



Taming Technology? A Socio- Technical Case Study of Newspaper Production in Austria

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**TAMING TECHNOLOGY?
A SOCIO-TECHNICAL CASE STUDY OF
NEWSPAPER PRODUCTION IN AUSTRIA**

Peter Fleissner

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ABSTRACT

This paper describes the formation of a social framework which was built up in reaction to technological changes in the Austrian newspaper industry, resulting from the introduction of computerized printing systems. The affected parties are specified, their material interests and their policies as well as the bargaining process and its results are analyzed in detail. Special emphasis is given to the point of views of the employees and their representatives at the trade unions.

A comparison with similar agreements in other Western European countries facilitates the assessment of the agreements.

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**TAMING TECHNOLOGY?
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BACKGROUND

The application of new technologies in a capitalistic economy bears the burden of an intrinsic discrepancy: although they represent the most recent developments in the human intellect's efforts to alleviate and reduce human work, at the same time they are able to create new kinds of misery for the working people*. We are now observing considerable increases in the productivity of labor and an increasing variety of new products, but through rationalization and increased managerial supervision work is often becoming more intense and less satisfying than it was before. It is becoming increasingly difficult to compensate for the cuts in the level of employment made feasible by new technology (Jenkins and Sherman 1979). As a result, rates of unemployment are rising in many countries of the world.

During the 1970s an overflowing basket of new technologies became available to the Austrian printing industry. Under pressure from competitors, management made plans to implement a full scale of newly available equipment to innovate the production processes. They were expecting an early harvest to the fruits of their investments, but for a variety of reasons their hopes were not realized. One of the most important reasons for the gap between expectations and actual results was the situation in other countries. Particularly in the production of newspapers,

*Many of the problems related to rationalization were discussed as early as in the first half of this century by the trade unions, see e.g. Stollberg, 1981.

rather serious social conflicts arose in the FRG and in the Great Britain accompanied by strikes, which could only be settled through collective bargaining and definite concessions to the employees.

As the introduction of new technologies into the Austrian economy is usually accompanied by a certain delay in comparison with more developed countries like the FRG and because mediation between opposing interests in Austrian society is institutionalized within a special framework, the "Sozialpartnerschaft" (social partnership), the social partners (union leaders and entrepreneurial associations) had enough time to learn from abroad and could organize negotiations around the table, which became nearly the only means needed for settling or quieting conflicts. Quite surprisingly, after a very short time the social partners signed an informal agreement, the "Moratorium", which allowed the enterprises to implement the new technology but in such a way that any negative effects for the employees were avoided. Recently, this agreement was replaced by a formal contract, the "Kollektivvertrag" (collective agreement), an official contract between entrepreneurs and labor containing certain legal guarantees and sanctions.

The paper presented here is intended to show one example of how the social consequences of new technologies are handled in a special type of market economy. We hope to make clear which kinds of consequences became subjects of the bargaining process, on which of them agreements could be reached, and which were left out. The paper should shed some light upon the underlying structure of the bargaining groups, their interests, and their correlations, agreements, and contradictions.

TECHNOLOGICAL INNOVATIONS IN THE PRINTING INDUSTRY

In the printing industry, as in many other industries, *extensive* growth, involving the number of workers, machinery, and buildings, is being replaced step by step by *intensive* growth (see e.g., Ahola et al. 1981). The old machinery, although in many cases operable and reliable, is being replaced by more efficient and modern equipment, usually based on new production processes involving a higher degree of automation.

In Austria the following technological innovations has been implemented step by step into the printing industry:

1. *Photocomposition Systems*: Before the beginning of the 1970s, movable printing types made of metal were used for composition and make-up of pages. Printer's ink was needed to produce negative copies. This technique now has been replaced by photocomposition systems involving the lightening of photographic paper with a cathode-ray tube. Photocomposition systems allow a faster, cleaner and healthier setting than with hot metal. Lead is no longer needed. This decreases the amount of capital tied up. However, there is only a small reduction of variable costs as lead was usually recycled. So only the energy costs of melting the metal can be saved. Nevertheless, composition costs have dropped by a factor of 2.5. A compositor who worked by hand was able to set about 5000 characters per hour. By using a punch tape-controlled fast setting equipment he can set about

20,000 characters. Theoretically photocomposition systems can set 1.5 million characters per hour. In practice they are limited by the speed at which man can produce input (Sedlaczek 1979).

2. *Computerized Printing Systems (CPS)*: By these systems the main work processes in printing which were carried out separately earlier, can be integrated into one. Data capture, database management, and output options are parts of a single "systems" design process (Gates 1980). The work can be simplified, the productivity increased, and cost further reduced. On the other hand these systems bear latent dangers of intensified work, a higher degree of controllability of workers, an increased health hazard from visual display units (VDU's), reduced quality of work, monotony and the necessity for retraining workers. The most adverse effect is probably the threat of lost jobs because of the higher degree of automation, which could eliminate several professions (like typesetters) completely.

Computerized printing systems consist of

- input-devices (VDU's, OCR-, floppy disk-, punch card- or tape readers)
- a central processing unit
- information storage (for the actual text in process and for the systems software) and
- output-devices, usually phototypesetting machinery

There is a distinct possibility that very few people (a minimum of one) supported by news agencies that have access to remote data entry stations could produce a complete newspaper.

3. *Automated Control of the Printing Process*: By means of electronic and/or remote control it is possible to reduce rejection and increase the quality of the product. The time needed to prepare the machinery can be reduced by 25%. This is very important because of the high ratio of "standstill" to "run times" (6:4) associated with this type of machinery.
4. *Finishing*: Control and error detection for the finishing of the newspaper is no longer done mechanically, but by electronic equipment. The electronic device works faster, more precisely, and with a lower rate of error.

DIFFUSION OF NEW TECHNOLOGIES IN AUSTRIA

Phototypesetting was introduced first in firms that were specialized in typesetting or that had special and difficult typesetting tasks, such as those requiring non-Latin, Greek, or Russian letters or special symbols (semigraphics, mathematical symbols, etc.). Around 1975 production of movable letter machines ceased; only parts for repair purposes are still being produced (by Linotype, the leading company in the field). By 1978 about 40% of the available setting capacity had been changed to photocomposition. The level of newspaper production remained unchanged. By 1985, eighty to ninety percent of setting capacity will have been converted to the new technology*.

At the beginning of 1980 three out of the 17 major daily newspaper printing plants and about one third of the weekly newspaper producers were using an integrated computerized text processing and printing system (CPS). In 1985 about one half of the daily newspapers and three quarters of the weekly newspapers are expected to have been switched to CPS*.

At present the automated control of printing machinery is being applied in only four firms because of the high costs of the necessary equipment (several million Austrian Schillings). An annual increase of ten automated controlled machines per year is expected for the near future*.

THE AFFECTED GROUPS AND THEIR INTERESTS

To control the possibly adverse effects of new technology in printing, three trade unions** and two entrepreneurial associations formed a group for collective and continuous negotiations. The group was formed in the wake of strikes in the printing industries of the FRG and the UK. No strikes had occurred in the printing industries up to this time in Austria.

Figure 1 shows the organizations that took part in this "group of five." As in any conflict there exist material interests of two types: interests that are common to each of the conflicting groups and interests which separate them or put them into opposition to each other***. Both types of interests exist simultaneously. They are responsible for a relatively stable conflict situation (i.e., the setup of the conflicting groups is unlikely to change). Through discussions, bargains, strikes, debates, etc., each of the parties seeks to optimize its position.

The main common interest of the "group of five" is the existence of their branch of production, from which each of the parties gets their means of existence. This fact *binds* them together and urges them to cooperate, but it is the *basis* of *conflict* as well: the parties differ in the way they get their income. According to this difference, one can split them into two *subgroups*: the employers who earn profits and the employees who work on a salaried basis (see Figure 1).

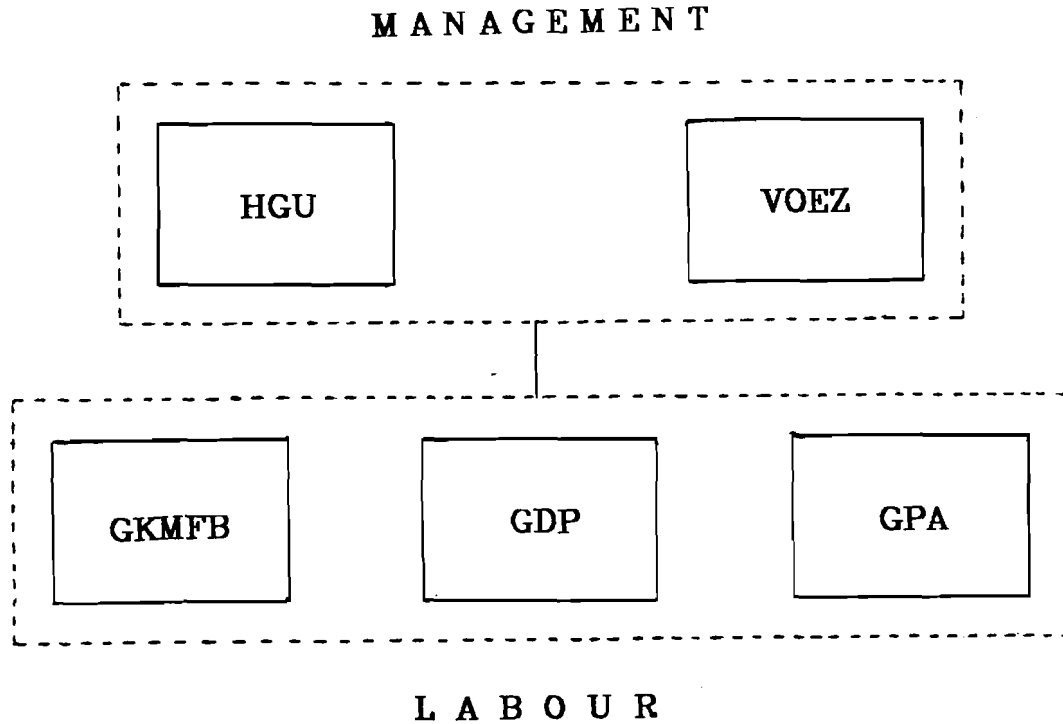
The employers are commonly interested in improving their economic situation wherever possible, e.g., in increasing their international market share, in increasing profits, in securing their existence for the long run. With respect to their employees they are commonly interested in reducing cost of production. But to the employees "cost of production" stands for completely different things, like their means of existence, becoming redundant or not, continuing a certain standard of living.

It seems evident that it is here that interests could come into opposition, especially in a situation of intense competition, tight markets, low economic growth, etc.

*This assessment was given to us by the "Hauptverband der graphischen Unternehmungen Oesterreichs".

**The three unions cooperated traditionally in an association on publicistics and media (GAG-PUM - Gewerkschaftliche Arbeitsgemeinschaft Publizistik und Medien).

***In a mechanical analogy one could speak of two forces, of attraction and repulsion.



- | | |
|-------|--|
| HGU | Hauptverband der graphischen Unternehmungen Oesterreichs (Umbrella organization for graphic arts enterprises in Austria) |
| VOEZ | Verband der Oesterreichischen Zeitungsherausgeber und Zeitungsverleger (Association of Austrian newspaper publishers) |
| GKMFB | Gewerkschaft Kunst, Medien und Freie Berufe (Association for artists, for employees in the mass media and for self employed professionals) |
| GDP | Gewerkschaft Druck und Papier (Trade union for printing and paper industries) |
| GPA | Gewerkschaft der Privatangestellten (Salaried employees association) |

Figure 1. The group of five

If one subdivides further, the picture becomes more complicated but more accurate, too. New contradictions arise within the two subgroups of employers and employees.

On the employers' side the main difference between the two groups HGU and VOEZ is the size of the plants they represent. While HGU represents several hundred small firms and a few larger ones*, VOEZ nearly is dominated exclusively by rather big publishing houses. For the big publishers it is much easier to find the necessary financial resources for modernizing their production processes. By using modern technology, they create additional typesetting capacities at reduced variable cost. The smaller printing firms cannot compete with them under the burden of their own high cost facilities. This contradiction led to certain agreements, which are discussed later.

The common goal of the trade unions is to hinder dismissals, but this very situation gives rise to possible conflicts, too. If workers of different unions can be substituted, the unions could behave like opponents striving for no dismissals of their members.

On the level of the three trade unions one finds different starting positions. The different roles of the members of different trade unions with respect to the new technology will be discussed briefly: The *typesetters* seem to be worst off. In many cases the new technology allows well-trained and well paid typesetters (organized in the GDP) to be replaced by "kaufmaennische Angestellte" (commercial workers, usually female typists, organized in the GPA), who are relatively low paid, although they enjoy better social conditions. This was a traditional difference between these groups of workers. *Typists, card punchers, teletypists*, etc. earn AS 7,255 per month, higher skilled secretaries, AS 8,605, but typesetters earn a minimum of AS 9,992 plus fringe benefits (including overtime at night—which usually amounts to 1/2 of their gross salaries) and a 2.5% increase of salary during the first ten years and a 10% increase afterwards.

The *journalists* are afraid of becoming partially redundant because of the possibility of remote data entry (by news agencies, information networks, data banks, etc.) On the other hand, the other groups of workers fear becoming redundant and being replaced by journalists, who could produce newspapers by themselves (like in the US) if assisted by modern equipment.

The conflicting interests among the unions could be used by the employers associations to achieve better results from the negotiations than they would have without these conflicts. But an analogous statement with changed characters also holds there: trade unions could use differences in goals among the employer groups to gain a better position in the bargaining process.

Seen from a more abstract point of view, the above differences and correspondences between the subjects investigated show a typical general feature: in pursuing the same goal—which means a correspondence in goals—some parties get into competition. In pursuing opposing goals

*In 1978 70 per cent out of 900 member firms of HGU employed less than 50 people per firm

some opponents can find each other in coalitions on an objective basis (whether they are aware of this fact or not). The seemingly logical contradiction in this disappears if one decomposes the problem into separate parts. On the level of the parts there remains no dialectics of this kind.

THE MORATORIUM

To prevent the Austrian newspaper sector from the sharp social conflicts that have occurred in other Western European countries and to gain a rather calm climate for further negotiations on a collective agreement the group of five subscribed to a "*Moratorium*" on March 1, 1978 as an interim solution (Gewerkschaft Druck und Papier 1978:1). This event happened only half a year after the first written proposal was forwarded to the parties by one trade union. The Moratorium should allow for the introduction of CPS without any major disadvantages to the employees. By their subscription the five parties declared to observe the following agreements on the production of *daily* newspapers:*

1. They agreed on an *operational definition of CPS*, especially with respect to possible *direct data inputs*. They defined direct data inputs as "immaterial data transfer or data processing of any kind, including computer readable manuscripts, which are not produced within the legal framework of the collective agreement in force between the workers and the entrepreneurs of the printing industry." "Direct data input" takes place regardless of whether the data source comes from within or outside the firm in question. (Data could be produced by the editorial staff of the firm, by news agencies, by the administrative staff or by the graphics staff.) The problem with direct data input is that it could result in the elimination of all the intermediary professions which under traditional technology linked information producers and the printing press.
2. If one of the parties learns of any plans for the introduction of CPS, it will *inform* the other parties in consensus with the company in question. There is no need for this consensus if the informing party is a trade union.
3. *If* all the subscribers of the Moratorium *agree*, the introduction of CPS is possible and *allowed* at any time.
4. The agreement is not necessary if the introduction of CPS is accompanied by the following conditions:
 - Within three months the works council and the firm have to sign an agreement (Betriebsvereinbarung) which has to comprehend all the sectors of the firm which are affected by CPS. Workers whose jobs are eliminated by CPS *must be offered* another job within the firm. This job must be of the same quality (e.g., an office worker must not be shifted to manual work). The purpose of this regulation is to

* For *weekly* papers the parties are only obliged to inform each other on the (plans for the) introduction of CPS.

guarantee the employees to maintain the financial and social status already reached. The necessary training opportunities must be made available by the firm.

- *An employee is protected from dismissal* if he has agreed to the shift of his job under the above conditions; if an employee transferred by CPS wants to quit, the usual *additional payments* as in the case of dismissal by the company *fall due*.
- *New jobs* are to be *announced first to employees of the company*. No outside hirings are allowed unless the internal demand is met if the needed qualifications are available within the firm.

The Moratorium is valid for a maximum of one year; prolongations are possible. The regulations have been ratified legally and have the same status as "Kollektivvertraege" (collective agreements) which can be taken to court, but GDP claims that the unions' expectations have not been met completely. Measures for retraining and protection of labor regulations have not yet been included (Gewerkschaft Druck und Papier 1978:1).

The Moratorium was renewed in March 1979 and expired in March 1980. Since this date the five parties have been bargaining for a more comprehensive "Kollektivvertrag." Until a "Kollektivvertrag" had been signed the parties observed the above regulations as if the Moratorium were in force.

TECHNOLOGY AGREEMENTS IN OTHER COUNTRIES

The Austrian Moratorium is not a unique agreement. At the beginning of 1978 agreements on the introduction of new technologies were into operation in seven other Western European countries (IGF 1978), some of them between employers and employees, some of them between trade unions. The agreements listed below are in operation in the following countries:

- in *Denmark* an agreement between the association of Danish journalists and the association of typographers,
- in *Finland* a frame agreement between employers and the union,
- in *France* an agreement between the association of journalists, the unions, and the printing industry,
- in *Norway* an agreement between employers and the union,
- in *Switzerland* an agreement between the association of journalists and the unions, and
- in *the U.K.* agreements between the union and the management of some plants

Within an organizational framework very similar to the one in Austria, an agreement with slightly different results was ratified in *Sweden*. In May 1980 the newspaper industry reached an agreement on new technology that "guarantees that the introduction of new techniques will not lead to dismissals" (ILO 1980). As in the Austrian case three groups of employees are protected by this agreement, namely, graphics workers (including typesetters), professional staff, and journalists. Employers will provide special funds for education and training. Retraining schemes will be worked out by a joint council for the graphics industries. The training is to be carried out during the working hours.

The Swedish unions have come to the conclusion that

"new computerized printing systems are threatening to break down the clear demarcation lines that exist between these three unions and under the new agreement existing jobs will change, becoming more integrated" (ILO 1980).

In its own journal the Graphical Workers' Union says that "the walls between the editorial and the composing rooms have already been broken down." This points towards a one-media union in the long run, they argue. Until this goal is reached the unions of journalists and the union of graphics workers decided to form an alliance and take a united stand in negotiations with the employers on the introduction of CPS in order to ensure job security, meaningful work, and an improved work environment. With the employers they agree on maintaining competitiveness with other media, on eliminating redundancies and on promoting an industrial structure that serves the needs of the public for quality and free choice. The most important concession for this agreement was the self obligation on the part of the unions to maintain "industrial peace" until 1986 in case of wage negotiations. Under this peace agreement the graphics workers won an extra vacation bonus from 1981 onwards (3% of the total wage including bonuses and overtime).

The above three categories of staff will continue to carry out their jobs under this agreement as before, but jobs could be transferred from one union to another after local negotiations. The local agreements must be approved by the national unions.

In contrast to the Austrian Moratorium, journalists are allowed to type 30% of editorial text directly into the computer and can take over some of the traditional functions of the graphics workers. In this way free flows from one union to the other are facilitated. A more integrated type of a new trade union could come into being, while Austrian unions insist on a more or less rigid separation of the traditional professions.

In the *Federal Republic of Germany* a tariff agreement (Tarifvertrag) on new technologies at printing plants and publishers was signed in April 1978 (Nachrichten zur Wirtschafts- und Sozialpolitik 1978). The negotiations lasted longer than one year and were accompanied by tough social struggles including strikes initiated by the trade union for printing and paper industries and supported by solidarity measures of other unions.

The FRG agreement includes the following main items:

- job security
- wages
- retraining
- indemnity payments
- medical examinations
- testing periods during work
- technical properties of the visual display units, like legibility of symbols, absence of flickering and dazzling, controllability of contrast, standards of lightning etc.

Special regulations were included for *journalists* and *editorial staff*. One reason for this is the necessity for granting individual freedom in journalistic and graphics work and to assure the privacy of journalistic activities:

- journalists may not be forced to feed text other than their own into the VDU
- information from third parties may not be published without the permission of the editorial staff
- the editorial products must be stored at the plant to assure possible financial claims by the editorial staff.

The FRG agreement was used as a prototype by the Austrian trade unions. It convinced them that an agreement could be reached in Austria, too.

THE AUSTRIAN COLLECTIVE AGREEMENT: PROPOSALS AND REALIZATIONS

The first proposal for an Austrian collective agreement came from the unions. It dates back to July 20, 1977 and was adopted by GAGPUM, the above mentioned group of representatives of three competent trade unions.

In a preamble it was declared that the introduction of new technologies should start only if three basic requirements were met: Security of jobs, security of incomes and protection from a deterioration in human working conditions. Productivity gains from the introduction of new technology may not be used solely for increasing profits, but must also serve to better the material conditions of the employees to create new jobs.

Unlike the FRG tariff agreement the Austrian proposal included another very fundamental point: the establishment of *technology commissions* at the level of the firm (Par.5.1 of the proposal). They should be made up of members of the top management, members of the worker's council, and representatives of the unions responsible for the employees of the firm. The technology commission should decide on all questions regarding new technology in the framework of the firm, in particular

- the conservation of working places
- the hiring and firing policy
- the formation of funds for social security
- extra pay for higher productivity and the reduction of the working week
- the number of hours to be worked daily at visual display units,
- the regulations on breaks for health reasons and health examinations
- the possibilities of organizing test operations with new equipment, and
- the framework for retraining.

If no decision is made within the technology commission the case should be transferred to the group of five. If there the case could not be settled, CPS might not be introduced in the firm.

Furthermore the Austrian proposal included a position to apply jointly for public subsidies for investments in new technologies as well as the establishment of social funds on the plant level financed by the firm to cover cases of undue hardship. Finally, the proposal dealt with demands for extra pay for increases in productivity and for reduction of the working week without losses in income.

The regulations on the work of journalists were rather rough compared with the FRG text (for details see Appendix).

The negotiations for a collective agreement on the basis of this proposal lasted nearly four years. The reasons why there was a rather calm climate of discussion and no strikes at all, but nevertheless at last an agreement could be reached, seem to be as follows:

- One reason for the adoption of the collective agreement could be seen in the general climate of uneasiness by the top management about having strikes in Austria similar to those in the FRG and the UK. The newspaper sector is traditionally very sensitive to strikes because of their very rapid effect on profits in this sector. While in other branches of production stock formation create buffer effects, not publishing a daily newspaper produces immediate losses to the entrepreneur.

But employers were not the only group which felt uneasy. For the GDP it seemed important to negotiate in advance with the management of the printing plants before CPS actually was introduced. The union preferred this procedure in view of heavy labor-management conflicts abroad and tried to learn from the solutions other unions had arrived at. The union feared that the employers could use new technology to dismantle the unity of their workers and strived to prevent such a situation.

- As nearly every graphics worker in Austria is a member of the GDP, there is a high probability that within one hour all the Austrian printing presses could be brought to a standstill if the GDP were to call for a strike. This situation exerted heavy pressure on management to look for a compromise in the bargaining

process, too.

In fact some tensions arose because of frequent delays in the bargaining process. The three unions reacted to slow going negotiations by organizing two seminars with their members on the topic "How to organize strikes" in order to speed up the discussions. Nevertheless, they did not use strike as a weapon.

- A third and very important reason was the split of the employers into two subgroups. On the one side are the printers of the newspapers, organized in the "Hauptverband der graphischen Unternehmungen Oesterreichs," and on the other, newspaper publishers, organized in the "Verband der oesterreichischen Zeitungsherausgeber und Zeitungsverleger." For objective reasons the printers were interested in a collective agreement that would forbid the input of texts from third parties*. Without such a regulation, under the influence of new technologies the printers would lose typesetting orders to the publishers of newspapers which have overcapacities at their disposal by the introduction of CPS. Although typesetting work is not as profitable as printing, the printers would be left with unused typesetters and unused typesetting equipment and would quickly get in troubles with these overcapacities. The collective agreement granted them a delay of five years for adjusting to the new technology-driven situation.

Another reason for the relative calmness during bargaining could be seen in the fact that the Moratorium was already ratified. So it could be used as a guide to indicate the range of reachable goals for the interested groups, who in addition did not hasten to inform the public about the advances of their discussions. This was so as to give no informative basis for activities by possible opponents.

- Finally another argument should be mentioned: as it is no secret, the main source of profits for newspaper publishers is the advertising sector. The increased productivity and the shorter production time made possible by CPS could increase profitability in this sector in such a way that many concessions in other sectors such as typesetting would be relatively insignificant from the point of view of costs. Nevertheless this argument was never mentioned in the published documents on the discussions and its results.

The employers finally signed the collective agreement on March 11, 1981, after nearly four years of negotiation. The press was excluded from the actual approval of the agreement. Public notice of the contents of the collective agreement was extremely sparse. The full text of the collective agreement was distributed only among union members. The press was used to inform the public only after the official approval of the collective agreement. This cautious behavior on the part of the employers could

*In fact the paragraph dealing with this problem is the first paragraph in the published version of the collective agreement.

be explained by their fear of "contamination" and spill-over effects to other branches of the economy.

In the following section, several of the main problems are analyzed in more detail, in particular job security, income, and codetermination. The conflicting views of the three trade unions are presented.

1. Job security

GPA called for protection laws against dismissals *for everybody* (more precisely, for each employee involved in or affected by CPS, directly or indirectly). For the GDP job security *for its members* had highest priority in the negotiations, especially in view of the fact that its members are usually highly specialized workers who would find it more difficult to get another job outside the printing industry than would typists and telephone operators. For the union it would have been very important to declare every working place within the printing sector as graphics for several reasons. Firstly, it would be much easier to organize a "closed shop," without employees who are members of other unions. Secondly, the traditional equality in wages and overtime compensation that is characteristic for the printers union in large plants could be continued without problems*. Thirdly, the income of the printers is - although they are classified as blue collar workers - comparatively high. Therefore there was a definite tendency to negotiate with the employers directly and apart from the other unions. But such a policy would be successful in the short run only. In the long run employers would replace the graphics staff with much cheaper commercial personnel because of lower costs for the qualifications necessary for CPS. In the end the two unions stayed together and the GDP accepted the definition of some working places as commercial.

For the GPA and the GDP, it was the first time they experienced rapid technological change; for the journalists of the GKMFb the problems were not new. Austrian journalists experienced the new technology for the first time in 1975, when in the Vienna office of the U.S. press agency United Press International (UPI) the typewriters were replaced by terminals. From this event they learned that the introduction of electronics not only increased their efficiency but at the same time created a lot of problems: they had to work with the new devices without previous training and they complained about headache, pains in the back, spots before the eyes, and in general, more intense work (Sedlaczek 1979:36-37). Their colleagues, the teletypists, became redundant and were dismissed before the substitution process took place.

The unions were in a weak position in the negotiations with the UPI because the press agency threatened to close the Vienna office. The agency called the introduction of the new technology a rescue attempt to secure at least some of the jobs. Nevertheless UPI closed its Vienna office three years later.

*There are no wage increases with age like there are for other employees (typists, clerks etc.)

In 1977 the Austrian Press Agency (APA) introduced an integrated text processing system. This time the unions were better prepared. The negotiations ended with a compromise: APA now grants its journalists the freedom of choice to work with the new system or to dictate their texts to the former teletypists, who were not made redundant but were retrained.

In agreement with the other two unions GKMF B called for job security for a certain period of time. To secure jobs they expressed their intention to agree with an eventual reduction in overtime, or at least, with a compensation for overtime not with money but with time-off. "Jobs are more important than overtime", they argued.

As a second chain of arguments GKMF B used the following: the new technical setup with its high workload reduced the ability of the journalists to remain fully alert and concentrated on the job. They were obliged to do their job "just on the surface". They could not verify the truth of the information obtained from press agencies. There would be a definite danger of neglecting the ethical principals of journalism. Therefore the editorial boards should not be reduced, but expanded and the number of jobs for journalists should be increased.

Finally, the union and the employers reached a compromise on job security. The following protective measures are due to the employees if, in the case of a threatening redundancy, they agree to their transfer to another reasonable job. The collective agreement provides a sufficiently strict definition of what should be as "reasonable" (Par.7.2)*.

- For usual workers there are no dismissals allowed for a period of *two years*.
- For highly skilled graphics workers (graphische Facharbeiter) there are no dismissals for *ten (!) years*,
- For workers above 50 there are no dismissals allowed during their working life.
- Employees of the firm itself have first priority in getting newly created jobs. External staff will be hired only if adequate personal is not available within the firm. The internal staff must be informed first of new opportunities (Par.6).
- Text-input is permitted only under the direction of the editing-board and/or the responsible journalist. Text-inputs from a third party are not allowed for a period of five years (Par.12). This regulation is especially important for typists and journalists.
- For a period of eight years after introduction of CPS journalists may not be urged to work at visual display units. No disadvantage whatsoever may come to him (Par.12.4).

* The paragraphs refer to the document on the collective agreement about CPS published by GPA.

2. Income

The question of wages as the most important part of income is closely connected with the labeling of jobs. Management is inclined to place as many jobs as possible in the professional class, because professional staff is cheaper than graphics workers are.

The first proposal of GPA was that the employers should pay the higher of the wages of the old and new jobs. But this proposal causes problems if e.g., a printer was transferred to a professional staff job because of the fact that for these jobs at the beginning of the working life the salary is much less than for graphics jobs, but the salaries of the professional staff grow every five years. Therefore, a typesetter would start with a relatively high salary after being transferred to a professional staff job and would enjoy additional increases of this income each five years, while other members of the professional staff have to start at a much lower level.

To strengthen its influence the GDP insisted strongly upon defining all jobs as graphics and nearly accepted an offer by the employers through which the graphics workers would get job security for their active life in return for considerable reductions in wages. Only intensive intervention from the other trade unions could prevent a separate contract between the printers and their employers on a bilateral basis. A separate contract would have been disadvantageous to the other unions with respect to their future wage position and could have decreased union membership.

But in the end the unions stayed together. A compromise was accepted. The members of the professional staff received a higher classification (Group III = AS 9285 per month instead of group II = AS 7915), although the employers argued that a terminal or visual display unit represents standard equipment (like an ordinary typewriter) and therefore no higher grouping was justified (Par.10.3).

The other working places, such as those in the editor's office and in the advertising departments, should stay professional, as before. The wages of graphics workers are traditionally high (about AS 12 000 per month in 1980). In addition, there was a historically-based *extra payment* of 50% for night work. This payment was given for actual night work in the pre-television era. Then newspaper editors came under pressure from television stations with their up-to-the-minute news releases and were obliged to sell their newspapers before the beginning of the TV evening news. They ceased to produce the newspapers during the night and began to produce them during the late afternoon. The GDP agreed to a change of production time under the condition that the extra payment for night work would be continued now during the daytime. So "night" now begins at 6 p.m. and ends at 7 a.m.*, for six days per week.

The graphics workers accepted a compromise which led to a reduction in additional payment for night-work (from 50% down to 30%), but as a partial compensation the definition of night was extended once more.

*There is a familiar quotation "The sun never rises in the printing sector."

If an employee is transferred to another job, he has the right to apply for compensation for possible wage losses within three months after the transfer. The wage difference and differences in fringe benefits are evaluated and must be compensated for (Par.10.1).

If a worker who is affected by CPS quits his job, and if there is no reasonable job available at his firm, an indemnity payment has to be paid to him as if the employer had dismissed him (Par.9).

Mobility-aid must be paid in addition to indemnity payments for the same length of time as his working place would be protected against dismissals. A maximum amount of three halves of the annual salary could be paid.

The collective agreement contains a footnote on page one of the document in which in case of a change in firm ownership the employers agree to take over employees with all their rights and obligations, just as if there had been no changes, so that all the fringe benefits accrued during their working life should remain untouched. This condition is very unusual under Austrian law. It was for this reason that the employers omitted this regulation from the officially published text: they feared consequences in other parts of the economy.

In addition, the unions were eager to succeed in reducing the working week while retaining full compensation in salary. GDP was most explicit on this point, asking for an incremental reduction of the working week to 35 hours. However, in the end they were unsuccessful and no such regulation was included in the final agreement.

3. Codetermination

For the GDP codetermination did not have highest priority. They called for separated responsibilities for graphics workers and managerial staff, especially at the level of the firm. Therefore, they did not stress the point of technology commissions. Nor did GPA stress this, so the proposal of the unions to establish technology commissions was completely neglected in the final document.

The only rights on codetermination that remained to the works council with respect to CPS were

- the right to be informed about plans to introduce CPS (Par.4)*
- rights to confer with the employer about introduction of CPS about the grouping and retraining conditions of the workers (Par.6.3,Par.10.1,Par.11.3) and
- the right to participate in advertising new jobs.

The level of codetermination with respect to new technologies at the firm level has therefore to be classified as minimal.

*This right is granted in the more general constitution on work.

For unsettled cases the parties agreed on the formation of a *court of arbitration*, which consists of two representatives for each of the five organizations described above. This court has to settle contested questions of the collective agreement within nine weeks (Par.16).

To journalists the agreement gave the following rights:

- For a period of eight years journalist must not be obliged to work at VDU's (Par.12.4).
- For journalists over 49 this right is extended in time (par.12.5)
- No text may be fed into the CPS without the permission of a member of the editorial board (Par.12.1).
- CPS must not reduce the autonomy of journalists (Par.12.2).

4. Qualification and Training

The GDP was very much interested in strengthening the technical skills of its members. The union operates two training centers in Austria where members are trained in using modern electronic printing equipment (e.g., programming of text processors, design of new fonts with the help of the computer). The unions feeling is that the only way to deal with new technology is to expand workers' abilities. They should learn to use it properly and to control the machinery as far as possible. In no case they should be controlled by the machinery.

The negotiators of the GPA were also fully aware of the ambivalent effects of new technologies on the qualification of the employees: the opportunities for higher qualification through more knowledge in programming and controlling the equipment and the threat of becoming a mere appendix to the machinery. The creative activities are reduced to a minimum and are accompanied by low qualification and low income. During the discussions it was impossible to get support from the employers in pushing through some regulations on the obligatory hiring of well paid and equally well trained employees. These could bring a lot of positive side effects for management, too. In contrary, the employers side insisted on their unlimited right to hire whom ever they want, preferably cheap and low qualified labor.

In the course of the negotiations this topic was not stressed further by either party, maybe for cost reasons on the employers' side, maybe for the lack of interest by the employees themselves. Finally it was simply dropped.

5. Health Problems

For the GPA it was not possible to succeed with an explicit proposal on *health examinations* (cardio-vascular, neural, and visual) especially for visual display unit workers. Nor could they push through their demands for a ten-minute *break* per hour of visual display units work and a *time limit* of four hours per day. The GPA was not able to agree with the proposals of the GDP, which demanded only fifteen minutes of break time per half day.

There seem to be two major reasons for the rather disappointing results in the efforts of the unions to include health issues into the agreement: they expected government to pass a general bill regulating work at visual display units, but by 1982 no such bill had been passed. The second reason could be seen in the disagreement between the two unions, which weakened their bargaining power.

In the future, GPA will try to succeed with its initial proposals through bilateral negotiations with the employers.

For further details of the agreement and for comparison with the proposals and the FRG Tarifvertrag, see Appendix.

CONCLUDING REMARKS

In discussions with the representatives of the different parties who signed the collective agreement one can observe different degrees of satisfaction with the results. Although employers had to pay the price of partly increased costs of production, they enjoy social peace, and a higher degree of automation and efficiency.

The unions reveal different evaluations. While GDP is most content with their results, in particular with job security, GPA shows a high degree of uneasiness. Besides their relatively poor rights in job security, no health regulations and the small influence of the works council on the decisions of the management they argue that under the new agreement employers will keep secret their plans on rationalization as long as possible. Furthermore the management will make as many decisions as possible well in advance in order to collect conflict-preventing arguments. The employees would be excluded from participation in the decisions of the firm.

Nevertheless, they are optimistic about having created a type of social framework for reducing possible disadvantages to the employees, at least during the eighties. For the nineties they foresee a relief of the problems on the Austrian labor market for demographic reasons.

APPENDIX : Collective Agreements in Austria and FRG—Proposal and Result

Items	Austrian Proposal	FRG agreement	Austrian Result
a. Area of application	Employees in the production of daily newspapers, periodicals and news agencies	All the printing industry	Employees in the production of daily newspapers affected by CPS (Par.1)
b. Time period of validity	5 years	5 years (April 78-March 83)	8 years (May 81-May 89)
c. Transition period	Planning period plus 5 years after introduction of CPS	5 years	8 years after introduction of CPS
d. Job security/Dismissals	Complete conservation of jobs for the transition period. Decisions about any dismissal due to the technology commission.	8 years	No dismissals for 10 years for graphics workers; 2 years for others; employees over 49 may not be dismissed at all; graphics jobs must be counted as graphics jobs for the transition period.

Items	Austrian Proposal	FRG agreement	Austrian Result
e. Retraining/ Training	Technology commission proposes measures for retraining. The "Group of five" has to work out a framework for retraining. Costs of retraining have to be paid by the firm	Costs of retraining have to be paid by the firm	Retraining obligatory for employees. During training ordinary salary is paid
			No longer than 13 weeks. If there is public subsidy for retraining, the firm has to add 20% of the usual wage
f. Indemnity payments	If employee quits by himself the usual indemnity payments are due to him. If employee is made redundant increased (+25%) indemnity payment is due to him. The appointed time for dismissals has to be increased by 50%. During this period the employee could use his working time for his own.	Indemnity payments in the case of dismissals only	If employee quits by himself the usual indemnity payments are due to him. If a worker quits by himself indemnity payments as high as for employees are due to him (Par.9)
g. Medical examinations	Examinations of the eyes, the neural and the cardiovascular system obligatory during the first 2 years, later on once a year. If the work with new equipment results in undue hardship to the employee, he has the right to refuse this type of work without any disadvantage to him.	Examinations of the eyes obligatory, others voluntarily	Not yet defined (Par.13)

Items	Austrian Proposal	FRG agreement	Austrian Result
h. Resting/working periods	Work at VDU's restricted to maximum four hours/day, maximum 15 minutes rest per hour. Technology commission decides the actual amount of work at VDU's.	Work at VDU's restricted to maximum six hours/day; 5 minutes rest per hour or 15 minutes rest per two hours	Not yet defined (Par.13)
i. Transfer of employees to other jobs	There must be consensus at the technology commission	There is financial assistance (150% of cost of change of residence + wage loss per hour time 173 hours per month for the time of one year) to be paid by the firm the employee has left	Transfer possible to reasonable jobs only (Par.7.5) Journalists must not be obliged to feed text into CPS during transition period and can refuse work on VDU's (Par.12.3/4). If they are over 49 they may refuse VDU - work for an unlimited period (Par.12.5).
j. Information about job openings	Within the firm employees should be informed about free jobs and their specifications. Employees of the firm who lost their job by new technology should be shifted to these new jobs preferably		Within the firm employees should be informed about free jobs and its specifications for a period of 8 years (Par.6.1). Employees of the firm who lost their job by new technology should be shifted to these new jobs preferably (Par.6.2/4)
k. Compensations for wage losses as a consequence of job transfers within the transition period	No loss of wage is allowed within the same firm	To prevent employees from financial losses if they are shifted to another job with lower wage rate, to them financial compensation must be paid in the amount of the difference of the hourly wage rate times 173 per month	There is a unique compensation once for all due to the employee. The amount must be fixed in cooperation with the works council (Par.10.1). Professional staff working with CPS must be classified in group III instead of group II (Par.10.3) Mobility aid must be paid to employees who quit by themselves for the full length of the protected period, with a maximum of 3/2 of annual income. (Par.8.1).

Items	Austrian Proposal	FRG agreement	Austrian Result
l. Measurement of work performance	New technologies may not be used for the control of individual performance at work	New technologies may not be used for the control of individual performance at work	Journalists must not be controlled by CPS (Par.12.2).
m. Compensations for productivity gains	Technology commission has to fix the amount of an extra pay for productivity gains, adjustment payments aimed at equal pay for equal work, and the reduction of the work week without financial losses for the employees	No such paragraph	No such paragraph
n. Public subsidies	For firms which cannot afford the necessary financial means for investment public funds should be transferred to them. This should be applied for products only which are completely produced in Austria.	No such paragraph	No such paragraph
o. Job content	New technology may not be used for restrictions on the previous work with respect to creativity and self responsibility, especially for journalists. Direct text or data inputs from news agencies are prohibited. Text produced by third parties must be edited by the editorial board of the newspaper before it is transferred to the technical production unit.		CPS must not reduce self responsibility of journalists (Par.12.2). Direct text or data inputs from news agencies are prohibited for a period of 5 years (Par.3.1). Text produced by third parties must be edited by the editorial board of the newspaper before it is transferred to the technical production unit (Par.12.1).

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