

Technological Development Structural Unemployment and Social Exclusion in the Netherlands

SOM theme A: Structure, Control and Organization of Primary Processes

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Abstract

In the 1980' a discussion started whether or not a social underclass was developing in the Netherlands. In this article the emphasis is on the contribution of such factors as the increase of international competition and technological innovation to the explanation of the growing numbers of people structurally excluded from the labour market. From an analysis of the relevant literature and secondary data a trend emerges that makes us to expect that in the near future more and more people will be structurally expelled from the labour market despite the present Dutch policy of labour costs reduction and training the unemployed. Instead of setting full employment as a target, a reorientation of social policy seems to be more realistic and appropriate.

1. Introduction

In October 1984 the leader of the Dutch Labour Party and former Prime Minister, J.M. den Uyl, stated in Parliament:

'Mister Chairman ... I dare to say: Our society is on the edge of breaking down. Ever widening gulfs are outlined against the horizon between those who have jobs and those who are excluded from the labour process, between those who have a prospect of higher incomes and those who see their purchasing powers weakening, between those who have the opportunities to participate in new technological and economic developments and those for whom the gateways to the future seem to be closed.'¹

In the Netherlands Den Uyl's speech provoked a public debate in which not only politicians, but also economists and social scientists participated. There are three interdependent reasons why Den Uyl's statement caused rather passionate discussions. The first relates to the objectives of socio-economic policy. In 1956 objectives of socio-economic policy were formulated² which became generally accepted by all political parties, trade unions and employers organizations and which were considered to be the cornerstones of the Dutch welfare state. In his speech Den Uyl implicitly suggested that two of these, *full employment* and a *socially acceptable distribution of national income*, had become obsolete.

Secondly, Den Uyl claimed a dichotomy of Dutch society to be growing, the rise of a new social underclass consisting of people permanently unemployed and therefore unable to participate in society.³ And, thirdly, the very existence of the Dutch welfare state was therewith challenged.

In 1985 the Dutch social scientists Köbben and Godschalk issued a report in which they presented the debate following Den Uyl's statement and investigated the issue at hand, i.e. the claimed growth of the number of people permanently economically non-active and its social consequences.⁴ Their main conclusion was that the economically non-active are a very heterogeneous social category as it consists not only of the unemployed, but also of those receiving social assistance benefits and disability benefits. Consequently, within the category of the economically non-active, people do not only have different income levels, but also different perceptions of their economic and social situations. Therefore, one can not

consider them as belonging to the same social class without losing sight on what is really going on in society.

Almost a decade later the debate has still not ended. Recent publications still emphasize the growth of a social dichotomy.⁵ Thus in 1990 Engbersen summarizes:

'In the Netherlands an underclass, which does not benefit from the economic revival in the second half of the eighties threatens to emerge. A large group of unemployed people in the inner cities of the Randstad¹ (including many allochthonous people) remains completely unaffected by economic prosperity. This underclass consists of different groups of citizens that have one important thing in common: they have no prospects of getting out of their marginal and State-dependent position.'⁶

The fact that a relatively large part of the Dutch labour force did not benefit from the economic revival in the second half of the 1980s is explained by different factors. In his study of insecurity of subsistence De Lange mentions 'deficiencies in national economic and technological development, climate of capital investment, cost of labour, individual market capacities (level of education, professional experience), motivations, consumption behaviour, bureaucratic skills, and the like.'⁷ On the level of national socio-economic policy many authors stress demographic factors that imbalance the demand and supply of labour, and the imperfections of the labour market as caused by the interference of a social security system characterized by a relatively high replacement ratio.

In this article a somewhat different angle of approach is used. Without denying the impact of the factors mentioned in the former paragraph, here the focus will be on the *nature* of recent technological innovations in production processes and their contribution to the explanation of the increase of people excluded from the labour process. The main thesis will be that the rise of 'new' technology⁸ and the abandoning of Fordism and associated types of production organization induce a qualitative shift in labour demand with the effect that an increasing proportion of the labour force can no longer comply with the requirements of employers. Section 2 of this article treats Dutch social and economic policy since World War II and the rise of structural unemployment in recent years. In section 3 it is explained how the

¹ The Randstad is the geographical triangle between Rotterdam, Utrecht and Amsterdam in the West of the Netherlands.

qualitative changes in labour demand are related to the increase of international business competition and how this induces social exclusion. In the last section policy options are explored.

2. Dutch Socio-Economic Policy and the Rise of Structural Unemployment

2.1. Dutch Social Policy since World War II

The Dutch economic attitude of the 1950s was dominated by four problems.⁹ Firstly, during the German occupation of the years 1940-1945 the economic infrastructure had largely been devastated and it had to be rebuilt as soon as possible. Secondly, the loss of Indonesia as a rich colony was felt as an economic deprivation that had to be compensated for economically. Thirdly, the country was confronted with a rapidly growing population. Fourthly, more than before the Second World War the Dutch economy was perceived to be dependent on international markets. It was generally felt that these four problems could only be solved by a major economic effort. All social and economic interest groups agreed that economic growth was a national aim of the highest priority to which all group interests had to be subordinated.¹⁰

The Dutch trade unions took over this culture of social harmony and accepted for years a so-called Guided Wage policy, i.e. the control of wages by national government aimed at the restriction of the wage level.¹¹ The economic policy of the 1950s succeeded in effecting a decrease of the labour share in income, a relative reduction of the tax burden and a relative increase of profits. This laid the foundation of the economic expansion of the 1960s and, as the labour market tightened, favoured the position of labour.¹²

Guided Wage policy became untenable in view of rising profits, economic growth and a tight labour market. Under the circumstances of the late 1950s it could no longer be regarded as a national interest. In 1959 Guided Wage policy was

abolished and freedom of negotiation restored. The 1960s were characterized by increasing claims on prosperity achieved by the efforts of the 1950s. These claims resulted, among other things, in public sector growth and an increase of the labour share in income. The Dutch Welfare State matured and became outstanding in the industrialized world.

In the late sixties the economic climate started to deteriorate. The public sector expanded rapidly and continued to do so till the 1980s. A spectacular increase of unemployment in the late 1970s weakened the bargaining power of the unions to a substantial degree. Government and employers presented to the unions the necessity of a restricted wage policy as a mean to improve the export position of the Dutch economy. It was argued that an increase of real wages and social benefits would imply a further rise of unemployment. Additional to this policy concept, it was stipulated by the government that the country could only recover from the economic downfall of the 1970s if free entrepreneurship and the functioning of market mechanisms - especially that of the labour market - would be restored.

Gradually social policy lost its position as a more or less independent domain. It became the servant of economic policy as it was strongly believed that once the aim of a healthy economy was reached, social and economic deprivation would consequently disappear. In the meantime some of the objectives of social policy had to be sacrificed.

In the 1980s reduction of public expenditures became a corner stone of Dutch socio-economic policy, partly to decrease a growing budgetary deficit of the state, partly to reduce the costs of labour as many social insurances are paid for by employers' and employees' contributions. As a result the levels of social security benefits like social assistance, unemployment and disability benefits were substantially lowered, while at the same time the definitions as to the eligibility for these benefits were narrowed down. Next to the argument of reducing the costs of labour the latter was done because it was felt that the generous Dutch social security system offered too few incentives for the non-active part of the labour force to participate in the labour market. Consequently, the replacement ratio which was in the period 1954 -1964 less than 60 per cent and reached in 1975 a peak of 75 per cent, after 1983 started to decrease with about 2 per cent annually. ¹³

2.2. The Rise of Structural Unemployment

In the 1970s and 1980s the policy of enhancing the competitiveness of the Dutch economy by reducing the costs of labour turned out to be rather successful. A large number of new jobs were created. However, this did not decrease the unemployment figures. After every turn of the business cycle unemployment rose to a higher level than before.¹⁴ This is not exclusively a Dutch phenomenon, but can be observed in almost all industrialized countries: for all OECD countries ultimate 1993 unemployment rose to 8.5 per cent of the labour force which was 50 per cent higher than the unemployment figure of 1990.¹⁵ Exceptions to this trend of increasing unemployment seem to be the US and Japan. More than in Europe nowadays US unemployment has a cyclical character. This can be explained by adjustments in wage levels. In recent years the US saw a decrease of 20 per cent in real income per hour for low-skilled young men.¹⁶ As a result the wages of low-skilled workers have sunk below the poverty line.¹⁷ Japanese unemployment is comparatively still low because of a high level of hidden unemployment in the Japanese economy and the existence of highly competitive export industries.

Unemployment in the Netherlands is foremost a social problem because of its persistent character. The proportion of long term unemployment - i.e. unemployment of over one year - in total unemployment rose from 15 per cent in 1970 to 21 per cent in 1980 and 50 per cent in 1984.¹⁸ In the years 1992 and 1993 about 45 per cent of the Dutch unemployed were without a job for more than one year, while in the US and Japan this percentage was 7 respectively 18 per cent.¹⁹

In table 1 the Dutch labour force is presented in absolute numbers. Table 2 presents Dutch registered unemployment as a percentage of the labour force. 'Registered'²⁰ means that the unemployed are registered at the labour exchange and are available for the labour market for more than 12 hours a week and actively seeking a job. This definition implies that the so-called discouraged worker effect is excluded from table 2 as well as types of hidden unemployment by early retirement, by disability and by governmental job creation in special programs for the long term unemployed and the youth. In this sense registered unemployment presents a flattered image of 'real' unemployment.

To get some idea of the amount of people excluded from the labour market in the

Netherlands the number of employment related benefits are presented in table 3 . Although the figures of table 3 cannot be taken as exact representations of 'real ' unemployment, they undoubtedly point to the fact that the actual labour slack is much higher than registered unemployment wants us to believe.

Going back to table 2, in 1994 compared to total unemployment (7.5 per cent) registered unemployment was disproportionately high among those younger than 25 years of age (11.1 per cent), allochthonous people (19 per cent) and the low skilled workers (19.3 per cent). On the other hand, unemployment among the elderly seems to be relatively low (3.8 per cent). However, we have to realize that the registered unemployment rate of those above 55 years of age is highly biased. Firstly, because many of that age category are in early retirement schemes and, secondly, because they form a large proportion within the category of the disabled. In 1990 40 per cent of the

Table 1: Dutch Labour Force (x 1000) by Age, Ethnicity and Level of Education, 1988-1994. ¹⁾

| | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Age: | | | | | | | |
| < 25 | 1,148 | 1,112 | 1,085 | 1,055 | 1,024 | 988 | 945 |
| 25-34 | 1,796 | 1,834 | 1,902 | 1,961 | 2,002 | 2,053 | 2,057 |
| 35-44 | 1,584 | 1,623 | 1,672 | 1,711 | 1,716 | 1,724 | 1,752 |
| 45-54 | 959 | 988 | 1,031 | 1,105 | 1,190 | 1,281 | 1,337 |
| 55-64 | 380 | 373 | 373 | 357 | 363 | 361 | 377 |
| Ethnicity: | | | | | | | |
| Autochthonous | 5,397 | 5,444 | 5,563 | 5,670 | 5,761 | 5,826 | n.a. |
| Allochthonous: | 470 | 485 | 499 | 519 | 536 | 580 | n.a. |
| Turkey | 48 | 51 | 62 | 62 | 69 | 68 | n.a. |
| Morocco | 30 | 31 | 33 | 33 | 38 | 37 | n.a. |
| other Mediterranean | 44 | 40 | 38 | 46 | 42 | 43 | n.a. |
| Surinam | 77 | 87 | 87 | 98 | 92 | 108 | n.a. |
| Netherlands Antilles | 15 | 17 | 18 | 20 | 22 | 26 | n.a. |
| other | 256 | 260 | 260 | 261 | 273 | 299 | n.a. |
| Level of Education: ²⁾ | | | | | | | |
| low | n.a. | n.a. | 709 | 670 | 651 | 613 | n.a. |
| low medium | n.a. | n.a. | 1,527 | 1,547 | 1,527 | 1,510 | n.a. |
| high medium | n.a. | n.a. | 2,494 | 2,624 | 2,667 | 2,749 | n.a. |
| higher vocational | n.a. | n.a. | 887 | 937 | 995 | 1,061 | n.a. |
| university | n.a. | n.a. | 412 | 403 | 449 | 468 | n.a. |
| Total Labour Force | 5,867 | 5,929 | 6,063 | 6,189 | 6,296 | 6,406 | 6,466 |

Source : *Enquête Beroepsbevolking 1993*, Centraal Bureau voor de Statistiek, Voorburg/Heerlen, 1994, tables 2 and 3, pp. 80,81. For definitions: see note 20.

Notes : ¹⁾ Desaggregated data may not add up to the total labour force because of rounding in thousands.

²⁾ The figures of Level of Education do not add up to the total labour force figure because the category 'education unknown' is not included.

Table 2: Dutch Registered Unemployed as a Percentage of the Dutch Labour Force by Age, Ethnicity and Level of Education, 1988-1994.

| | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|----------------------|------|------|------|------|------|------|------|
| Age: | | | | | | | |
| < 25 | 11.5 | 9.8 | 7.8 | 7.0 | 7.5 | 10.1 | 11.1 |
| 25-34 | 8.1 | 7.4 | 6.1 | 5.7 | 5.6 | 6.9 | 8.2 |
| 35-44 | 6.2 | 5.8 | 5.3 | 4.9 | 4.9 | 5.6 | 6.9 |
| 45-54 | 6.4 | 5.5 | 5.4 | 4.7 | 4.4 | 5.0 | 5.9 |
| 55-64 | 4.0 | 3.6 | 3.5 | 3.6 | 2.9 | 3.1 | 3.8 |
| Ethnicity: | | | | | | | |
| Autochthonous | 6.7 | 5.9 | 5.0 | 4.5 | 4.4 | 5.4 | 6.4 |
| Allochthonous: | 19.0 | 18.0 | 16.0 | 15.0 | 15.0 | 17.0 | 19.0 |
| Turkey | 36.0 | 42.0 | 34.0 | 33.0 | 26.0 | 32.0 | 36.0 |
| Morocco | 31.0 | 31.0 | 35.0 | 31.0 | 30.0 | 36.0 | 31.0 |
| other Mediterranean | 15.0 | 14.0 | 10.0 | 13.0 | 9.0 | 15.0 | 17.0 |
| Surinam | 26.0 | 19.0 | 18.0 | 15.0 | 16.0 | 16.0 | 18.0 |
| Netherlands Antilles | 38.0 | 27.0 | 22.0 | 20.0 | 19.0 | 23.0 | 30.0 |
| other | 12.0 | 11.0 | 10.0 | 10.0 | 10.0 | 11.0 | 12.0 |
| Level of Education: | | | | | | | |
| low | n.a. | n.a. | 15.2 | 14.1 | 13.7 | 15.7 | 19.3 |
| low medium | n.a. | n.a. | 6.8 | 5.9 | 6.1 | 8.1 | 9.0 |
| high medium | n.a. | n.a. | 3.6 | 3.7 | 3.7 | 4.7 | 5.6 |
| higher vocational | n.a. | n.a. | 3.9 | 3.6 | 3.5 | 4.1 | 4.6 |
| university | n.a. | n.a. | 4.8 | 4.2 | 4.4 | 5.1 | 5.8 |
| Total | 7.7 | 6.9 | 5.9 | 5.4 | 5.3 | 6.5 | 7.5 |

Note: For definitions see note 20.

disabled workers were older than 55 years of age which was 7 per cent of the labour force of that year.²¹ In the 1970s and 1980s both the early retirement schemes (VUT) and the Disability Scheme (WAO) were with the silent consent of government and unions used by employers to repulse older employees with a relatively low marginal utility.²²

Table 3: *Unemployment and Unemployment Related Benefits per Ultimo 1993.*

| Source of Benefit | Numbers of Benefits |
|---|---------------------|
| unemployment private sector | 935,000 |
| unemployment public sector | 50,000 |
| sheltered workshops | 80,000 |
| projects for the unemployed | 40,000 |
| 921,000 disabled workers of which are to some degree unemployed | ??? |

Source: *Sociale Nota 1993.*

One may wonder why despite the successful creation of a large number of new jobs in the 1980s the growth of unemployment continued and why it remained persistent in character. Firstly, in the second half of the 1980s the Dutch labour market had to absorb a wave of new entrants: nine out of ten new jobs were occupied by newcomers.²³ This was not only due to demographical factors, but it resulted also from socio-cultural developments, notably the increase of women's participation on the labour market: compared to other industrialized countries the Dutch participation rate for women has always been rather low. A change of attitude in the 1970s and 1980s as to the position and the role of women in society led to a catch-up effect.

Secondly, in the 1970s and the 1980s the employment structure changed. A shift took place from industry to services.²⁴ Especially those branches within industry characterized by low paid labour suffered from the rise of the New Industrializing Countries.²⁵ In the second half of the 1980s employment rose for those with higher and senior vocational training, but decreased for those of a lower educational level.²⁶

This seems to be contradictory to the fact that in the period 1983-1990 employment growth at the bottom of the labour market was proportionally large: 53 per cent (116,000 jobs) which was about three times as high as the average growth of employment (19 per cent).²⁷ However, these were mainly jobs at the base of the labour hierarchy characterized by flexible contracts and minimal or no job security.²⁸ They were mainly occupied by new entrants to the labour market.

A third factor that may account for the persistent nature of unemployment in the Netherlands is the Dutch social security system and the existence of a minimum wage level. Therewith the unemployed are enabled to be selective in the acceptance of jobs while at the same time the costs of labour of a low marginal utility become too high. Thus the unions complain that the jobs available at the bottom of the labour market are of low quality, have no job security and offer no prospects to the employees. At the other side, employers' associations try politically to promote the abolition of the minimum wage level as a major barrier to the solution of the unemployment problem.

3. Structural Unemployment and the Qualitative Change of Labour Demand

3.1. Reactions to the Internationalization of Business

The conclusion from the former sections must be that the last decade Dutch society is confronted with a growing problem of structural long term unemployment of which the victims are mainly the young, the lower educated, the allochthonous and the elderly workers. These are not separate categories. In many cases they coincide. So many immigrants seeking a job have serious language problems and have a low level of education. In many cases their different cultural backgrounds hinder them to adapt to the requirements of the Dutch labour market; many elderly workers often have a lower education.

In the former section we mentioned that in the 1970s and 1980s the Dutch employment structure changed. Many low skilled jobs were lost to NIC countries and recently also to East European countries formerly belonging to the Soviet block. Because of a growing international competition of business low skilled labour intensive industries could no longer compete because of the relatively high level of Dutch labour costs. So they were forced to move labour intensive production to countries with lower wage levels.

A second solution to face international competition was found in shifting production from the formal to the informal 'black' economy. Some employers did so by subcontracting. In this respect the case of the large Dutch clothing-stores is notorious. Many of these used illegal sweat shops to produce clothing; in turn these sweat shops recruited illegal alien workers who because of their weak legal status were forced to accept wages far below the official minimum wage level. Other employers, notably small enterprises in horticulture, directly hired informal labour in order to meet production peaks.²⁹

The flexibilization of labour contracts is a third trend that can be related to economic competition. It means that job security is offered by the employer only to those workers whose labour is regarded to belong to the core business of the company and of which the qualifications are considered to be scarce on the labour market. Workers who do not comply to these criteria are offered temporary contracts - directly or via manpower agencies - for a limited period of time. This solution is different from the one described in the former paragraph because here the contracts comply to Dutch Labour Law offering the workers normal wages and providing them with social security rights in cases of sickness and unemployment. In the former section we noted that in the period 1983-1990 most jobs created at the base of the labour hierarchy were characterized by flexible contracts.

The fourth alternative to fight international competition was specialization. It is believed that western industrialized countries can only economically survive by either reducing production costs or by investing in knowledge intensive sectors of the economy. Therewith the employment shift from labour intensive industries to services and the growing demand for those with higher and senior vocational training.

3.2. The Contribution of Technological Innovation to Structural Unemployment

The policy of production organizations to fight international competition by technological innovation raises the question how the latter contributes to structural unemployment and the segmentation of the labour market as analyzed in the former section. If technological innovation results in an increase of skill requirements it seems reasonable to assume that the chances of low skilled workers to get a job will be reduced. The fact that Dutch long term structural unemployment is disproportionately high among those of a low education seems to make this hypothesis plausible.

Regarding the relationship between technological innovation and the development of skill requirements four generations of research and theorizing regarding the relation between technological innovation and skill requirements can be distinguished.³⁰ In the 1950s and 1960s the first generation saw increasing automation resulting in a substantial improvement of the quality of labour because it observed a broadening of job contents and an upgrading of skills relative to the job requirements of the assembly line.³¹ The second generation was heavily inspired by the Marxist paradigm.³² Instead of upgrading, progressive automation had a degrading effect on job requirements. This 'degrading thesis' could be explained by the tendency in capitalist societies to 'a constant search for lower production costs and greater control over a potentially recalcitrant labour force'.³³ In the late 1970s and early 1980s a reaction was formulated against both the upgrading and the degrading hypothesis. This 'contextualist' generation³⁴ generated research into factors such as the balance of political power, union organization, market conditions and the like that could override any direct effect technology might have on skills.³⁵

At present a new trend becomes discernable. New attempts are made to reach modest generalizations. Recent research is not only interpreted as counter-evidence against the deskilling hypothesis, but as evidence for a net upgrading trend. As a result of economic competition in the late 1980s and early 1990s firms more and more invest in new technology. New technology in general demands more skills of the workers. At the same time within organizations some pockets of de-skilling may

remain to exist. However, the result of the development and application of new technology will be a net upgrading of jobs.³⁶

Another approach to get some grip on the relationship between technological development and changing skill requirements was followed by Hirschhorn and Mockray.³⁷ In a case study through in depth interviews they tried to assess why and when workers feel competent and what factors help them act and work in a competent manner. The results of this study are quite revealing. Hirschhorn and Mockray expected that because of automation the problems workers had to solve became less complex. This turned out not to be true:

'...the workers at Westfield did not highlight any growing simplicity but rather the increasingly abstract nature of the problems. They noted that they were more often using their heads than their hands. Moreover, despite access to more information through the automated systems, many emphasized their need to rely more on memory to control production.'³⁸

Hirschhorn and Mockray bridge the gap between automation and the increase of skill requirements in two steps. They start with the argument that the nature of the tools with which workers have to work changed (table 4). Secondly, because the tools become more integrated and complex the nature of the problems to be solved by the workers changed (table 5) in the sense that mental work becomes more important and significant. As a result the nature of the skills required changed (table 6): in order to perform competently in an

Table 4: The Changing Nature of Tools

| FROM: | TO: |
|---|--|
| A single tool | A system of tools |
| A discontinuity between material and tool | A seamless interaction of material and tool |
| Sensory feedback at the juncture of tool and material | Cognitive feedback at an interface between the system and the person |
| Tools that narrow the worker's focus | Tools that broaden the worker's focus |

Source: Hirschhorn and Mokray, 1992, table 2.1., p. 21.

Table 5: The Changing Nature of Problems to Be Solved by Workers

| FROM: | TO: |
|-----------------------------|----------------------------------|
| A few parameters | Many parameters |
| Correcting variances | Preventing Variances |
| Sustaining levels of output | Sustaining Quality |
| Puzzles: a single piece | Patterns: the flow, the linkages |
| Within a single operation | Across several operations |

Source: Hirschhorn and Mokray, 1992, table 2.2., p. 23.

automated work environment workers need more to plan and to control than in a traditional non automated production setting.

The trend from doing and responding to controlling and planning as analyzed by Hirschhorn and Mockray supports the hypothesis that new technology demands a higher level of skill requirements and that compared to traditional systems of production the latter appeal much more to the cognitive abilities of the worker. However, this is not the only effect new technology has on human labour. Modern technological innovation also implies that production becomes more capital intensive. Even in service sectors like banking human labour is to a large extent substituted by machines. Further, in some sectors of the economy the rate of technological development is as high as to shorten the life cycle of capital substantially. This means that the depreciation of capital has become a large proportion of the costs of production than before. Therefore employers are driven to produce on a 24 hours a day basis and it becomes a vital interest for them to expand the working day or to introduce shiftwork where it did not exist before.

Table 6: Technology's Impact on the Nature of Skills Required

| FROM: | TO: |
|------------|-------------|
| Doing | Controlling |
| Responding | Planning |

| | |
|--------------------------|--|
| Tacit knowledge | Explicit knowledge - knowing what you know |
| Enacting one's knowledge | Remembering one's knowledge |
| Awareness | Awareness of one's awareness |

Source: Hirschhorn and Mokray, 1992, table 2.3., p. 24.

As psychologists have shown shiftwork in the long run induces sickness and disability. In this respect we may expect that there exists a positive relationship between the life cycle of capital and the life cycle of workers. The higher the rate of technological development and the more capital intensive production the sooner in the life time of a production worker his marginal utility will sink below the level acceptable for the employer and the sooner the worker will be expelled from the production process.

The employer's need to use technology as efficiently as possible leads to the requirement that workers should be polyvalent. Firstly, because the higher the relevant rate of technological development the more often workers have to learn to work with new tools and equipment in the course of their working lives. Secondly, the optimal utilisation of modern technology demands of the worker that he is functionally flexible, i.e. that he is able to perform different tasks within the production process and that he can quickly shift between these tasks.

The requirement of functional flexibility is not only induced by new technology as an isolated factor, but rather by product variety demanded by the market which has to be answered by flexibility of the production process as a continuous process of the joint optimization of technology and the organization of human labour. Therefore, it is not sufficient for the worker to understand the parameters of his own task and work situation. Efficient modern production can only exist on the condition that the worker is able to understand how the tasks he performs relate to those of others in the organization. He needs contextual skills, i.e. skills directed at integration and developed and useful in the frame of a non-hierarchical information structure. More specifically, contextual skills refer to the ability to learn different tasks, to communicate, to cooperate, to adapt to different situations and to exert

leadership if needed.³⁹ These skills differ significantly from those workers need in a Tayloristic setting where production is realized by isolated specialization.

From the trends described above we can derive characteristics of workers required to enable them to perform adequately in a modern production setting. These are presented in table 7. This representation needs some additional remarks. Firstly, the characteristics stated are derived from major trends in modern production and should therefore be considered to form the bases of hypotheses to be tested in empirical research. Secondly, some of the concepts are still rather vague. As one of the results of research we would like to know a more exact empirical reference of notably the adjective 'minimal'.

Table 7: Characteristics of 'New' Employees

| |
|---------------------------------------|
| Minimal educational qualifications |
| Polyvalent |
| context oriented |
| flexible |
| capable to continuous learning |
| capable to act autonomously |
| Minimal physical and mental condition |

Thirdly, not all characteristics are mutually exclusive. On the one hand they can be reduced to the level of education attained, on the other hand they are to some extent based on inborn potentials. Actually, it is not too bold to state that, *ceteris paribus*, the educational level an individual can reach is limited by his inborn potentials. Without plunging into a discussion on the precise respective contributions of nature and nurture to human skills and characteristics the conclusion must be that some individuals have more chances to meet the characteristics required by modern production than others.

3.3. Economic Change and Social Exclusion

In the former sections we tried to detect the mechanisms which explain the presently high level of structural unemployment and why it is predominantly concentrated among those with a relatively low educational level. In general terms, the starting point of the analysis was the increase of international economic competition as it developed the last few decades. In the Netherlands the economy reacted by the expulsion of labour to foreign countries characterized by comparatively low wage levels or to the informal sector of the economy, by subcontracting and numerical flexibilization and by technological innovation.

Socio-economic policy was aimed at a reduction of the costs of labour, by removing the barriers to labour market mobility and by increasing the incentives for

accepting work instead of a social security benefit. Consequently, the last decade the replacement ratio was substantially lowered whereas the criteria of social security eligibility were sharpened and the benefit durations shortened. The hope that these policies would decrease the number of those structurally and long term unemployed turned out to be idle.

As it may be clear that the expulsion of labour to the informal economy implies a marginalisation of its conditions, the same holds for subcontracting and numerical flexibilization, be it to a lesser degree. As mentioned before, it is significant that in the period 1983-1990 the substantial growth of jobs at the bottom of the labour market consisted mainly of jobs characterized by flexible contracts and minimal or no job security.

On the other hand, technological innovation has an almost opposite effect on the labour market. In those sectors of the economy submitted to technological innovation job complexity increases and therewith the level of skills required. As mentioned before, the latter should not only be associated with formal levels of education but also with personality traits of the workers which are partly shaped by an educational career but which also originate from personal capacities which in turn determine success in the educational system. Workers that comply to such skill requirements operate in the core sectors of the economy and are crucial to the production processes in which they are engaged. However, before their levels of productivity needed are reached they have to be trained on the job. Therefore, employers try to prevent labour turnover by providing them with relatively good conditions of employment.

The phenomenon of supersession fits rather well into this trend.⁴⁰ On the supply side most workers prefer to work in the core segment of the labour market because there the conditions of employment are best and career opportunities are provided. On the demand side employers will try to select the best workers they can get. As long as jobs are scarce, employers are able to require skills that are higher than actually needed for a good performance of the relevant job. The net effect of this will be supersession downwards the labour hierarchy resulting in structural unemployment of those in the lower segments.

In 1986 Kern and Schumann published their book *Das Ende der Arbeitsteilung? Rationalisierung in der industriellen Produktion*. They pointed out that the rise of

new technology would lead to a segmentation of the working class into four categories.

The first category consists of workers employed in sectors characterized by new technology and the resulting new production concepts: the so-called new employees or the core workers as we described them above. Workers in the new technology sectors who are not part of the new production concepts belong to the second category. These are the traditional workers that are not polyvalent because of age, sex or immigrant status. The third category consists of workers in the traditional production units and the fourth category are the unemployed.

In the analysis of social exclusion the labour market is of special importance as it can be considered as a central institution by which scarce goods and services are distributed in society. However, in modern post-war industrialized societies it is not only the labour market that fulfils this social function. As early as 1952 M. Penelope Hall distinguished as the essential characteristic of highly developed industrial welfare societies that governments guarantee the participants in those societies a minimum level of health care, economic security, civilized living and the ability to share in the social and cultural achievements of society.⁴¹ To the degree these attributes cannot be realized by the functioning of the labour market, they should be attained by social security rights. The concept of social exclusion then refers to those categories of the population that cannot share in the achievements of society as defined by Hall either because of their positions on the labour market or because of a lack of sufficient guarantees by the social security system.

Consequently, for the study of social exclusion the Kern and Schuman classification has its limitations as it does not take into account the effects of social security on the distribution of scarce goods and services in society. However, if we would extend the classification with social security rights it could be a useful tool to describe social exclusion in its varying degrees. Taking then the position on the labour market as a starting point it seems to me that presently five segments can be discerned.

The first segment consists of the core workers with medium or higher vocational training employed in modern and knowledge intensive industries and services. These core workers do have a reasonable degree of job security, have relatively high incomes and their labour is of high quality.

The second segment consists of those working in the formal economy on flexible contracts. They have only temporary job security, a relatively low quality of labour, but they are entitled to all formal rights provided by labour law and the social security system. If they wish to do so, they have the opportunities to supplement their incomes in the informal economy.

The third segment consists of those on social security benefits (social assistance, unemployment and disability benefits) who have some qualifications demanded in the market. They therefore have the opportunity to moonlight in the informal economy and to supply their benefits with black earnings.

The fourth segment consists of people living on social security benefits which have few or none qualifications demanded in the labour market. Consequently, their opportunities to leave the social security system or to earn a supplementary income in the informal economy are minimal. Because of cuts on social security benefits the last decade they were confronted with decreasing incomes even to the extent that a large category is believed to live on the subsistence level. To this fourth segment belongs the chronically sick, the long term unemployed and the elderly.

The fifth segment consists of those workers with a weak legal status, notably illegal immigrants. They have no access to the formal labour market and are forced to work in the informal economy and to accept work of low quality with low earnings and no job security. In case of sickness or unemployment they do not have any social security rights.

We started this analysis of social exclusion with Den Uyl's statement of 1984 that a split in Dutch society was growing. More than ten years later his ideas are still relevant. However, they need some specification. First of all, the thesis that Dutch society is moving into the direction of a dichotomy is too simple. The classification presented above shows that there is no clear break between those who have favourable socio-economic positions and those who have not. The combined effect of unequal chances on the formal and the informal labour market and the dissimilar rights the social security systems produces for individuals of differing backgrounds make the demarcations between socio-economic categories that suffer from different degrees of social exclusion rather fluent.

Secondly, and to some extent related to the former argument, it seems ambiguous to label those who are socially excluded as a new underclass or even as belonging

to the same status group: they cannot be considered homogeneous as to economic positions and life styles. However, as we emphasized before, technological innovation and the demand for higher levels of productivity make an individual's chance to be excluded from the labour market ever more dependent of personal characteristics such as intelligence, the ability to learn, flexibility and health status. These propensities are hard to influence by education and training nor will they react to incentives like a lower replacement ratio. Contrary to such traditional production systems like Fordism, in modern economies the chance to be excluded from the labour market is to a large extent related to given personal capacities. This is the common denominator of those that live at the margin of society.

The heterogeneous nature of the category of the socially excluded makes social exclusion nowadays indeed to a social problem of utmost importance because it may jeopardize social stability. As we have seen before ethnic minorities have a high unemployment rate which is about five times higher than average Dutch unemployment. So they are well represented among the socially excluded. What is more, they are clearly recognizable because of dissimilar race and life styles. This internal division within the socially excluded along the lines of race and subculture prevents this category from effective organization in order to promote its interests. Frustrations originating from an economic and social dead end situation lead to social aggression which is inner directed. Thus among the deprived who compete at the bottom of society for scarce goods and services there is a growing tendency to perceive other groups in a similar position as the scapegoats. Hence the last decade in those areas where social exclusion is concentrated one can observe growing racism and support for right wing social and political radicalism that aims at 'sending the aliens home'.

4. Policy Options: Some Conclusions

In the forgoing sections we argued that economic changes are at the basis of increasing social exclusion in modern society. As these developments progress we may expect that more and more workers will be expelled from the labour market.

This expulsion is selective because technological developments in production processes make the worker's utility more than before dependent on personal characteristics and capacities that can be trained for only to a limited degree. This implies that training the unemployed will not bring the solution we are waiting for, i.e. a substantial decrease of structural unemployment.

We did not argue that the present volume of structural unemployment means that there is not enough work to be done in society. Because of all kinds of social arrangements related to the idea of Welfare Society for the employers the price of labour in the formal labour market is relatively high and this suppresses the demand. This holds especially for low skilled labour which is consequently expelled to the informal black economy. So it seems appropriate to reduce the costs of labour in order to decrease structural unemployment.

This is precisely the kind of social policy the Dutch government is presently following. Part of this policy concept is also the decrease of the replacement ratio and the execution of special programs aimed at training the long term unemployed and providing them with work experience. So far the results are disappointing.

Dutch social policy has led to a situation where the expulsion of workers with a low marginal utility has continued while at the same time social security provisions for those expelled have deteriorated. Therewith social exclusion increased. Of course, one could argue - as some do - that the process of decreasing the costs of low skilled labour has not yet gone far enough. The proponents of this view often take the US experience as an example. One has to admit that the US were very successful in creating jobs at the bottom of the labour market. However, this did not solve the problem of social exclusion as this US policy has induced an increase of poverty. As research shows, another negative effect of the US model is that it leads to a decrease of labour productivity because it takes away any incentive to achieve.⁴²

In my view we are here confronted with one of the dilemmas of Welfare Society. If one chooses to uphold income protection for the weak and powerless it seems almost impossible to solve the unemployment problem. If, on the other hand, one chooses to strive for full employment one has to break down the achievements of the Welfare State which will without any doubt lead to a substantial increase of poverty and social exclusion. It is not too bold to predict that the social unrest produced by the latter will in the end force society to pay a price.

It seems as if the market oriented policies of the industrialized countries that became so popular since the 1980s and which prescribed a withdrawal of the state from economic and social affairs are now meeting their limits. From the perspective of international economic competition they may be advisable, but we can now see that the social consequences they produce may trigger off processes of social disintegration which, in turn, may have a detrimental effect on business.

From the national perspective it is utopian to think that one could influence the parameters of international economic competition. Likewise the debate whether or not one could get rid of new technology in order to avoid social exclusion seems academic to me. However, if one accepts the view that modern economic processes are behind the problem of social exclusion the conclusion must be that it is only the state that can counteract the negative social consequences by taking a more active role.

This new concept of social policy should start from the idea that in a modern internationally oriented economy structural unemployment is not to be avoided. This implies that social policy should break out of the chains that tie it to economic policy. The latter should continue to improve the conditions of business. Social policy, however, should take its own responsibility and direct itself to neutralize the negative effects the labour market has for the distribution of scarce goods and services at the bottom of society. It should be complementary by satisfying the needs that cannot be fulfilled by the market. Therewith competition at the bottom of society and social exclusion can be mitigated.

If one accepts the fact that structural unemployment is of a permanent character in our economy social policy aimed at reducing social exclusion has two main targets to strive for. The first one is to reconsider policies of income redistribution in order to prevent the rise of poverty: if we accept the idea that many of our fellow citizens are outside the labour market we must not hesitate to face the problem how to finance their incomes. If our social policy manages to be successful in this respect, there is left a second problem to be solved: how can we integrate those without a job into our society by providing them with life purposes that enable them to feel included instead of excluded. This involves a tremendous change of culture implying the growth of new values as to the functions of work in society.

Notes

1. Cited in Köbben and Godschalk, 1985, p. 1. Translation mine.
2. These objectives were stated in a publication of the Socio-economic Council, SER : *Onderzoek van de economische situatie van Nederland* , 1956. See also J.P. Windmuller, 1969, chapter VIII.
3. Later on Den Uyl stated in a publication that the concept 'dichotomy' actually lacks the subtlety to describe the process of fragmentation of society. See Den Uyl, 1986.
4. Köbben and Godschalk, 1985.
5. De Lange does not speak of an underclass , but of a growing category of people suffering from insecurity of subsistence. His study aims to methodologically and theoretically interpret the many hundreds of research reports that have been published in the Netherlands on this issue. See De Lange, 1993.
6. Engbersen, 1990, p. 282.
7. De Lange, 1993, p. 403.
8. In literature the concept of new technology is only poorly defined. In general, the adjective 'new' seems to relate to automation built in technology by the application of micro-electronics and information technology. See A. Francis, 1986.
9. See for an elaborate treatment of post-war Dutch social and economic institutions and industrial relations: Bax, 1990, pp. 123-130 and pp. 149-153.
10. See J.P. Windmuller and C. de Galan, 1979, part II, p. 140.
11. See for an elaborate treatment of the Dutch Guided Wage policy J.P. Windmuller, 1969.
12. I.e. labour share in net value income of the private sector at factor prices (include d imputed income of the self employed).
13. Graafland, 1990.
14. *Advies sociaal-economisch beleid 1994-1998, deel II: analyse* , 1994, p. 41.
15. OECD, 1993-A, p. 7.
16. OECD, 1993-B, p. 9.
17. OECD, 1993-B, p. 15.
18. May and Muysken, 1992, p. 190.
19. *Advies sociaal-economisch beleid 1994-1998, deel II: analyse* , 1994, p. 44.
20. Definitions table 2 and 3: *Labour Force*: Persons between from 15 till and including 64 years of age who: work at least 12 hours per week, or have accepted a job because of which they are going to work at least 12 hours a week, or state that they want to work at least 12 hours a week, that they are available for the labour market and that they are actively seeking a job of at least 12 hours a week. *Registered Unemployed*: Persons from 15 till and including 64 years of age registered at the labour exchange bureaus who: do not have a job or work less than 12 hours a week, and have accepted a job because of which they are going to work at least 12 hours a week, or are available for a job of 12 or more hours per week or have accepted a job by which they are going to work at least 12 hours per week. *Level of Education*: Low: first level basic education; low medium : second level lower stage, i.e. junior vocational training and basic secondary education; high medium: secondary education, preparatory schools and senior vocational training ; higher vocational: vocational colleges. See Statistical Yearbook 1994 of the Netherlands, Statistic Netherlands Publications 1994, The Hague, SDU, 1994, pp. 451-453.
21. Bensing c.s., 1991.

22. Because of the legal possibilities in the 1970's and 1980's to repulse workers with a relatively low marginal utility to the Disability Scheme WAO the Dutch labour productivity is among the highest in the world. In the early 1990's the government reformed the WAO in order to fight this type of hidden unemployment.
23. *Sociale Nota 1994*, annex 5.
24. *Ibidem*.
25. Andriessen and Van Esch, 1993, pp. 4-5.
26. De Grip and Dekker, 1993.
27. *Sociale Nota 1993*, annex 7.
28. Bosch and Van der Hoeven, 1991.
29. See E.H. Bax, 1994.
30. Adler, 1992, pp. 6-9.
31. Blauner, 1964; Woodward, 1958; Touraine, 1954; Mallet, 1969.
32. Braverman, 1974.
33. Adler, 1992, p. 7.
34. E.g.: Edward, 1979; Gallie, 1978; Knights *et al.*, 1985.
35. Adler, 1992, pp. 7-8.
36. See Adler, 1992, p. 8. Steijn and De Witte found that as a result of technological development the educational level required of workers increased while in many cases the skill level of jobs decreased. Thus they concluded that new technology may induce a dequalification of labour if one analyses the job content. See Steijn and De Witte, 1992.
37. Hirschhorn and Mockray, 1992.
38. Hirschhorn and Mockray, 1992, p. 21.
39. Aoki, 1988, p. 50.
40. See for an analysis of the development of the skill structure of employment and the level of education in 1977 and 1985: F. Huijgen, 1989.
41. Hall, 1952, p. 303.
42. Delsen, 1995.