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The Rise of ‘New’ Social Classes within the Service Class in The Netherlands

Political Orientation of Social and Cultural Specialists and Technocrats between 1970 and 2003

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Abstract: The employment structure of The Netherlands and other advanced countries is evolving from industrial to postindustrial. Yet existing social class schemata, like the well-known Erikson, Goldthorpe and Portocarero (EGP) class schema, were constructed for an industrial employment structure. In this study, we adjust the EGP class schema to account for this transformation by using new class theories. We distinguish a ‘new’ class of social and cultural specialists and an ‘old’ class of technocrats with both a higher and a lower version in the service class. Our research question concerns the extent to which the adjusted EGP class schema is a better predictor of people’s political orientation than the standard EGP class schema. We assume that the ‘new’ classes differ in their political orientation from the ‘old’ classes. We also assume that, during their formation, the ‘new’ classes become increasingly effective in explaining differences in people’s political orientation. Experts’ knowledge is employed to classify the occupations. In addition, we use the data of 34,856 respondents gathered between 1970 and 2003 in The Netherlands. The adjusted EGP class schema explains people’s political orientation substantially better than the standard EGP class schema; the ‘new’ classes vote significantly more for leftist parties and differ substantially in their political orientation from the ‘old’ classes. Furthermore, our results show that the political orientation of the low-grade social and cultural specialists has become more crystallized since 1970.

Keywords: adjusted EGP class schema ◆ new social classes ◆ political orientation ◆ social class structure ◆ trend analysis

Introduction

The advanced economies have experienced vast changes in their employment and social class structure (Elfring, 1988, 1989, 1992; OECD Employment Outlook, 2000; Breen, 2004). The Netherlands, the country we focus on here, has also experienced these changes (Asselberghs et al., 1998; Ganzeboom and Luijckx, 2004), mainly due to processes such as mechanization and computerization. Despite such changes, sociologists still use class schemata such as the well-known EGP class schema devised by Erikson, Goldthorpe and Portocarero (1979). Yet, the EGP
class schema classifies workers according to their occupations and employment relations of an industrial employment structure. The question is whether the EGP class schema captures important social cleavages in the transition to a postindustrial employment structure. To answer this question, we need an indicator for these social cleavages, and, traditionally, voting behaviour has been used as such an indicator.

The voting behaviour of the classes has been studied extensively in political science and sociology (for an overview, see Nieuwbeerta, 1995). Research shows, for instance, that variations in voting behaviour within the service class are more marked than variations between the classes (Butler and Savage, 1995; Nieuwbeerta and De Graaf, 1999). Not only has the service class increased in size, it has also become more heterogeneous, and this suggests the need to adjust the EGP class schema.

Our adjustment of the service class is based on the literature on postindustrial class theories and studies that have already adjusted parts of the standard EGP class schema. In the current research, we adjusted only the service class of the EGP class schema, leaving the other social classes of the schema unchanged. Within the service class, we distinguished a ‘new’ class of social and cultural specialists and an ‘old’ class of technocrats with both a higher and lower version in the service class. We then tested the validity of the adjusted EGP class schema by comparing it with the standard EGP class schema. The adjusted EGP class schema can be said to better reflect the social cleavages in postindustrial societies if it predicts people’s political orientation better than the EGP class schema. Our first research question is as follows:

To what extent does the adjusted EGP class schema predict people’s political orientation better than the standard EGP class schema?

To answer convincingly, we examined the political orientation of people from different classes in The Netherlands over three decades. According to class formation theory, it takes time for a class to gain a high degree of ‘demographic identity’ (Goldthorpe, 1995). Thus, if there are ‘new’ classes within the service class, these classes should over time become more effective in explaining differences in people’s political orientation. Our second research question is:

To what extent do the distinguished ‘new’ social classes become more effective over time in explaining differences (effect size) in people’s political orientation?

Theory

A new social class within the service class

The importance of social class has been the subject of much debate. Some have argued that social classes are ‘dying’ (Pahl, 1989, 1991; Holton and Turner, 1989; Clark and Lipset, 1991; Goldthorpe and Marshal, 1992; Clark et al., 1993; Pakulski and Waters, 1996); others have claimed that new social classes are rising (Kriesi, 1989; De Graaf and Steijn, 1997). While the debate on the significance of social class in contemporary Western societies continues (Manza and Brooks, 1996; Weeden and Grusky, 2005), attempts are being made to delineate the emergence of new social classes. One of these is the ‘new class theory’ (Bruce-Briggs, 1979; Brint, 1984; Lamont, 1987; Kriesi, 1989; Esping-Andersen, 1993), according to which the middle class can be divided into two: a ‘new’ class of knowledge workers and an ‘old’ class of industrialists and business owners. Bruce-Briggs (1979) claims that there is a struggle between these two classes for power and status in society.

Views differ on how the ‘new’ classes should be conceptualized. Brint (1984) uses several conceptualizations in his work and concludes that differences within the service class can be explained by educational differences. Lamont (1987), in contrast, claims that the progressive
attitudes of the incumbent cultural capital workers are explained by their common interests. According to Lamont (1987), these common interests are: to maintain and increase their autonomy, have a powerful government sector, promote taxes from the private sector to invest in the public sector and support politics regarding ‘non-material issues’ like euthanasia, lesbian/gay marriage and environmentalism.

In accordance with Lamont, Kriesi (1989) builds on the ‘new’ class concept, which he uses to explain support for new social movements in The Netherlands. In his conceptualization of the middle class, Kriesi (1989) distinguishes between two main classes, technocrats and specialists, and argues that there is ‘a basic antagonism of interest’ between technocrats and specialists. Technocrats are assumed to preserve the integrity of the organization they work for, while the specialists are more client-oriented or their objective is to act within the body of knowledge of the discipline they belong to. The specialists are assumed to represent the ‘new’ class, and they are likely to support the new social movements because ‘the specialists try to defend their own and their clients’ relative autonomy’ against the interventions of the controllers (Kriesi, 1989: 1085–6).

Two other theories shed additional light on the class structure of the postindustrial society. One is the materialism and postmaterialism thesis of Inglehart (1990) on the value shift in affluent societies; the other is Bourdieu’s (1984) thesis of economic and cultural elite. In this, the value priorities of materialists and postmaterialists are said to be based on their needs, with materialists focusing on material goods and postmaterialists more interested in quality of life issues. Both choose their education and occupation according to these needs and priorities. Thus, the occupations chosen by members of the service class are said to correspond to these two dimensions of materialism and postmaterialism. Cotgrove and Duff’s (1981) study showed indirectly that materialists are found more among managerial and technocratic occupations, e.g. managers and administrators, while postmaterialists are more common in social and cultural occupations.

The two value dimensions discussed by Inglehart resemble the distinction made by Bourdieu (1984) between economic and cultural elites (De Graaf and De Graaf, 1988). Bourdieu uses occupational positions to differentiate a person’s economic or cultural status. Occupations with a low social status, such as unskilled work, score low on both the economic and the cultural ladders, while some specific high social status occupations score high only on the cultural ladder and some high only on the economic ladder. Occupations in education, health care and social services, for example, are said to score high on cultural capital (Bourdieu, 1984) and constitute the ‘new’ class of the postindustrial society (De Swaan, 1985). Occupations said to have a relatively high economic dimension are those of the ‘old’ middle class, e.g. economists, engineers, managers and proprietors.

**Adjusting the service class of the EGP class schema**

De Graaf and Steijn (1997) claimed that the EGP class schema is inappropriate for postindustrial societies. They showed large differences in explanatory power between their adjusted EGP class schema and Goldthorpe’s class schema with respect to the political behaviour of Dutch people. De Graaf and Steijn (1997) divided the service class (classes I and II of the EGP class schema) into four classes. They distinguished social and cultural specialists from controllers, arguing that these classes experience different labour market conditions. Using Dutch Family Survey data (Ultee and Ganzeboom, 1995), they showed that their adjusted EGP class schema better explains differences in an array of attitudes and behaviours, even when controlling for education.

We build on this new classification schema by De Graaf and Steijn (1997) to adjust the EGP class schema that already incorporates the theories of Kriesi (1989), Lamont (1987) and Esping-Andersen (1993). Additionally, we use the theories of Inglehart (1990) and Bourdieu (1984) to
show that all these theories imply similar social cleavages in the middle class. Furthermore, we agree with Grusky and Weeden (2001) that the traditional classes, especially the service class, are too aggregate, and our adjustment of the service class is an attempt to disaggregate it. A relatively new aspect is that we analyse the formation process of the ‘new’ classes. In other words, we examine the differences between the ‘new’ classes and the ‘old’ classes over time with regard to people’s political orientation.

We suggest distinguishing the service class into a ‘new’ class of social and cultural specialists and an ‘old’ class of technocrats according to two criteria. Like Goldthorpe (2000: 206–29), we base our criteria on employment relations. We assume that occupational characteristics, for the most part, serve as an adequate proxy for the features of employment relations. Our first criterion is difficulty in monitoring the tasks performed by employees. This is inspired by the work of Goldthorpe (2000) and Wright (1985, 1997). Wright (1997) distinguished specialists from managers because the former are more difficult to control than the latter. He convincingly explained that ‘the control over knowledge and skills frequently renders also the labor effort of skilled workers difficult to monitor and control’ (p. 22).

The second criterion is social and cultural features of occupations, which is inspired by the work of Kriesi (1989). This second criterion has two components: whether an occupation has a feature of social services and/or whether it needs social and cultural specialist knowledge to perform the tasks well. Occupations do not need to have both components to be classified as social and cultural specialists: one is enough. We use the controllability of the employees and a specific kind of human capital in delineating the service class occupations. With respect to the second criterion, we argue that the possession of a specific kind of knowledge and skills, i.e. social and cultural knowledge and skills, is why most social and cultural specialists are employed in the public sector or non-profit-making sectors.

Goldthorpe (2000) puts professionals and managers in the same class according to the criteria of monitoring and specificity of human assets. Scholars have argued that managers and professionals cannot be considered as members of a single class according to their political orientations (Savage, 1991; Heath and Savage, 1995), employment relations (De Graaf and Steijn, 1997) and mobility patterns (Gerber and Hout, 2004). We argue that it is easier to control managers and administrators because, for example, the objectives of managers are more clearly framed than those of professionals. The leading task of managers in the commercial sector is to seek profit for their employer organization. If this aim is not realized, it is required that they resign or at least that they will be placed in another function. In the case of managers in a non-profit organization, the goal is still straightforward: maintain the viability and success of the organization.

In contrast to managers, administrators and technical specialists, it is difficult for an employer to monitor the tasks of professionals. This holds especially in the case of social and cultural specialists. The job-specific skills and knowledge of the social and cultural specialists are very sophisticated, and this is where the problem of monitoring arises (Freidson, 1986; Wanrooy, 2001). This problem arises because the social and cultural specialists’ primary aim is to use their skills and knowledge in the interests of their clients (Kriesi, 1989). For example, medical specialists and psychologists use highly specialized knowledge while performing their job. Managers or employers do not have the specialized knowledge that social and cultural specialists have at their disposal. Managers have a classical Principal–Agent problem in this case (Coleman, 1990). The principal (i.e. manager) is responsible for the agents but these agents have skills and knowledge the principal does not have, and this makes it difficult for the principal to control the agent.

As far as we know, no empirical studies have been done on this specific issue of difficulty in controlling the work performance of technocrats and social and cultural specialists. However, as Flood and Scott (1978: 242) put it: ‘[I]t is widely recognized that the assessment
of professional performance is at best a complex and hazardous business’. Freidson (1986: 152) convincingly argues that there is a ‘basic antagonism of interest’ between managers and professionals. Managers seek to prevent the interest and the viability of the organization they work for, while specialists try to prevent the interest of their clients, patients or students and/or their field of specialization. It is important for specialists to guarantee the autonomy in their work. Therefore, they do not want their managers to interfere in their domain of specialization. Flood and Scott (1978) show that the influence of the managers on the decisions of surgeons’ own domain was not significantly related to the quality of surgical care. On the other hand, a greater regulation of the work of individual surgeons by the surgical staff was associated with higher quality of surgical care in the hospitals.

Thus, occupations are classified as social and cultural specialists in whom the tasks are relatively difficult to monitor by the employers and in whom the basic tasks consist of social services and/or in whom the basic tasks are based on specialized knowledge in social and cultural issues. Other occupations within the service class are classified as technocrats. That is to say, occupations are allocated into the class of technocrats if their tasks are relatively easy to monitor by their employer or if the basic tasks in these occupations consist of controlling the employees. We retain the higher–lower distinction of the service class in the adjusted EGP class schema as it is in the standard EGP class schema. Hence, there are four social classes in the service class of our adjusted EGP class schema: high-grade technocrats, high-grade social and cultural specialists, low-grade technocrats and low-grade social and cultural specialists.

Figure 1 shows the structure of the standard and the adjusted EGP class schema. The ‘new’ social classes in the service class are not hierarchically ordered, but situated next to each other in relation to their social status. The materialists and the postmaterialists are represented to different degrees in these social classes, since high-grade and low-grade technocrats put more

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Figure 1 The EGP class schema compared with the adjusted EGP class schema
priority on materialistic values while high-grade and low-grade social and cultural specialists give more priority to postmaterialistic values. To some extent, Figure 1 also reflects Bourdieu’s (1984) grouping of occupations according to economic and cultural dimensions. These dimensions are the same in the lower levels of occupations, but they split into two at the higher levels, which can also be seen from Figure 1.

Political orientation of the social and cultural specialists and technocrats

There are two approaches to the explanation of voting behaviour: one sociological, the other economic. The sociological approach claims that those around them influence people in their voting behaviour, such as parents, friends and workmates. It suggests that group membership has an adhesive quality which binds people to their parties. Voting is a symbolic act, i.e. people expressing their allegiance to a particular social group (Heath et al., 1985: 8–9). The economic approach, on the other hand, claims that people vote for parties with policies that will bring them the greatest advantage (Downs, 1957; Schumpeter, 1991). People with the same socio-economic position will have the same interest and thus vote for the same political party. Political parties cater to the interests and preferences of people and social groups. According to Need (1997), the sociological approach does not explain why co-workers from the working class vote more for left-wing parties, while the economic approach cannot explain why people are influenced by other voters (for further detail, see Need, 1997). Need (1997) used Popkin’s (1991) ideas on low information rationality to integrate these approaches. According to Popkin (1991), voters do not invest much time gathering information about political parties, for example by reading the party programmes, because this does not necessarily lead to the desired outcome. Instead, voters more efficiently use information about what other voters say, especially through information about those who are in similar social, economic and religious positions.

On the basis of the integrated approach to voting behaviour, we expect the social and cultural specialists to be more likely than the technocrats to vote for leftist parties. These parties stand for the interests of employees in the public/non-profit sector. Social and cultural specialists carry out tasks that provide for the basic needs of a society (education, health care and the like). However, it is difficult to make these tasks more efficient by using innovations such as mechanization and computerization (Baumol, 1967). The time that a nurse or a general practitioner needs to dedicate to a patient, for example, has remained much the same over time. That is why these occupations are economically less profitable than those of managers or computer scientists. In other words, these occupations require more financial investment than they yield to keep the quality of the services they provide up to date. Since these jobs are not directly instrumental in profit maximization, sectors (e.g. health, education) of these occupations need much investment by the state or any charitable institution. Clearly, the performers of these jobs are aware of the fact that they are working in a field that needs financial support from the state. Therefore, we expect that the social and cultural specialists vote more for leftist parties than the technocrats do.

Furthermore, the fact that the jobs of social and cultural specialists are relatively difficult to mechanize and that these jobs are not directly instrumental to profit maximization gives a certain autonomy to the performers of these jobs. Mechanized work tasks are easier to monitor than tasks that are difficult to mechanize or tasks that cannot be mechanized at all. Mechanized or computerized work tasks are easier to trace or control than tasks in which the performers of these tasks are themselves responsible. This relative autonomy, possession of specialized knowledge and the fact that most social and cultural specialists predominantly work in the public sector means that they develop more progressive political behaviour. In this way, they try to influence political decisions by voting for left-wing parties with regard to employment situations and organizational regulations for their own and their clients’ interest.
Moreover, for the few social and cultural specialists working in the private sector, we argue that they are concerned relatively less with economic outputs and more with the quality of the services they offer. Since the main aim in the private sector is to seek financial gain, the autonomy of the social and cultural specialists with regard to their work tasks is endangered if the sector they work in is privatized. This is why we expect the social and cultural specialists to vote for left-wing political parties, since leftist parties are proponents of big government and against privatization of the sectors in which the social and cultural specialists work (e.g. education and health care).

The progressive attitudes held by social and cultural specialists owe much to the relative autonomy they enjoy in their work tasks. Members of these occupations also tend to possess more humanistic and value-laden knowledge, which makes them more sensitive to non-economic issues. New-left political parties are proponents of democratization, a multicultural society and environmental protection. For these reasons, we expect the social and cultural specialists more likely to vote for the new-left political parties than for the technocrats.3

As regards the technocrats, we expect them to vote more for right-wing political parties, because these parties strive to preserve the status quo while promoting privatization and, especially, lowering taxes. The majority of the technocrats are employed in the private sector. Furthermore, the technocrats have economic and organizational assets which they use for profit-maximization and for the viability of the organization they work for. The technocrats’ assets and strategies are therefore in line with the right-wing party programmes.

Goldthorpe (1982, 1995, 2000) claims that the service class is still under formation, and that if it consolidates it will become an essentially conservative element within society. That is because members of the service class hold the most privileged occupations within the social division of labour; they are unlikely to be proponents of egalitarian values or politics. Rather, they are more likely to seek to preserve the status quo. This claim has been criticized, however (Lamont, 1987; Kriesi, 1989; De Graaf and Steijn, 1997), and is not backed by research. Furthermore, Goldthorpe does not mention approximately when this consolidation of the service class will occur. Studies show that there continue to be large differences in political orientation within the service class (Brint, 1984; Kriesi, 1989; Savage, 1991; Hout et al., 1995; Brooks and Manza, 1997; De Graaf and Steijn, 1997), so it is obvious that the consolidation process of the service class is not yet finished.

The data we use in this article enable us to test previous claims about class formation over time. Since the class structure has changed gradually, we assume that the political preferences of the ‘new’ classes of the social and cultural specialists have crystallized gradually as well. Our assertion is that over past decades the political orientation of the social and cultural specialists has become more crystallized (i.e. class-based voting has become stronger).

**Data and operationalization**

To test our hypothesis, we used data from surveys held between 1970 and 2003. Nieuwbeerta and Ganzeboom (1996) combined different surveys from 1970 to 1990 (the International Social Mobility and Politics File (ISMP)), while the data between 1992 and 2003 came from the Family Survey of the Dutch Population (FSDP) held in 1992 (Uitte and Ganzeboom, 1995), 1998 (De Graaf et al., 1999), 2000 and 2003 (De Graaf et al., 2002, 2004). The FSDP dataset was made comparable to that of Nieuwbeerta and Ganzeboom (1996) and added to it. The resulting dataset consisted of 19 different surveys with a total of 34,856 respondents over a 33-year period.

The criteria for splitting the service class into four classes are presented above. We asked 12 experts on job or labour markets to allocate all occupations in EGP classes I and II to a class of technocrats and a class of social and cultural specialists. The experts were presented with 293 descriptions of detailed occupations of the service class derived from the Standard Classification of Occupations 1984 of Statistics Netherlands (CBS 84). An occupation was to
receive the score 1 when an expert allocated this occupation to the class of technocrats and 2 when allocated to the class of social and cultural specialists. There was agreement among the experts about the allocation of occupation into one class or the other. The KR20 reliability coefficient (alpha coefficient for dichotomous items) is 0.95; no expert disagreed strongly with the other, and overall reliability could not be improved by leaving out experts. We then calculated the mean expert allocation score for each single occupation based on the scores the experts gave them. The experts agreed perfectly on the allocation of 42 per cent of the occupations. Occupations with scores below 1.3 and above 1.7 (i.e. agreement among 77 per cent of the experts or higher) were simply allocated to the majority vote. The remaining occupations (23 per cent of the total), about which the experts disagreed more, were allocated by the authors in consultation with some of the experts.

Occupations in the ISMP file were identified based on the four-digit occupational classification of the International Standard Classification of Occupations 1968 (ISCO 68); occupations in the FSDP file were identified on the basis of CBS 84. Therefore, occupations in the FSDP file were converted into ISCO 68 with the conversion tools of Ganzeboom et al. (1989). Doing this, we also converted the expert’s classification of the occupations of the service class into the ISCO 68 and 88. The coding scheme can also be obtained from the website at www.ayseguveli.nl. Table 1 presents the frequency distribution of the adjusted EGP class schema.4 The classes of the high-grade, low-grade technocrats and the low-grade social and cultural specialists (Ia, Ib and IIb) have expanded over time, while there is no trend in the share of the high-grade social and cultural specialists.5 The share of workers decreased substantially from 41 per cent in 1970 to 32 per cent in 2003.

We analysed two different dependent variables for voting behaviour. The political parties were divided into two groups for the first variable: left-wing parties and right-wing parties. For the second dependent variable, the parties were divided into three groups: old-left, new-left and right-wing parties.

Since there are no data on the actual voting behaviour of the respondents, we have to rely on indirect measures of ‘voting behaviour’. Voting behaviour was constructed from different variables requested in different surveys. Some surveys asked respondents to name the party they would vote for if national elections were held tomorrow. Other surveys asked the name of the political party that the respondent voted for in a recent election or which political party the respondent preferred or identified with.

According to Nieuwbeerta (1995: 35–6), there are no significant differences in outcomes between analyses that use surveys containing ‘voting behaviour’ measures and those that use surveys with measures for ‘political preferences’. We therefore used both voting behaviour and political preferences to construct voting behaviour.6 We used the classification of political parties by Mackie and Rose (1991) to categorize parties as leftist or rightist. The right-wing political parties were coded as zero (0) and the left-wing political parties as one (1).

We split the left-wing political parties in The Netherlands into two groups according to the De Graaf et al. (2001) classification: the new-left and the old-left. The old-left parties are the Radicals, the Communist Party (CPN), the Democratic Socialists 70 (DS70), the Labour Party (PvdA) and the Socialist Party (SP). These parties stand for the interests of the working class (De Graaf et al., 2001). The new-left comprises parties like the Democrats ’66 (D66), the Green Left (Groen-Links), the Radical Political Party (PPR), the Pacifist Socialist Party (PSP) and the Evangelical People’s Party (EVP). New-left political parties stress issues like democratization, human rights and environmental protection. All other parties are grouped as right wing.7 The dependent variable for old-left versus new-left versus right-wing parties was coded as (1) old-left parties, (2) new-left parties and (3) right-wing parties.

To find out whether the adjusted EGP class schema is improved in relation to the old one, we also used the standard EGP class schema in our analysis. For simplicity, we reduced the
Table 1  Class structure for men in the labour force between 1970 and 2003 (n = 15,768)

<table>
<thead>
<tr>
<th>Classes</th>
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<th>'72</th>
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<th>'82</th>
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<td>13.1</td>
<td>7.3</td>
<td>5.2</td>
<td>15.4</td>
<td>10.6</td>
<td>8.5</td>
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<td>14.5</td>
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<td>2.5</td>
<td>1.1</td>
<td>3.2</td>
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<td>1.2</td>
<td>1.9</td>
<td>1.7</td>
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<td>1.7</td>
<td>2.4</td>
<td>2.6</td>
<td>1.5</td>
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<td>Ila. Low technocrats</td>
<td>15.7</td>
<td>7.6</td>
<td>14.4</td>
<td>16.8</td>
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<td>10.6</td>
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n  
954 473 1060 572 638 2597 402 946 657 1260 696 371 408 1129 846 973 750 1036
11 social classes of the standard EGP schema to 5 and the 13 classes of the adjusted EGP schema to 7. To examine trends of voting behaviour over time, we constructed a time variable ranging from 0 to 33 years (i.e. 1970 to 2003). We also looked for the interaction between time and the ‘new’ social classes (i.e. time*high-grade and time*low-grade social and cultural specialists). Education was coded as (1) primary, (2) low secondary, (3) high secondary, (4) tertiary and (5) university and post-university education. The sector of employment variable was coded as (0) for people employed in the private sector and (1) for people employed in the public sector. The public sector contains all organizations that are partly or wholly financed by the state, including education, social services, health care and foundations. Sex (0 for man, 1 for woman) and age were used as control variables.

Analysis and results

Comparing the standard and adjusted EGP class schema

A logistic regression analysis was applied to analyse voting behaviour. First, the fit of a model with the standard EGP class schema was compared to the fit of a model using the adjusted EGP schema. Table 2 indicates the improvement of the model fit using the adjusted EGP schema with regard to political party preferences. To compare the adjusted with the standard EGP class schema, the workers (an amalgamation of classes V, VI and VII from Figure 1) were used as a reference category.

Model B significantly improves the model fit of Model A by 152.2 (945.7–788.5) and 2 degrees of freedom. Since this is quite a strong improvement in fit, we can conclude that the adjusted EGP class schema is a substantially better predictor of voting behaviour than the standard EGP schema. Our hypothesis was that there are ‘new’ social classes within the service class and that the adjusted EGP class schema will predict their voting behaviour more accurately than the standard EGP schema. Table 2 indicates that the voting behaviour of the ‘new’ social classes is not significantly different from that of the workers. This means that the distinction between the standard and adjusted EGP class schema does not make a difference for voting behaviour.

Table 2: Comparison of the standard and adjusted EGP class schema with regard to leftist versus rightist voting behaviour (standard errors in parentheses) (n = 22,707)

<table>
<thead>
<tr>
<th></th>
<th>Model A</th>
<th>Model B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Constant</td>
<td>0.22</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>High professionalsa/High technocratsb</td>
<td>–0.67 (0.05)**</td>
<td>–0.83 (0.05)**</td>
</tr>
<tr>
<td>High social and cultural specialists</td>
<td>–</td>
<td>0.01 (0.10)</td>
</tr>
<tr>
<td>Low professionalsa/Low technocratsb</td>
<td>–0.23 (0.04)**</td>
<td>–0.51 (0.05)**</td>
</tr>
<tr>
<td>Low social and cultural specialists</td>
<td>–</td>
<td>–0.01 (0.04)</td>
</tr>
<tr>
<td>Routine no manuals</td>
<td>–0.31 (0.04)**</td>
<td>–0.31 (0.04)**</td>
</tr>
<tr>
<td>Self-employed</td>
<td>–1.54 (0.06)**</td>
<td>–1.56 (0.06)**</td>
</tr>
<tr>
<td>Workers</td>
<td>Ref.</td>
<td>Ref.</td>
</tr>
<tr>
<td>Chi square</td>
<td>788.5</td>
<td>945.7</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

aEGP class schema; bAdjusted EGP class schema; *significant (p < 0.05); **significant (p < 0.01).
made between technocrats and social and cultural specialists is important and that the high-
grade and low-grade professionals of the standard EGP class schema are substantially less
likely to vote for leftist parties than are the rest. Furthermore, the rightist political orientation
of these classes is now more prominent.

**New-left versus right and old-left versus right voting behaviour**

Since the adjusted EGP class schema predicted people’s voting behaviour better than the
standard EGP class schema, we continued our analysis using only the adjusted EGP class
schema. In this analysis, the left-wing political parties were split into two streams: the new-
left and the old-left. The idea behind this split was that effects of the ‘new’ classes are stronger
for the new-left than for the old-left political parties. We used a multinomial logistic regres-
sion model for this part of the analysis, as this enabled us to analyse a multi-categorical
dependent variable. We estimated the likelihood of a person voting for an old-left, a new-left
or a right-wing political party. In analysing the dependent variable of voting behaviour, the
right-wing political parties were taken as the baseline category (Lammers et al., 1996). Table 3
presents the results.

Model A in Table 3 shows that voting behaviour of the ‘new’ classes within the service class
is significantly different from that of the high-grade technocrats. While the odds of voting for
old-left political parties are highest for the workers, the high-grade social and cultural special-
ists are, nonetheless, 1.82 (Exp(0.60)) times more likely than the high-grade technocrats to vote
for old-left political parties. The ‘new’ classes (the high-grade and low-grade social and
products) are most likely to vote for new-left political parties, respectively, 2.64 (Exp
(0.97)) and 2.12 (Exp (0.75)) times more than the high-grade technocrats. Interestingly, while
all social classes, except the self-employed, are more likely to vote for old-wing parties than
are the high-grade technocrats, only the high-grade and low-grade social and cultural special-
ists vote significantly more for new-left political parties than the high-grade technocrats do.
The workers are even more likely to vote for right-wing parties than for new-left parties than
are the high-grade technocrats. The workers are also the more likely to vote for old-left than
right-wing parties than the high-grade technocrats are. These results are in accordance with
our expectations.

The sector of employment has a significant effect on voting behaviour, of voting both for
old-left and new-left versus rightist parties. Model B shows that people working in the public
sector are significantly more likely to vote for old-left as well as for new-left parties. Yet Model
B shows that the sector of employment cannot explain the differences in voting behaviour
between the ‘old’ classes and the ‘new’ classes. Even the level of education, in Model C, fails
to explain the differences in voting behaviour between the ‘old’ and ‘new’ classes.

Including time and trend (interaction) variables in Model D shows that people become
significantly less likely to vote for old-left parties over time, while the likelihood of voting for
new-left parties increases significantly. The high-grade social and cultural specialists did not
differ from the high-grade technocrats with regard to their likelihood of voting for an old-left
political party in 1970. While there is no significant trend for the high-grade social and cultural
specialists, there is a significant trend for the low-grade social and cultural specialists with
regard to their voting for old-left and new-left parties.

Model E in Table 3 includes all the variables in the model, which improves the model fit
substantially. Model E shows that the high-grade social and cultural specialists do not differ
from the high-grade technocrats regarding voting for old-wing parties in 1970. However, the
low-grade social and cultural specialists are significantly more likely to vote for old-wing
political parties in 1970. Over time, the low-grade social and cultural specialists came to vote
more for old-left parties, and by the end of the 33 years (in 2003) they had become the most
leftist social class; that is, an exponent of 3.46 (Exp(1.24)) (33*0.03 = 0.99 + 0.25 = 1.24). Model
Table 3 Multinomial logistic regression, effects of social classes on voting for old-left versus right and new-left versus right political parties over time (standard errors in parentheses) (n = 22,707)

<table>
<thead>
<tr>
<th>MODEL A</th>
<th>MODEL B</th>
<th>MODEL C</th>
<th>MODEL D</th>
<th>MODEL E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Old-left vs. right</td>
<td>New-left vs. right</td>
<td>Old-left vs. right</td>
<td>New-left vs. right</td>
</tr>
<tr>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.35</td>
<td>-1.54</td>
<td>-1.38</td>
<td>-1.67</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.06)</td>
<td>(0.06)</td>
<td>(0.07)</td>
</tr>
<tr>
<td>High social and cultural specialists</td>
<td>0.60</td>
<td>0.97</td>
<td>0.58</td>
<td>0.92</td>
</tr>
<tr>
<td></td>
<td>(0.13)**</td>
<td>(0.13)**</td>
<td>(0.13)**</td>
<td>(0.13)**</td>
</tr>
<tr>
<td>Low technocrats</td>
<td>0.33</td>
<td>0.15</td>
<td>0.34</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>(0.07)**</td>
<td>(0.08)</td>
<td>(0.08)**</td>
<td>(0.08)*</td>
</tr>
<tr>
<td>Low social and cultural specialists</td>
<td>0.65</td>
<td>0.75</td>
<td>0.63</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td>(0.07)**</td>
<td>(0.08)**</td>
<td>(0.07)**</td>
<td>(0.08)**</td>
</tr>
<tr>
<td>Routine non-manuals</td>
<td>0.50</td>
<td>0.10</td>
<td>0.51</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>(0.07)**</td>
<td>(0.07)</td>
<td>(0.07)**</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Self-employed</td>
<td>-0.59</td>
<td>-1.02</td>
<td>-0.56</td>
<td>-0.90</td>
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<tr>
<td></td>
<td>(0.09)**</td>
<td>(0.11)**</td>
<td>(0.09)**</td>
<td>(0.11)**</td>
</tr>
<tr>
<td>Workers</td>
<td>0.91</td>
<td>-0.27</td>
<td>0.93</td>
<td>-0.21</td>
</tr>
<tr>
<td></td>
<td>(0.06)**</td>
<td>(0.07)**</td>
<td>(0.06)**</td>
<td>(0.07)**</td>
</tr>
<tr>
<td>Public sector</td>
<td>0.13</td>
<td>0.48</td>
<td>0.13</td>
<td>0.48</td>
</tr>
<tr>
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<td>(0.04)**</td>
<td>(0.04)**</td>
</tr>
<tr>
<td></td>
<td>MODEL A</td>
<td>MODEL B</td>
<td>MODEL C</td>
<td>MODEL D</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td>Old-left vs. right</td>
<td>New-left vs. right</td>
<td>Old-left vs. right</td>
<td>New-left vs. right</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Primary education</td>
<td>0.18</td>
<td>-1.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.09)*</td>
<td>(0.10)**</td>
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<td></td>
</tr>
<tr>
<td>Low secondary</td>
<td>-0.07</td>
<td>-0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>education</td>
<td>(0.08)</td>
<td>(0.09)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High secondary</td>
<td>-0.24</td>
<td>-0.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>education</td>
<td>(0.08)**</td>
<td>(0.08)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary education</td>
<td>-0.02</td>
<td>-0.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.09)</td>
<td>(0.08)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Post)-university</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (0–33)</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(0.00)*</td>
<td>(0.00)*</td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Time*High social-</td>
<td>0.02</td>
<td>-0.02</td>
<td>0.02</td>
<td>-0.01</td>
</tr>
<tr>
<td>cultural specialists</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Time*Low social-</td>
<td>0.03</td>
<td>0.01</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>cultural specialists</td>
<td>(0.00)**</td>
<td>(0.00)*</td>
<td>(0.01)**</td>
<td>(0.01)**</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>-0.01</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.00)**</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chi square</td>
<td>1026.7</td>
<td>1103.0</td>
<td>763.1</td>
<td>3155.3</td>
</tr>
<tr>
<td>Degree of freedom</td>
<td>12</td>
<td>14</td>
<td>20</td>
<td>18</td>
</tr>
</tbody>
</table>

*significant (p < 0.05); **significant (p < 0.01).
E also shows that the high-grade social and cultural specialists are most likely to vote for new-left political parties in 1970, but they do not change their voting behaviour over time. The low-grade social and cultural specialists came to vote significantly more for new-left parties over time. If we add the trend effect of 0.66 (33 0.02) for the 33 years for the low-grade social and cultural specialists to the regression coefficient of 0.33 (0.33 + 0.66 = 0.99) for this social class, we see that the exponent of this figure is the highest, 2.69 (Exp (0.99)), of all social classes. This means that between 1970 and 2003 the low-grade social and cultural specialists formed themselves as the most leftist social class. Furthermore, our results suggest that the old service class is by far the most conservative social class in postindustrial Netherlands.

**Conclusion and discussion**

In this article, we have discussed and used new class theories to reassess the appropriateness of the EGP class schema. And, inspired by these theories, we have adjusted the service class of the EGP class schema. We distinguished two ‘new’ classes (the high-grade social and cultural specialists and the low-grade social and cultural specialists) within the service class. Incumbents of these ‘new’ classes carry out tasks that require specialized knowledge on social and cultural issues, which makes their performance difficult for employers to monitor. In contrast, the ‘old’ classes in the service class perform tasks preserving the viability of their employing organization, and their performance is more straightforward to monitor.

The allocation of occupations into classes on the basis of our criteria is difficult. To increase the soundness of the classification, we employed experts who classified the service class occupations according to our criteria. Consequently, the adjusted EGP class schema is robust in capturing the political orientation of the ‘new’ social classes.

Using data from various Dutch surveys conducted between 1970 and 2003, we compared the adjusted and the standard EGP class schema with regard to their ability to predict people’s voting behaviour. Our results showed the adjusted EGP class schema to be significantly better in predicting people’s political orientation.

Goldthorpe (1982, 1995) claims that the service class is in formation, and that, as it consolidates, managers and professionals will become increasingly like each other. He also claims that the service class is an essentially conservative element within society. Our data show that there are substantial social cleavages within the service class. Politically, the ‘new’ classes are significantly more leftist oriented than the ‘old’ classes are. Furthermore, the high-grade social and cultural specialists differ significantly from the high-grade technocrats in their political orientation; this has been the case since 1970. The low-grade social and cultural specialists were initially less leftist oriented, but by the year 2003 they were just as leftist as the high-grade social and cultural specialists.

This means that the consolidation process of the service class is working in the direction contrary to what Goldthorpe expected. The social cleavages within the service class are salient. Apparently, the consolidation process runs parallel to the process of transformation from an industrial to a postindustrial society. We therefore conclude that the ‘new’ classes over time become more effective in explaining people’s political orientation. In this respect, the adjusted EGP class schema provides a better understanding of the political cleavages within the service class in The Netherlands and other postindustrial societies.

Most of the social and cultural specialists in The Netherlands are employed in the public sector, where they are generally known to vote more for left-wing political parties because these parties invest more in the public sector. Our results also show that people employed in the public sector are significantly more likely to vote for leftist parties. But even after controlling for sector of employment, the ‘new’ classes are still significantly more likely to vote for leftist parties than are the ‘old’ classes. This means that the differences in voting behaviour
between the ‘old’ classes and the ‘new’ cannot be attributed to the sector of employment. It therefore appears that social class remains an important determinant of people’s political orientation.

According to Brint (1984) and Goldthorpe (1995), the lifestyle and behaviour differences between managers and social and cultural specialists can be explained by educational differences. However, level of education does not explain the differences between the ‘old’ and the ‘new’ classes. Perhaps type of education could explain the differences that we found. Nonetheless, according to Güveli et al. (2007), the differences between the ‘new’ and ‘old’ classes in political orientation remain even after controlling for type of education.

Clearly, the construct validity of the adjusted EGP class schema cannot be sufficiently tested using just one kind of behaviour (i.e. voting behaviour) in one country. However, the adjusted EGP class schema is also better in explaining right-wing voting behaviour (Lubbers and Güveli, 2007), social-political, cultural and economic preferences and behaviour (Güveli, 2006; Güveli et al., 2007). Furthermore, Güveli and De Graaf (2007) have demonstrated that the newly distinguished classes within the service class show specific intragenerational mobility patterns in The Netherlands.

We are aware that our findings in this study are based on the Dutch political and occupational structure. However, almost all advanced economies have moved from an industrial to a postindustrial employment structure. Furthermore, our criteria for distinguishing the ‘new’ and ‘old’ classes should apply to other countries as well. Therefore, we encourage international scholars to use the adjusted EGP class schema, the details of which are reported in the Appendix and at the website: www.ayseguveli.nl. Future research should reveal whether our conclusions apply in the cases of other countries as well. We have shown that social class still matters and is not ‘dying’. Rather, ‘new’ social classes are appearing and the old class schemata should be updated in accordance with changes in the postindustrial societies.

Notes

1. New social movements included by Kriesi are: the ecology movement, the peace movement, the anti-nuclear movement, the women’s movement and the squatters’ movement.

2. During a stay at Nuffield College in Oxford, we analysed this subject on the basis of representative British employment data from 1992 and 2000. The Employment in Britain survey from 1992 (n = 3855) and the Changing Employment Relationships, Employment Contracts and the Future of Work survey from 2000 (n = 2441) provide data appropriate for analysing the controllability and importance of social services of the newly distinguished classes. These data contain variables about controllability of work tasks and about the importance of social services in these work tasks. According to these data, the class of social and cultural specialists declares itself significantly less controllable than the class of technocrats in various monitoring variables. To perform their job well, it is significantly more important for social and cultural specialists to have good contacts with clients and customers than it is for technocrats (Güveli, 2006: Chapter 2).

3. We do not test whether the social and cultural specialists possess more humanistic and value-laden knowledge directly. However, we assume that a person carrying out an occupation has the qualifications and the knowledge required for this occupation. For example, a medical doctor serves patients personally. In treating patients, specialized knowledge about diseases is not enough – also needed are humanistic qualifications to be able to sympathize with the patient. We therefore assume that a person with a specific occupation possesses some of the qualifications needed to be able to perform his or her tasks and which, to a certain extent, determine his or her political party choices.

4. Only data for men are included in Table 1 because in the surveys until 1981 only the occupations of the heads of households were asked if the respondent was a woman. To find out whether the results for men and women are different, we analysed men and women separately. After analysing men and women apart, the results were not different for men compared to the combined analysis, while they were different for women. Because the inclusion of women in the analysis did not change the overall
results, we decided to include women in our further analysis. The class structure for women is another
study and beyond the scope of this article.
5. There is some instability in the proportional representation of social classes in the early 1970s caused
in the years 1971, 1974 and 1976. The data we used for the analysis originate from different sources.
The codification of occupations is done with different coding schemas in the early 1970s, schemas that
differ in detail from each other. Therefore, some fluctuations in the early 1970s occur. We excluded
these years one by one from our analysis to find out whether the results change; this does not affect
the results significantly. The results do not even change significantly when these years are excluded
(1971, 1974 and 1976) simultaneously, which implies that our results are fairly robust.
6. In our dataset, the questions about voting behaviour are asked differently in 6 surveys out of 19. In
13 surveys, the political preferences of respondents are asked, while in 6 surveys (in 1974, 1976, 1977,
1982, 1987 and 1989) the voting behaviour is asked. To prevent any doubt about pooling these two
questions into one dependent variable, we ran a separate analysis without the surveys (in 1974, 1976,
1977, 1982, 1987 and 1989) containing voting behaviour. This did not significantly affect the results.
7. Of course, for The Netherlands there are detailed left–right scores for political parties. However, using
scales based on these scores is hardly likely to result differently. Our division into three categories can
be regarded as a conservative test.

References

Werkgelegenheid in Nederland (Deel IV). Bevolking in Loondienst naar Functie Niveau: Ontwikkelingen in
International Sociology 8: 293–316.
Sociology 32: 92–110.
De Graaf, N. D. and De Graaf, P. M. (1988) ‘Family Background, Postmaterialism and Lifestyle’, Nether-
lands Journal of Sociology/Sociologia Neerlandica 24: 50–64.
Survey Dutch Population 2000 (Codebook). Department of Sociology, Nijmegen: Nijmegen University.
Survey Dutch Population 2003 (Codebook). Department of Sociology, Nijmegen: Nijmegen University.


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