"Data Qualities"

Research Program of the Department of Social Science Research Methodology

2004-2007

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Program Leader: Prof. Dr. H.B.G. Ganzeboom

Members of the Department with research appointment since 2002			
	(A)	(B)	(C)
Berg, Harry vd	UHD	2005/11	0.4
Bunt, Gerhard vd	UD		0.3
Dijkstra, Wil	UHD/HL		0.4
Draisma, Stasja	UD	2000/09 - 2005/08	0.3
Elzinga, Cees	UD		0.3
Gaag, Martin van de	PD		0.2
Ganzeboom, Harry	HL	2000/09	0.5
Hoogendoorn, Adriaan	UD		0.3
Liefbroer, Aad	BHL	2004/10	0.2
Mills, Melinda	UD	2003/01 - 2003/12	0.3
Nagel, Ineke	UD	2003/09	0.6
Nencel, Lorrain	UD		0.3
Roelofsma, Peter	UD		0.3
Vaart, Wander van der	UD		0.3
Veer, Kees vd	UD		0.3
Wolbers, Maarten	UD	2005/06	0.6
Ongena, Yfke	PROM	2005/09	0.8
Moerman, Gerben	PROM		0.8
Glasner, Tina	PROM		0.8
Buis, Maarten	PROM		0.8
Carabain, Christine	PROM		0.8
A: Academic rank			

A: Academic rank

B: Contract period

C: Research appointment in fte

Background

The Department of Social Research Methodology [SRM] is the core service department in the Faculty of Social Sciences [FSS] of the Free University Amsterdam [VUA], that hosts six disciplinary departments. FSS's disciplinary department are in Anthropology [SCA],

Communication Sciences [CW], Political Science [POL], Sociology [SCW], Organizational Anthropology and Cultural Studies [COM] and Policy Sciences [BCO, BK]. Altogether, these departments sponsor nine separate educational programs at the BA and MSc level, and jointly organize a MPhil Research Master Program and a PhD program. SRM's position in the Faculty' spectrum is a special one. The primary reason for the existence of a methodology department is in the joined teaching of methodology to students in the separate educational programs. The first mission of the SRM is the efficient and effective teaching of introductory and advanced teaching of methodology to students of the various social science disciplines in FSS. The second mission of SRM is in high quality consultation and assistance to the research programs of the disciplinary departments.

These two missions can only be accomplished when members of the Department offer competencies and expertise with the following features:

- The competencies have to be of high quality and offer a true model of advanced social science research.
- The competencies have to be broad with respect to disciplinary orientations and dominant research styles.
- The competencies have to be disciplinary specific and sensitive to the structure and development of the relevant social science disciplines.

Taken together, these requirements are not only hard to satisfy, but they also lead to severe restrictions on the composition of SRM's staff. A good methodology department needs a group of excellent researchers and teachers with authority in the client disciplines. At the same time, this group is cannot bound by a strong common research program. In stead, the research program needs to foster a variety of disciplinary orientations and research styles.

At the same time, there needs to be common ground. Both in teaching and consultation, SRM can only accomplish its missions only if there is consensus on basic principles of social science research. It would otherwise be impossible to build a structured curriculum or be a reliable partner in research consultation.

Like many of its sister departments in other Dutch universities, the SRM department has been formed in the mid 1980's as a result of efficiency operations. The basic idea of these operations was to merge the various methodological components of disciplinary programs into a common methodology curriculum. While initially such programmes were often conceived of a joined initiative of disciplinary programs, it was soon realized that little could be accomplished if the methodology curriculum was not the responsibility in a group with a dedication to methodological issues. Hence, the initial methodology working groups [teaching task forces] were developed into separate department, with their own chairs and specializations, and separate research programmes.

At the VUA, the SRM department was build around Hans van der Zouwen, who specialized in methods of data collection, with a strong concentration on quality of the survey interview. The research program of the Department has seen several incarnations, and was most recently called "Research on Methods of Data Collection". It was last externally evaluated in 1999 (VSNU 2000), and obtained only modest scores (3-4-3-3). There were clear indications in the evaluation that the programs was too narrowly formulated, and that the productivity was too much concentrated among a few leading members. It was also clear that the program – and the Department – had lost contact with the research in FSS elsewhere. A remarkable feature of the operations of the Department at the time was that – although it concentrated on

methods of data collection [as opposed to data analysis] – it hosted no substantial data-collections.

After 1999, the Department has expanded considerably, primarily due to the strongly expanded student inflow of FSS. The research interests of some of the new members of the department (Van de Bunt, Elzinga, Nencel, Mills, Roelofsma) are not strongly or only partly connected to issues of data collection, which has diversified the expertise and competencies considerably. Others (Draisma, Hoogendoorn, Van de Vaart) have research interests that are more strongly connected to methods of data collection, which is also true of the veteran members of the department (Van de Berg, Dijkstra, Van de Veer). In 2002, after an interim period, Harry Ganzeboom was appointed as chair and head of the Department. Ganzeboom holds a strategic chair, which is endowed with a strategic budget to promote his interest in research on social stratification and social mobility. The strategic budget has made it possible to appoint two stratification researchers (Nagel, Wolbers) and led the appointment of Liefbroer on a part-time personal professorship.

The current research program of the SRM Department, Data Qualities, reflects the special position of the department with its special missions in the Faculty of Social Sciences. The following principles have guided the formulation of the program and its structure.

- There is no need for a strong common research topic in a methodology department as a matter of fact, single-minder concentration on a common research topic may be a handicap in establishing relationships with the disciplinary departments. In stead, the program allows for and stimulates topical collaborations with disciplinary researchers elsewhere.
- Methodological research should be conducted in close contact with research on substantive issues. Independent methodological research is only part of the program, not is exclusive contents. In order to accomplish the primary mission of the department, both in teaching and consultation, it is important that members of the department are excellent researchers, who jointly offer a broad diversity of competencies.
- The current program continues the traditional specialization of the Department on issues of data collection and broadens it considerably by hosting a number of large scale data-collection projects (Jongeren & Cultuur, ISSP, ESS, C-TOR). Research on data collection methods has become a sidekick to data-collection itself.
- The department has become more diversified and so has its research program: this is true for topics of research (data collection, social stratification, demography), stages of research (data collection and data analysis), and research styles (qualitative, quantitative).
- The research program is not structured along broadly conceived research questions or overarching themes, but in stead formulated in detailed project plans, with specific deliverables as targets. The basis thrust is towards quality and productivity, not in board conceptions.

Introduction

Within the research program of the Department, three main subprograms are hosted:

- 1. Comparative Stratification Research (CSR). This research line started in September 2003 with the appointment of the program leader as chair of the Department and continues research of Ganzeboom and associates as previously carried out in Utrecht/ICS.
- 2. Improving Data Quality in Survey Research (IDSR). This research line continues and extends some of the projects already begun under the former program "Research on Data Collection Methods"

3. Social Processes of Inequality from Qualitative and Mixed Method Perspectives (SPIC). This research line too, partly originates from projects of the former RDCM.

In the research of social stratification, issues of historical and cross-national comparison of social and cultural mobility inevitably arise. Modeling the processes and mechanisms of social stratification thus requires a tremendous effort on harmonizing many different sets of data and developing valid and standardized measures of the main underlying variables of these processes. So, modeling mechanisms of social stratification is wrought with methodological problems of data collection and data quality. Furthermore, some of the projects within CSR require large-scale primary data collection. On the other hand, IDSR and SPIC exactly focus on problem areas related to data quality in connection with data collection. Hence "Data Qualities" are a key issue that binds together these three research lines. Apart from these three research lines, there are a number of separate research projects that are supported by individual staff members. The latter projects do not fit is very well with the main research themes of the program but have proven to be successful in their own right. In the sequel we will amply describe the mission areas and short- and long-term plans and ambitions of each of the research lines as well as those of the individually supported projects.

Subprogram 1. Comparative Stratification Research (CSR)

Participants: Prof. Dr. H.B.G. Ganzeboom

Dr. F.A. Nagel (tenured)

Drs. M. van der Gaag (non-tenured)

Drs. M. Buis (Ph. D-student)

Issues of social stratification and social mobility – i.e. inequality in various social domains and its persistence/volatility in social groups – are among the core questions of social science. Comparative question about variations in patterns of social stratification between different societies have been asked since the early beginnings of the social sciences, and have not lost any of its relevant as of today. Comparative stratification research belongs to the broadest and most advanced areas of social research. This research plan reviews the (historical) background of comparative stratification research, summarizes earlier contributions of the PI to the field, and identifies short-term plans and long-term goals in the program Sociologists have studied social stratification and social mobility in particular in the realm of occupational status - representing social standing in general -, such in contrast to economists, who have traditionally focused on income inequality and income attainment. The sociological approach is characterized by a strong connection between questions of social stratification proper (i.e. inequality of social positions) and questions of social mobility (how unequal positions are maintained in social groups, e.g. between parents and children, between spouses, between other family members or in a social network, or remain stable during the life course. Research on social stratification and social mobility in sociology has a long, continuous and active tradition, having roots in the classics (Marx and Weber), but turning modern (i.e. empirical and quantitative) with the founding study of Pitirim Sorokin, Social and Cultural Mobility (1928), probably the oldest readable sociological study in existence (still in print). Comparative stratification research had a marked upswing in the late 1940's, when UNESCO fostered the founding of the International Sociological Association and its Research Committee, that under the direction of demographer and mobility researcher David Glass took comparative stratification research as its topic. The history of modern stratification research, which is very much the history of this tradition (currently the Research Committee 28 on Social Mobility of the International Sociological Association), its various subgroups and

generations, has been described by Ganzeboom, Treiman & Ultee (1991) and Treiman & Ganzeboom (1998). These authors distinguish four generations of stratification research:

- The first generation, around the original research program of the ISA-RC, generated a modest number of national prestige cum social mobility surveys, and conducted mostly tabular (inflow/outflow) analyses. The comparative work of this generation was summed up by Lipset & Zetterberg (1956, 1959) and Miller (1960), with as its best remembered conclusion that social mobility patterns are "much the same" in different countries. However, this conclusion has been contested by various subsequent researchers who reanalyzed the data.
- The second generation is the one propelled by Blau & Duncan's work on continuous measures of occupational status (Duncan 1961) and the use of such measures in multivariate, indirect effects, status attainment models (Blau & Duncan 1968). The generation gave rise to a batch of national stratification surveys, mostly spun off from Blau & Duncan's (1965) "Occupational Change in a Generation" survey. As explained by Ganzeboom et al., this generation of research still awaits its comparative conclusion, as it was prematurely aborted by new methodological developments, that gave rise to the third generation.
- The third generation was inspired by the applicability of loglinear models to social mobility patterns, which made it possible to decompose bivariate associations into meaningful components, such at the expense of the multivariate questions that has been asked by the previous generations. Researchers of this generation profited from the widely available data collected from the early 1970's onwards (often with the aim to conduct second generation research), and the many pertinent surveys held thereafter. This generation of research culminated in the Erikson & Goldthorpe's "The Constant Flux" (1992), now being replicated by Breen et al. (2004).
- The fourth generation of mobility research is primarily concerned with longitudinal (career and life course) models of social stratification in issue already present, but not effectively treated by the first generation. Also, there is a growing concern with multi-actor representations of social stratification, as mutual influences of spouses, multiple offspring of parents, and both father and mother are brought into the picture. The best representation of comparative working this generation probably is the work of Blossfeld.

The history of Dutch stratification research to a large part mirrors these international developments. The Netherlands (Van Heek) was very active in the first generation, in fact one of the two countries complying to the original agenda of the ISA Research committee. The second generation of research found only a late echo in our country, with the prestige and social mobility survey of Ultee & Sixma in 1982, thus missing the events in the 1970's when most of the data used in second and third generation research were collected. While the Dutch became very active again in the third generation from 1983 onwards, but missed its early development (1975-1982) and were for this reason left out of the CASMIN project that became The Constant Flux. However, several Dutch researchers, amongst whom the PI, have been active at the international level since and have published authorative studies of patterns and trends in social mobility, became officers in the RC28 board and were represented in most comparative studies.

Ganzeboom has been involved in (comparative) stratification research since 1983, nationally in close collaboration with the members of the Utrecht Mobility Seminar (Wout Ultee, Ruud Luijkx, Paul de Graaf, Nan Dirk de Graaf, Wim Jansen, Jos Dessens) and internationally primarily with Donald J. Treiman (UCLA). The main goals of the research have been:

- To use existing data on social mobility patterns in the Netherlands to their full exhaustion and collect relevant new data on a periodical basis. This work has generated a very large pool of harmonized social mobility data in our country (that was conspicuously absent from comparative projects until very recently), as well as a number of new studies which collected stratification information in a household contact on a longitudinal basis (Family Surveys, Household in the Netherlands).
- To produce periodical assessments of trends in social mobility and its components in the Netherlands.
- To create an authoritative database on social mobility patterns in other countries around the world, industrial, post-industrial, and pre-industrial, both in terms of published tabulations, but primarily as harmonized unit data.
- To produce periodical assessments of variations in social mobility and its components in time and space, i.e. in countries around the world, primarily in the second half of the twentieth century.
- To produce international and historical harmonization tools for core stratification variables, in particular occupational and employment status, and educational attainment.
- To develop better models and define higher standard for the analysis of social mobility data.

Project 1: The International Stratification and Mobility File [ISMF]

Participants: Prof. Dr. H.B.G. Ganzeboom

The International Stratification and Mobility File consists of a large number of harmonized extracts from datasets from a large number of countries around the world. The basic criteria for inclusion are that a dataset is (A) (sub-)nationally representative, (B) contains at a minimum a measure of father's occupation and respondent's education and occupation. In addition to these, the list of harmonized variables includes mother's, father's and spouse's education, occupation and income, respondent's first job, personal and household income and a number of ancillary variables on employment status, marital status. The occupations are harmonized by using the International Classification of Occupations [ISCO], educations are harmonized with respect to hierarchical level and duration.

At present [February 2004], the ISMF contains some 250 harmonized studies from 42 countries. The ISMF is expanded on a continuous basis. These data are used primarily by the principal investigator and collaborators to conduct historical and cross-national analyses of occupational and educational status attainment and mobility. In future projects, the ISMF will be put to use for projects on other phenomena related to social mobility, such as on class voting, fertility, consumption patterns and occupational careers.

As a byproduct, creating the ISMF generates a large number of conversion tools of national educational and occupational classifications into international standards. Access to the ISMF data itself is restricted, but the conversion tool and harmonization tools are available for the taking. The principal investigator maintains an internet site, from which these tools are available.

One-vear plan:

- Revise and document all the harmonized extracts in the ISMF up to the 2004 standard and adapt the associated files to the SPSS-Windows platform.
- Create a website that documents the ISMF and its harmonizing procedures and makes the harmonization tools available to other users.

Long-term target

- Expand the ISMF with available new and old data. We should be able to add at least 20 studies each year to the database.
- Deposit the ISMF database and its documentation in a data-archive.

Project 2: The Comparative Measurement of Occupational Status

Participants: Prof. Dr. H.B.G. Ganzeboom Dr. D. Treiman (UCLA)

Occupations are the "single best indicator" to measure social status in a society. They are highly differentiated, but at the same time there is impressive agreement on their desirability across countries and historical episodes, even in the very long run. Nevertheless, the measurement, classification and use of occupational status information is wrought with problems and debates. The project is aimed at contributing to these debates by the empirical analysis of occupational status measures. In the past, the principal investigators have propagated the use of the International Classification of Occupation [ISCO] as a tool to harmonize occupations across time and space, and has generated much used conversion of national classifications into ISCO, and from ISCO into frequently used occupational status measure, i.c. Treiman's Standard Index of Occupational Prestige [SIOPS], Ganzeboom's & Treiman International Socio-Economic Index of occupational status [ISEI] and Erikson & Goldthorpe's social class typology [EGP].

In this project, this work will be continued and elaborated, by expanding the number of conversions for national classifications and upgrading the existing tools to newer versions of ISCO. A new point of focus in this respect is the reliability and validity of occupational information itself, in particular by studying multiple-indicator models.

One-year plan

- Document the electronic versions of the conversion tools and make these available on the Internet
- Review and revise the conversions of Dutch national classifications into international standards and derived status variables.
- Revise the semi-automated occupational coding source for Dutch occupations to boost its precision.
- Produce an accurate Dutch translation of ISCO-88, with a wealth of examples from the occupational title data-source.
- Present, revise and submit the Dutch & English language versions of the multiple indicator model of occupational measurement.
- Revise and submit the paper on crude occupational measurement with international data.

Long term goals

- Become acknowledged and cited as the authoritative database on occupational measurement and conversions.
- Keep up with newly published or revised occupational classifications, in particular ISCO and English language (American, British, Australian) classifications.

Project 3: The Comparative Measurement of Education

Participants: vacancy (Ph. D-student)

Prof. Dr. H.B.G. Ganzeboom

The second core measure in comparative stratification and mobility research concerns educational status. Unlike occupations, educational institutions are highly variable and idiosyncratic between countries, as well as between historical time episodes. Educational systems are much more institutionally arranged than occupations, and therefore harder to compare. This is even so at the level of classification: while there exists a (UNESCO produced) International Standard Classification of Educations [ISCED], it is hardly comparable to its (ILO maintained) International Standard Classification of Occupations [ISCO]. ISCED is limited to a small number of countries, not sensitive to historical variations (describes educational systems as they are now, which is hardly relevant to comparative stratification research), rather complicated to use, and leads in the end not to a detailed comparative classification. Fortunately, some properties of educations counteract to potentially insurmountable problem of comparing them. First, whatever the institutional arrangements and the politically driven discussions around it, a core property of educational outcomes is that they are – to a very large extent – one-dimensionally ordered with respect to important outcome variables in the status attainment process, such as occupational status, earnings or spousal status, as well as with respect to the its main determinants, parental statuses. If the originally classification is not overly detailed, this hierarchy can easily be reconstructed from data, and very often researchers (who present closed question formats with ranked alternatives) and respondents (who are asked to respond to these categories, despite their obvious negligence of historical and institutional variations) are well aware of this. This hierarchy can be expressed in several interpretable metrics, such as relative order (percentiles), optimal scaling, metric level (measured in years needed to achieve a certain level), or duration (actual time used). Given these strong measurement properties in all educational systems, one can begin to ask to what extent educational systems actually vary with respect to the validity of these one-dimensional representations, how large the distances between levels are and how they change over time (diploma inflation). The aim of this project is to produce a companion to the ISCED classification that survey researchers can use to measure, and (re-) classify educational attainment data. The sources for this will be the two existing issues of ISCED, related literature, expert advice from around the world, as well as the survey data in the ISMF, than can be used to generate optimal or metric scalings.

One-year plan

- Appoint a researcher for this project.
- Fully document the ISMF data with respect to educational classifications used and how they are currently harmonized. Review and revise these conversions.
- Start analyzing the ISMF data with respect variations to returns to education.

Long term targets

- Create a companion guide to ISCED that documents and standardizes educational classifications, as they frequently occur in social mobility (and other) surveys.
- Write an authoritative piece on measuring and scaling educations.

Project 4: Long-term Trends in Educational Mobility in the Netherlands

Participants: Drs. M. Buis (Ph. D-student)

Prof. Dr. H.B.G. Ganzeboom

Long-term trends in educational mobility in the Netherlands have been studied with two different designs. One tradition of research uses cohort data from pooled cross-section surveys to study the relationship between educational outcomes and social background (primarily parental education and occupation). Using this retrospective information from birth cohorts, these studies go back to events in the early twentieth century and have documented a spectacular increase of educational mobility since. In the second approach, student cohort data (available from 1965 onwards) are compared. These analyses have typically reported no or limited change in educational mobility. The differences between the two approaches are multiples: they use different time windows (1900-1980 vs. 1965-1999), data collection techniques (retrospective vs. panel), different set of independent variables (students panels contain measures of early school ability and indications of parental income), and models of analyses. All of these may be in part responsible for the different results. In this project, the first aim is to expand the available evidence by adding newly collected or recovered data to the existing pool and thus refresh and detail the existing analyses. A second aim is to compare the two different approaches and bringing in another, and hitherto underused source of data, retrospective educational careers.

One year plan

- Revise and execute project plan of Maarten Buis.
- Start writing new paper on latest trends in educational mobility, incorporating surveys data collected in 1998-2000 period.
- Start writing a paper on returns to education, corrected for social background effects.

Long-term targets

- Publish authoritative updates of trend reports on educational mobility in the Netherlands, using both survey data and student panel data.
- Compare various educational attainment models (final metric score, ordinal score, transitions, gain scores) and analyze role of selection bias.

Project 5: Long-term trends in Social Mobility and Occupational Status Attainment in the Netherlands

Participants: Prof. Dr. H.B.G. Ganzeboom

Dr. R. Luijkx (University of Utrecht/ICS)

Intergenerational occupational (or: social) mobility remains the best indicator to study the openness of social groups in a society. The 1954-pattern of social mobility in the Netherlands was first documented by the Van Heek group (see Van Tulder 1962). Replication and the study of trends began in the 1980s and showed from its beginning that social mobility has considerably risen over the last half century, by approximately 1% per annum. Ganzeboom has been adding evidence to the existing database on a continuous basis: the Dutch part of the ISMF now contains 35 studies, and covers a wider time window than almost all of the other countries. The ISMF data allow one to estimate multivariate models of social mobility, but also to make further distinctions in occupational attainment (first/current jobs, full occupational careers). Questions about pattern, degree and trends in intergenerational occupational status reproduction are this elaborated into questions about mechanisms of transfers and questions about timing of transfers. The aim of this project is to refresh and extend these existing analyses, by taking into account newly collected or reconstructed data, and adding new analytical insights.

One year plan

- Begin writing a paper about even more recent trends than in the paper for the Breen book, for submission to Netherlands Journal of Social Sciences (with Ruud Luijkx).

Long-term targets

- Analysis of education/first job association, with controls for parental background; critiquing common labor market analysis on this association.
- Analysis of first job/current job association.
- Start project on relation between geographical and social mobility in a long term historical perspective.

Project 6: Ascription and Achievement in Comparative Perspective

Participants: Prof. Dr. H.B.G. Ganzeboom

Dr. D. Treiman (UCLA)

In their 1968 monograph "The American Occupational Structure", Blau & Duncan reformulated the traditionally studies social mobility relationship (association between fathers' and sons' occupation) into the elementary status attainment model, in which father's education, father's occupation, education, occupational status at career beginning and current/final occupational status are causally connected. The status attainment model made it possible to calculate direct and indirect effects and dissect the social mobility relationship into ascriptive components (father's direct effects) and achievement components (effects of education on later occupational attainment). It also made it possible to pinpoint different transition in time (cohorts) and this allowed for precise historical comparisons. Finally, the model can be easily extended with other relevant variables / units, such as mothers' socioeconomic and cultural characteristics, multiple offspring (career models), multiple occupations (career models), spouses' socio-economic characteristics (homogamy models) and multiple indicators (structural equation models with measurement error). The status attainment model would have been the most often used workhorse for comparative stratification research, had not methodological innovations interfered. The stratification literature from 1975 onwards focuses on discrete measurement of occupational status ("class analysis") and educational attainment ("transition analysis"), thereby complicating the use of simple covariances to model the relationship in the status attainment model. Issues of quality of measurement and indirect effects were dropped from the research agenda, to the advantage of discrete models of bivariate relationships ("log-linear relationships"). It is only recently that researchers have learned how to combine discrete data and multivariate causal relationships into parsimonious models.

The present project aims at estimating the elementary (end expanded) status attainment models in a large scale comparative perspective and analyzes how the ascriptive and achievement effects in these models respond to exogenous conditions, in particular economic development, political regime and institutional changes (educational and labor market arrangements). Papers concentrate on a single part of the status attainment models (such as educational achievement, occupational status attainment at career beginning, occupational status attainment during the career), and model these relationship with advanced techniques at the individual (discrete, multivariate) and aggregated (XT-models, multi-level models).

One year plan

- Finish and submit paper on educational transitions in comparative perspective (New York).
- Draft a paper on direct/indirect channels of reproduction (Neuchatel).

Long term target

- Writing a monograph (together with Donald Treiman) on "Ascription and Achievement in Comparative Perspective", that puts the Blau-Duncan model in a large scale comparative perspective, taking into account the different methodological developments since. The book has 8 chapters (1) History of the problem (2) A Theory of Social Mobility (3) The International Stratification and Mobility File (4) Comparative Measures of Social Stratification (5) A World-wide Regime of Social Mobility (6) Educational Mobility (7) Social Mobility at Career Beginnings (8) Social Mobility during the Life Course.

Project 7: Comparative Stratification Research Methods: Methodological Footnotes

Participants: Prof. Dr. H.B.G. Ganzeboom

Stratification research often has been the breeding ground of methodological innovation in the social sciences, in particular in sociology. Measurement and scaling procedures (for occupational prestige and SEI), path modeling of indirect effects, loglinear and logmultiplicative models, longitudinal life-course models were all introduced to sociology via stratification research. The general aim of the "Comparative Stratification Research" program is to conduct comparative stratification research to the best currently available standards, but its primary goal is to make substantive contributions, not purely methodological ones. Nevertheless, methodology can flourish at the outskirts of substantive research, and be useful footnotes to others, inside and outside the field of stratification analysis. A particular important development over the last few years has been the integration of discrete data and continuous approaches into parsimonious conditional logit models. These models are distinct from the commonly used multinomial logit model, by being capable of allowing for multidimensional metric constraints on the dependent variables. It is thus a promising way to integrate log-linear models, which are often used to model bivariate mobility data (and other square tabulations), with multivariate regression-type models. Such models have been applied in some earlier publications of the PI. As a follow-up, it will be shown how such models can be estimated in new software, in particular LEM. A second possible methodological contribution to the field is in the strategy of comparative analysis via XT-designs, in which cross-sectional information (countries) is combined with historical variations (cohorts). Such models can be commonly estimated in STATA's XT-modules, but their estimation van be improved by using generalized variance component models, e.g. in ML-Win.

One-year plan

- Finish and publish inaugural lecture.

Project 8: School & Culture – A Panel Study of Adolescents

Participants: Dr. F.A. Nagel (non-tenured)

Prof. Dr. H.B.G. Ganzeboom

The School & Culture panel study of adolescents was started in 1998 with the collection of write-in questionnaire data on culture consumption, social and cultural background and associate variables among 1521 14-16 years old students in 69 school classes in 24 secondary school in 8 cities in the Netherlands. The students were reinterviewed (using telephone and mail questionnaires) after 1 year, and 3 years. New fresh waves were added in 2000 and 2001,

with now a total of over 3800 adolescents between 14-22 year of age in the study, each of which was interviewed 2 or 3 times. At the first reinterview, also one of the parents of the adolescents was asked to fill in a mail questionnaire or was interviewed by phone. The data collection was originally developed to evaluate new arts education programs in secondary schools for which their cultural behavior, preferences and tastes were measured, but at the same time constitutes a rich source of data on the other leisure behavior, life styles and educational choices, all in combination with family background data, obtained from the adolescent and a parent independently. As the data collection was started in school classes with almost perfect response by the students, we do have a complete coverage of the panel before attrition and non-response sets in. Another strong point of the data is that we do have simultaneous information in the school and family contexts. In future sweeps, starting in 2002, new waves will be added and the current waves will be re-interviewed at an interval of 2 years (last measurement was in 2002). We intend to broaden the score of the survey, dropping some of the details on culture consumption and add new modules on moral and demographic attitudes, educational and occupational choices.

One-year plan

- Start and field the new wave
- Finish the documentation on the 1998-2002 sweeps

Long-term targets

- Continue to build op the database and prepare for 2006 and 2008 sweeps
- Find external funds for data collection cost

Project 9: Effects of Education and Family Background on Culture Consumption and Socio-economic Careers

Participants: Dr. F.A. Nagel (non-tenured)

Prof. Dr. H.B.G. Ganzeboom

Culture consumption belongs to the most unequally distributed distinction markers among social groups (Bourdieu). Access to formal culture is an important resource in status attainment, in particular in the attainment of (further) education, occupational status and the choice of a marriage partner. Access to formal culture is to a very large extend generated in early life – the required knowledge, taste and codes develop early or not. In much of the literature, formal education is credited for the acquisition of cultural capital: school select children with respect to cultural background and develop these features systematically. Recent analysis suggest that the role of the educational system is much smaller than conceived in this literature and to a large extend limited to selection: almost all of the systematic variation in culture consumption is family generated, with causal effects of education taking second place at a considerable distance. This project studies the effects of socio-economic background and cultural resources in the parental family and the acquisition of cultural resources among offspring and its effects in their early life course (educational attainment, first jobs, marriage partner selection), using the School & Culture student panel data.

Subprogram 2. Improving Data Quality in Survey Research (IDSR)

Participants: Dr. A.R. Draisma (non-tenured)

Prof. Dr. W. Dijkstra (tenured Dr. C.H. Elzinga (tenured) Drs. T. Glasner (Ph. D-student) Dr. A.W. Hoogendoorn (tenured) Drs. Y.P. Ongena (Ph. D-student) Dr. W. van der Vaart (non-tenured)

A substantial part of all different kinds of data that social scientists use, originates from more or less standardized survey research. Questioning subjects has many guises, ranging from the classical paper-and-pencil questionnaire or a face-to-face interview to a modern web-survey. It is well known that a multitude of factors affect the validity and reliability of interview data and there is abundant literature about the "does and dont's" of questioning and the assessment of the (lack of) reliability and validity.

The causes of this lack of data quality are the focus of this program. It is generally assumed that a substantial part of factors that affect data quality somehow originate in the cognitive and social processes that are required from the respondent (and the interviewer). So, a better understanding of these processes could lead to better questions, questioning techniques and interviewer training.

In this program, indicators are developed for cognitive processes in question answering. For example, *reaction time* can be used as indicator of task difficulty (the longer the time, the more difficult the task), as well as *verbal indicators* like speech rate and expressions of doubt (project 1). Memory processes necessary to answer questions about the past seem to be facilitated by several *aided recall techniques* (project 2). Further, *behavior coding of verbal events* in telephone and face-to-face interviews is a powerful tool to identify problems in question answering, pointing at problems in (the formulation of) questions themselves as well as at problems in respondent- interviewer interaction (project 3). Attention is also paid to 'modern' methods of data collection, i.e. how to improve data quality gathered by means of Internet Surveys (Project 4).

Behavior coding results in coded sequences of verbal events (utterances) expressed by the actors in the interview. Therefore, sequential models and methods play an important role in the project and part of the program is devoted to developing new or extending existing models for the analysis of sequential data (Project 5). All participants of this program are member of the Research School IOPS; Prof. Dr. Dijkstra is member of the board of IOPS.

Finally, although some of the projects primarily focus on more fundamental and theoretical issues, all projects will eventually address problems of practical questioning methods aimed at the improvement of questioning techniques.

Project 1: Cognition and question answering: manifestations of strategies in the judgment phase and effects on data quality

Participants: Dr. A.R. Draisma

Prof. Dr. W. Diikstra

It has been shown time and again that answers to factual and opinion questions are not based on available cognitive information specific for such survey questions. Instead, it is often assumed that answers are constructed 'on the spot' and may be based on the processing of conflicting information elements (*beliefs*, *thoughts* or *considerations*) that are 'at the top of

the head': after a search for relevant information in memory relevant for a survey question, respondents are supposed to combine different, sometimes conflicting information elements into an answer. Processing problems in this judgment phase may express themselves in a number of paralinguistic (e.g. reaction times) and verbal (e.g. verbal considerations, or cognitive mismatches: the respondent is not sure of his or her answer) behaviors. Given a particular judgment, the respondent next faces the task to translate this judgment into an appropriate answer (or formatting), e.g. one of the response alternatives provided in the questionnaire. This may show up in task mismatch answers (the respondent 'knows' the answer, but this answer does not fit one of the available response alternatives). The present research concentrates on development and assessment of measurement procedures for judgment problems in different survey domains. Judgment problems are found to be associated with motivational forces (like personal relevance/importance of the question topic, accessibility of information, ambivalence as a result of conflicting beliefs) whereas formatting problems are related to context effects pertinent to the questionnaire. Such factors are referred to as state and task variables respectively. It has been demonstrated that task and state variables influence the choice of a heuristic (satisfycing) or a systematic (optimizing) processing strategy in finding an answer to a question. In the latter case, a respondent is motivated to engage in deep processing and performs as an optimally rational actor. The actual existence of such 'ideal' respondents is highly improbable. Furthermore, it is hypothesized that verbal behaviors like giving considerations and mismatch answers, and paralinguistic behaviors like reaction times or filled pauses are interrelated. For example, cognitive mismatches are assumed to be preceded by long reaction times, filled pauses and/or verbal considerations, or may be accompanied by so-called doubt words ('maybe'). Task mismatches on the other hand may be given quickly (as the respondent knows the answer), but may be followed by considerations, that 'explains' the answer. Respondent characteristics (such as cognitive sophistication, motivation and expertise) influence the choice for a certain strategy. The aim of the project is to develop a more sophisticated categorization of strategies (associated with different survey questions types) and to find out what circumstances (task- and state variables) determine the application of specific strategies. Finally, it is investigated what effects specific strategies have on data quality and how the application of an optimal answering strategy can be enhanced. At present, an analysis of verbal interactions between interviewer and respondent is performed by Draisma, to investigate what kind of considerations are expressed (indicators for beliefs) and whether reaction times could be used as indicators for the cognitive processing during the judgment phase in factual and opinion questions in an environmental survey. In the future, other survey domains will be explored (health questionnaires, culture, political issues) with respect to the expression of considerations and strategies in the judgment phase of question answering.

One-year plan

(Draisma)

- Submit an article concerning comparison of reaction times and spontaneous verbal considerations of factual and opinion questions.
- Finish a chapter for the book to appear about the NIAS group "A new view on survey research". This chapter will treat response strategies and conflicting beliefs.
- Finish another chapter together with Tony Chessa for the book to appear about the NIAS group "A new view on survey research". This chapter will treat the application of the Memory Chain Model on reaction time distributions.
- Submit an article about models for conflicting beliefs.

- Coordination of a session at the RC33 conference in Amsterdam (August) "Response Latencies in Survey Research: Theory, Measurement and Predictive Power." (Dijkstra)
- Finish a chapter for the book to appear about the NIAS group "A new view on survey research". This chapter will discuss the different types of mismatch answers and their relation to both cognitive and interactional processes.
- Analyze an experiment about assertions, together with Ch. Carabain.

4-year targets

- Further develop collaboration with survey methodologists at ZUMA Mannheim, University of Amsterdam, Ann Arbor, Michigan and Madison, Wisconsin.
- Find external funding of research projects, especially a Ph.D project
- Collect data on new topics like health, culture, political issues. Collection modes can vary from CATI to web questionnaires. Small experiments can be performed, for instance with master students at the faculty.
- Collect existing datasets of surveys in which the verbal interactions between interviewer and respondent are available.

Project 2: Retrospective questions and aided recall methods in survey research

Participants: Dr. W. van der Vaart

Prof. Dr. W. Dijkstra

Drs. T. Glasner (Ph. D student)

Dr. Bob Belli (University of Nebraska)

In many disciplines information on past behavior and life events is central to scientific theories and empirical research. The most frequently used method to obtain this information, is to reconstruct the past by means of retrospective questions in standardized survey interviews and questionnaires. Since such retrospective data often suffer from recall error, social researchers at times employ aided recall techniques to enhance data quality. Respondents are provided with checklists, cues, landmarks, time frames and the like. Timeline procedures and event history calendars (EHC) are instruments that integrate a number of such measures by utilizing a graphical time frame in which life history information can be represented. Yet, methodological research on the value of these techniques is scarce and requires more theoretical foundation.

The project aims to provide more insight into the (cognitive) determinants of recall bias in retrospective data in order to develop and further improve aided recall techniques in standardized surveys. Center of attention are the effective mechanisms underlying these techniques - with a focus on timeline methods - and their implications for questioning procedures and questionnaire design. In addition, issues are raised as to what extent aided recall techniques can go together with standardization of survey research and whether they can be tailored to different types of recall tasks, respondents and modes of data collection. A Ph. D project, financed by NWO (called 'Reconstructing event histories in standardized survey research: Cognitive mechanisms and aided recall techniques') starts in September 2004 and is supervised by Dr. W. van der Vaart and Prof. Dr. W. Dijkstra.

The Ph. D project concentrates on retrospective questions about life histories of individuals. Since such retrospective data frequently suffer from recall error, sociologists and health scientists have employed timelines and event history calendars to enhance data quality. These interrelated aided recall procedures aim to help respondents to gain better access to long-term memory by employing a graphical time frame in which life history information can be

represented. The few studies that compared such methods to regular questionnaire procedures show positive effects on data quality.

This Ph D project aims to obtain more insight in the way timeline and calendar techniques (can) relate to cognitive processes involved in answering retrospective questions. Furthermore, the Ph D project aims to develop effective timeline/calendar techniques that can be used efficiently in standardized event history studies. Several pilot experiments will be performed to elaborate and evaluate timeline/calendar techniques. A final timeline procedure that is applicable in standardized social surveys will be tested in a field experiment.

One year plan Ph. D project

- Formulation theoretical framework
- Design of a first pilot experiment
- Presentation of a paper at a conference of the Dutch Interuniversity Graduate School of Psychometrics and Sociometrics (IOPS).

Long-term targets Ph. D project

- Design and application of subsequent pilot experiments
- Developing a timeline procedure for standardized surveys
- Paper presentations at international conferences
- Publication of research articles in peer-reviewed international journals
- PhD-thesis (written in English)

One year plan general project

- Writing papers on 1) timeline methods and related aided recall applications in social sciences and health studies and 2) a timeline application for telephone interviews
- Coordinating a session on "Aided recall techniques in survey interviews" during the "Sixth International Conference on Social Science Methodology of the Research Committee on Logic and Methodology (RC33)", in Amsterdam
- Conducting a small qualitative study using a paper and pencil EHC version

Long-term targets general project

- Analysis of recall bias by means of a record check study;
- Developing and testing (electronic) timeline applications for standardized surveys;
- Developing research projects in cooperation with dr. Robert F. Belli (University of Nebraska and Gallup Research Center),
- Publish on cognitive mechanisms underlying recall bias and aided recall techniques as focused on life histories and health behavior.

Project 3: Question-answer sequences in survey-interviews

Participants: Prof. Dr. W. Dijkstra

Drs. Y.P. Ongena Dr. A.R. Draisma

Michael Schober (New School University, New York) Fred Conrad (University of Michigan, Ann Arbor) Nora Cate Schaeffer (University of Wisconsin, Madison)

The process of questioning and answering in the survey interview takes place in so-called question answer sequences (Q-A sequences). One Q-A sequence consists of all utterances of the interviewer and respondent that concern one question. A 'paradigmatic' Q-A sequence is perfect from a survey researcher's point of view. In such a sequence, the interviewer poses the

question as scripted and the respondent is assumed to give an appropriate answer immediately. When the exchange of information does not proceed as a 'paradigmatic sequence', response errors may occur. We therefore presume that the course of the Q-A sequence will influence the eventual answer, and analysis of Q-A sequences can give insight in the way information is exchanged between the interviewer and the respondent. In addition to the course of the interaction during the interview proper, attention will also be given to the interaction during the introduction phase of the interview, i.e. how interviewers try to persuade unwilling persons to participate in a survey interview.

The aim of this project is to develop appropriate methods for coding and analyzing interviewer-respondent interactions, to explain their course, and to determine how particular courses affect data quality, in order to improve questionnaire design and interviewer training. Part of this project is a Ph D project, supervised by Prof. Dr. W. Dijkstra and Dr. A.R. Draisma, that aims at four main questions:

- How can question-answer sequences be analyzed?
- How can question-answer sequences in survey-interviews be classified?
- What are the causes of certain courses of question-answer sequences?
- What are the consequences of certain courses of question answer sequences for the quality of the data obtained?

The research questions will be answered by means of analysis of existing behavior coding schemes, exploratory analyses of several data-sets with question-answer sequences, and an experiment, conducted in 2004, that was based upon the results of these preceding analyses. In the experiment, question wording as a cause of deviation will be one of the main variables tested. The data to be analyzed consist of protocols of standardized survey-interviews. These protocols are coded according to behavior coding procedures. More in particular the experiment will test a number of hypotheses about causes of so-called conversational mismatch answers, i.e. answers that reflect a conversational way of responding to survey questions.

One-year plan

- Analyze the experiment from the Ph D project
- Defend thesis in 2005
- Submit a paper on evaluating encoding methods to the Journal of Official Statistics
- Code and analyze data from a "video" experiment (video-recorded interviews) conducted in collaboration with M. Schober and F. Conrad..
- Transcribe, code and analyze introductions from the Ph D experiment mentioned above.
- Feasibility study of a large survey in 10 to 12 different European countries (ULTORC: Case Control Study to Characterize the Odds Ratio for Risk of lung cancer from Ultra-Low Tar and Full Flavored Cigarettes), sponsored by Philip Morris.
- Conference papers with Schober and Conrad, presenting the results of the "video" experiment i.e. at the 45th Annual Meeting of the Psychonomic Society
- Developing and applying a coding scheme with Nora Cate Schaeffer and Dough Maynard about interviewer-respondent interactions related to administering cognitive tests in survey interviews

Long term plans

- Rework thesis into papers to submit to refereed journals
- If the ULTORC project is judged feasible, quite a lot of time will be devoted to monitoring and controlling the quality of the interviews; the field work is expected to take about two to three years.

- Developing an interviewer training, including videos and trainings manual.

Project 4: Response Behavior in Internet Surveys

Participants: Dr. A.W. Hoogendoorn

Prof. Dr. J.G. Bethlehem (Statistics Netherlands)

Prof. Dr. A. Kapteyn (Rand)

Dr. B. Schouten (Statistics Netherlands)

The use of the Internet as a data collection channel confronts researchers with many methodological problems. One problem is that the population of households that have access to the Internet differs substantially from the total population. Another problem is that little is known about the behaviour of respondents with respect to screen layout, use of graphics and colours, while at the same time respondents work on different computers that can not be completely controlled by the survey researcher. At the same time, the use of computerized questionnaires on the Internet provides technical possibilities that were not available in the traditional methods of data collection. In the case of Internet Panel Surveys, one example is the use previously gathered information in a survey, called dependent interviewing. One of the major methodological issues is the topic of sampling and non response. With respect to this topic the following questions are important.

- 1. To what extend does the population of households that have access to the Internet differ from the Dutch population?
- 2. Is it possible to use the population of households that have access to the Internet and apply weighting techniques to obtain valid estimates for the whole population?
- 3. How does the (initial) non response of an Internet survey compare to other methods of data collection?
- 4. Is it recommendable to use a panel design in Internet surveys?
- 5. Is it possible to obtain and maintain a 'representative' panel?
- 6. Is it recommendable to use rotation in the panel design in Internet surveys?
- 7. Does the topic of the survey affect the response?
- 8. What are the response rates for Internet surveys?

In a research project together with CentERdata, that already operates an Internet Panel for several years and Statistics Netherlands we will try to answer several of the questions mentioned above. A major research tool would be to combine the information of CentERdata with the information of the 'Sociaal Statistisch Bestand' of Statistics Netherlands, and thus answer the questions mentioned above.

With respect to dependent interviewing the motivation for its' application is twofold: to obtain a better data quality, and to reduce respondent burden. If a survey designer is interested to use dependent interviewing, then there is the issue of how to use previous information: the amount of information (use all the information available, or use only a part of it), the timing of presenting the information (present it before or during the question, or use it as a check after obtaining the answer), and the place of presenting the information (in the question text or the answer field). The research will be pointed at disentangling the different design issues with respect to data quality and response burden.

One-year plan

- Write a paper on initial non-response
- Write a paper on effects of dependent interviewing in measuring the

4-year plan

- Extend analysis with respect to time-in-sample bias and attrition
- Set up an experiment in order to study different design elements with respect to dependent interviewing towards response burden and data quality

Intended journals

- Journal of Official Statistics
- Journal of Applied Economics

Project 5: Formal models for question-answer sequences in structured interviews

Participants:

Dr. C.H. Elzinga Dr. A.W. Hoogendoorn Prof. Dr. W. Dijkstra

Ideally, structured interviews give rise to very short and simple sequences of utterances of the interviewer and the respondent: correctly worded question, admissible answer, acknowledgement of perceipt of that answer. However, in actual practice, many of such sequences deviate from this simple paradigm and are much longer. Sequences deviate for a wide variety of reasons: both respondent and interviewer may behave inappropriately by misphrasing or misinterpreting questions, become engaged in a social conversation, suggest certain answers, etc. Such detailed sequences may or may not lead to a valid answer to the question as intended by the designer of the survey. If they do not, the quality of the surveyor's data is at stake. If they do, this quality is also at risk because different subjects answer differently formulated questions in different contexts. Therefore, a better understanding of the mechanisms that generate such non-paradigmatic sequences could lead to improved interviewing techniques, improved question wording and improved interviewer training. In the past decades, several attempts have been made to explain the frequent occurrence of nonparadigmatic sequences. These explanations (e.g. Suchman & Jordan, 1991 and Tourangeau et. al, 1988) have been formulated as quite general and qualitative theoretical frameworks, the tenability of which is hard to test empirically. Moreover, these explanations rather focus on the sheer occurrence of particular kinds of deviating behaviors. Within this project, it is attempted to formalize these cognitive frameworks in order to test their tenability and relate model-parameters to characteristics of questions, interviewers and respondents. The first class of models that will be studied is a new kind of probabilistic models, which is called "selfmonitoring hidden Markov models" (SHMM's), which take the dependency between successive behaviors into account. Since these models are new, new methods of parameter estimation and model evaluation will have to be developed and implemented. A second class of models, still to be developed, will attempt to merge characteristics from item-response theory and dynamic models in order to more explicitly relate characteristics of the questionanswer sequences to, possibly non-scalar, characteristics of questions, interviewees and interviewers. The purpose of the models will then be to scale (i.e. estimate) the latter characteristics from the question answer sequences.

One-year plan

- Implement appropriate software to fit and evaluate self-monitoring hidden Markov models (SHMM's)
- Submit a paper on evaluating model-fit of SHMM's.
- Submit a paper on estimating distances between different (S)HMM's
- Submit a paper on applying SHMM's to question answering sequences

4-year plan

- Submit an authoritative paper on estimating and evaluating SHMM's with applications to question-answering sequences
- Submit papers that use SHMM's to investigate the tenability of several cognitive theories pertaining to question answering in structured survey interview
- Stabilize and document SHMM-software and develop collaboration outside the department to apply SHMM's to other substantive research areas (communication and political sciences).
- Develop models and implement methods to estimate characteristics of interviewees, interviewers and questions from question-answering sequences and
- Submit papers on these models and methods
- Obtain external funding for at least 2 Ph.D.-projects related to the above
- Develop a master-level educational program on (applying) discrete latent-trait models

Intended journals

- Journal of the American Statistical Association
- Public Opinion Quarterly
- Sociological Methods & Research
- Journals that specialize in either survey or (computational) statistics

Subprogram 3: Social Processes of Inequality from Qualitative and Mixed Method Perspectives (SPIQ)

Participants: Dr. H.van den.Berg (tenured)

Dr. L.Nencel (tenured)

Dr. C.G. van der Veer (tenured) Drs. C. Carabain (Ph. D-student) Drs. G. Moerman (Ph. D-student)

This subprogram combines methodological research concerning qualitative research methods and the methodology of mixed methods perspectives with a focus on substantive issues. The research projects in this cluster concern different manifestations of social inequality in contemporary society. Among them, special attention is paid to ethnic and gender relations and issues such as social and economic ex/inclusion. Queries into how social processes take shape and are experienced by different social groups in a particular society are served excellently by the use of either a solely qualitative approach or one of mixed methods. However, one of the distinguishing features of this cluster from the others within the department is the prominent position given to qualitative methodology in the different research projects. Qualitative methods facilitate studies that aim to understand, describe and analytically probe the increasing complex cultural diversity of society. For this objective, data collection methods such as open interviews, and ethnography are used. Projects focus on methodological problems concerning interview strategies in open interviews, and reflexivity and inter-subjectivity in ethnography. The increasing interest of the use of mixed modes in social research is explored in relation to, for example, cross cultural and cross national comparative research and those projects concerned with the factors that influence the successful working of mixed methods in data collection. This subprogram hosts the projects mentioned below.

Project 1: Dilemmas in everyday discourse: methodological problems of public opinion research on controversial topics.

Participants: Dr. H. van den Berg

Standardized questionnaires with closed questions constitute the main instrument of public opinion research. To get more insight in the possibilities and limitations of this instrument a field experiment was designed to compare assertions with open questions as means to get more insight in the respondent's discourse on the main theme of the interview. Two hundred respondents were randomly distributed over two groups. One group was interviewed about asylum seekers. The other group was interviewed about traffic jam. In each group the question order of assertions and open questions was varied. The results of the study show that public opinion research based on assertions tends to neglect the dilemmas in public opinion concerning controversial topics such as asylum seekers and traffic-jams. Presently (June 2004) the fieldwork is finished and the data-analysis is nearly complete.

One-year plan

- Publication of a book, entitled "Stellingvragen als instrument voor opinie-onderzoek" (Assertions as a tool for public opinion research), to be published by the "Stichting voor Culturele Wetenschappen" (Foundation for Cultural Sciences)

Long-term target

- Submit a paper, entitled "Assertions in Opinion Surveys; On the limits of a popular question format", to the International Journal of Public Opinion Research.

Project 2: Discourse analysis of open interviews

Participants: Dr. H. van den Berg

Transcribing and analyzing open interviews is not only a time and labor consuming activity but also an activity that runs the risk of under-analysis as well as over-interpretation. The general aim of this project is to contribute to the development of methodological guidelines on behalf of analyzing open interviews. This project has started in 2004.

One-year plan

- Presentation of a paper at RC-33 (August 2004) about possibilities and problems of secondary analysis of qualitative data.

Long-term target

- Submit a paper, entitled "Reanalyzing Qualitative Interviews: The merits of Sharing Qualitative Data", to Forum of Qualitative Research.

Project 3: Femininity, Work and Identity in Low-level Clerical Occupations in Lima, Peru

Participants: Dr. L. Nencel

This anthropological investigation primarily concerns female secretaries and the construction of gender identity in Lima, Peru. The study will attempt to complete the following objectives: a) disclose the mechanisms of the gendered labor market in this particular work culture; b) narrate the daily experiences of poverty for this specific group; c) make explicit the notions of ethnicity and sexuality interwoven in the meanings of femininity in the work culture as well as the household; d) show how these different dynamical dimensions of subjective experience merge together in the construction of gender identity, e) design and apply a methodology which supports a study of qualitative detail but at the same time takes into consideration the limitations of short fieldwork periods. This project is to be completed in the period of December 2004 till March 2005 (this project is financed by NWO-Wotro).

One-year plan

- Write a chapter in a book, to be edited by T. Davids en F.van Driel (Eds.) and to be published by Ashgate Publication. Working Title: "Professionalization versus Sexualization: When Global meets Local in the working lives of secretaries in Lima, Peru".
- Submit a paper for the conference "Discourse and Organization Broken-down Bureaucracies, Change and Secretaries Identities in the Peruvian Public Sector" Submita paper, entitled "Work, Home and Money. Identity Markers in an Urban Context" to Bulletin Latin American Research
- Submit a paper on the development of a qualitative rapid research methodology to Qualitative Inquiry
- Submit a paper on the cultural construction of money, diversity and gender, to be submitted to "Social Anthropology.
- Edit (with Ida Sabelis COM, VU) a Special Issue of the Journal Gender, Work and Organization, entitled "Gender and Time".

Project 3: Non-standard Work Schedules and Partnership Quality and Stability

Participants: Dr. L. Nencel

Dr. M. Mills (SCW, VU)

This project will examine the link between non-standard schedules and partnership quality and stability. A multi-level theoretical framework blends psychosocial perspectives on relationship attachment, communication and conflict with attention to external pressures and alternative attractions at the macro-level. A triangulation of multiple qualitative methods is proposed, namely: time diaries, artifacts (e.g., agendas, family calendars), in-depth semi-structured interviews and observation. Drawing a sample of persons who work non-standard schedules from the first wave the NKPS survey, data will be collected from 40 couples with children at one point in time. Interviews, observation notes and time-diaries will be transferred into text files, with artifacts and other non-textual observation material (e.g., drawings, photographs) scanned into digital format. Analysis will be guided by a grounded-theory approach to identify themes, index, map and interpret data. The project has been approved by NKPS-minipanel (NWO, MAGw), to commence (approximately) in January 2005 and last for some 8 months.

One-year Plan (commencing 2005)

- Publications in refereed journals (gender and work and organization, time and society, etc.)

Project 4: Teachers' Identities and Ethnography of School Culture

Participants: Dr. L. Nencel

Prof. Dr. E. Henning (RAU, South Africa)

This inquiry aims to capture teacher identities as lived experience in selected schools in Gauteng and Northwest Province in South Africa. In the inquiry into teacher identity, the investigation also aims to craft ethnographies of schooling in these schools, thereby authoring a thick description of the context in which the identities of teachers develop. The ultimate purpose is to design a pedagogical tool that can be used to map schools as living users of "cultural, social and symbolic capital" (Pansters and Siebers, 2003) and to design required teacher development interventions according to these heuristic maps. We aim to develop such a tool specifically for schools that are on the periphery of cultural and pedagogical change and where the lack of resources (material, social, cultural and symbolical) is the criterion for selection for the inquiry and for future interventions. This project will start in January 2005 and will run for 3 years (until 2008) and is granted by SANPAD.

Project 6: Pretesting self-completion questionnaires

Participants: Dr. K. van der Veer

Dr. T. Hak (EUR Rotterdam) Dr. H. Jansen (IVO, Rotterdam) Dr. R. Ommundsen (UiO, Oslo)

In this project validation studies are carried out of different types of self-completion questionnaires and different types of questions like attitude scales, questions about quality of

life, and questions about physical discomfort. The main method of investigation in this study is the Three-Step Test-Interview (TSTI), which is a new technique specifically developed to detect problems with self-completion questionnaires. The study's aim is to further develop the TSTI and to ascertain the usefulness of the TSTI for detecting problems regarding different measurement instrument in different groups and social categories.

One-year plan

- Start data collection (in cooperation with the VU Medical Center)
- Starts writing an article on the validation of attitude scales

Long-term targets

- Become acknowledged and cited as one of the most authoritative experts on methods of pre-testing.
- Write articles and/or a book on pre-testing.

Project 7: Attitudes towards illegal immigrants

Participants: Dr. K. van der Veer

Dr. Knud S. Larsen (OSU, Corvallis, USA) Dr. R. Ommundsen (UiO, Oslo, Norway)

Dr. T. Hak (EUR, Rotterdam)

Dr. H. Van Le (National Institute of Psychology, Hanoi)

Dr. K. Krumov (University of Sofia, Bulgaria) Dr.R.E. Pernice (Massey University, New Zealand)

Dr. G. Pastor Romans (Universidad Pontificia de Salamanca, Spain)

The purpose of this project is to investigate attitudes toward illegal immigration among different social categories both in receiving countries (like US, NO, DK, NL, ES, AU, NZ) and in net sending countries (like VT, BU). The main question is: which items of the illegal immigration scale are the most and least significant contributors to attitudes based on item analysis?

One-year plan

- Start data collection (in Vietnam and Bulgaria)
- Write an article on the possibility of developing a robust Mokken scale, which reflected common meanings in varying samples.
- Start writing an article on attitude scale development in countries which send illegal immigrants

Long-term targets

- Write a monograph on attitudes toward illegal immigration.

Project 8: Title: Social Position Reconsidered. A holistic approach of social stratification and social inequality

Participants: Dr. K. van der. Veer

Dr. H. van den Berg

Prof. Dr. J. Galtung (Kyoto University, Japan)

Dr. H. Wiberg (University of Copenhagen, Denmark)

Dr. Å. Hartmann (University of Oslo, Norway)

This project aims at the development of a holistic theory of social stratification, and the empirical validation of indicators of Social Position along the Center/Periphery dimension.

One-year plan

- Start data collection (in NL)
- Write draft chapter Social Position and the Internet 'Divide' focusing on network centrality as a dimension of Social Position.
- Write a draft literature review on theories of Social Inequality

Long-term targets

- Write and publish articles
- Write articles and / or a book on social inequality.

Project 9: Researching racial attitudes: A 'mixed methods' approach

Participants: Drs. C. L. Carabain

This Ph. D-project (supervised by Dr. H. van den Berg) concerns the comparison between a 'mixed methods' and a 'single method' approach on behalf of the measurement of racial attitudes in the Netherlands. Data collected by means of solely standardized interviews with closed questions on racial attitudes (single method) will be compared with data collected by means of standardized interviews with closed and open questions (mixed method). The main hypothesis is that the surplus value of the mixed method is partly dependant on characteristics of the research topic. Therefore, attitudes toward three different ethnic groups will be distinguished, namely Moroccan youth, Muslims and immigrants. It is assumed that media-images of these groups differ from each other with respect to the measure in which those images are stereotypical. Therefore, it is necessary to analyze those media images and the relation between media usage and attitudes. Besides, it is hypothesized that the surplus value is also dependent on respondent's characteristics such as knowledge about out-group members and social contact with out-group members. The project started in 2001 and pilot research is finished. The fieldwork is planned for 2004.

One-year plan

- present a paper at AAPOP (may 2004)
- present a paper at RC-33 (august 2004)

Long-term target

- publication of articles in refereed journals.
- thesis will be defended in 2006.

Project 10: Probing tactics in open interviews

Participants: Drs. G. Moerman

This second Ph. D-project is also supervised by Dr. H. van den Berg.

It goes without saying that probing constitutes the 'heart' of open interviewing. Therefore, the quality of open interviewing depends mainly on the quality of probing. This study concerns a comparison between three different probing tactics: 1) the accommodating probing tactic, 2) the compliant probing tactic and 3) the challenging probing tactic.

The main research question is: What are the effects of the different probing tactics in open interviews on the quality of information about ethnic categorization? It is taken into account that those effects could be topic dependant. Therefore, other topics beside ethnic categorization will be included, such as the categorization friendship. In order to study the assumed effects of probing tactics, respondents are assigned at random to three different groups. Interviewers of a specific group will be trained thoroughly to use only one of the three probing tactics. The project started in 2001 and pilot research is finished. The fieldwork is planned for 2004.

One-year plan

- presentation of a paper at AAPOP (may 2004)
- a paper at RC-33 (august 2004)

Long-term target

- publication of articles in refereed journals.
- thesis will be defended in 2006.

Other programs and projects

Program: Dynamics of Social Networks: Strategies, Behavior and Evolution.

Participants: Dr. G. G. van de Bunt (tenured)

The general aim of this project is to apply and substantiate recently designed new and complex statistical network models in several domains that are not familiar with these models, in order to get a better grip on the relation between actor strategies and behavior on the one hand, and network dynamics on the other hand.

Project 1: The evolution of social networks.

Participants: Dr. G. G. van de Bunt

Dr. P. Groenewegen (Dept PA & O, VU) Prof. Dr. Tom Elfring (Dept PA & O, VU) Prof. Dr. C. Snijders (University of Eindhoven) Prof. Dr. Rafael Wittek (University of Groningen)

Drs. Z. Sasovova (Fac. E & BA, VU)

Dr. Chris Baerveldt (university of Utrecht/ICS)

Drs. Wouter Stam (Ph. D-student) Drs. Suresh Bhagavatula (Ph. D-student)

This project boils down into three sub-projects: the evolution of friendship networks, the evolution of intra-organizational networks, and the evolution of inter-organizational networks. To start with the most important project (in terms of time spent): this project is closely, though not exclusively, related to part of the research program of the Department of Public Administration and Organization (Dept. of PA & O) called "Entrepreneurship, Networks, and Emerging Industrial Communities", which stresses 'the role networks, resulting from interaction between individual organizations, play in the emergence and survival of new firms'. In order to model dynamics of networks Tom Snijders, Marijtje van Duijn, Gerhard van de Bunt and others, proposed an actor-oriented statistical network model called SIENA (part of the StOCNET software package). The last couple of years these models have been elaborated and extended by Snijders and colleagues. Although the number of applications of these models is increasing, it is to a large degree restricted to sociological studies. Since these models are also suitable for networks of collaborating organizations (i.e. inter-organizational networks), windows of opportunities are opened to introduce SIENA to the field of management, entrepreneurship, and related areas. These fields of research are increasingly getting engaged in network studies, influenced by classics like Granovetter's 'The strength of weak ties', and Burt's 'Structural holes'. Only recently the evolution of inter-organizational networks was added to the agenda (e.g. Powell, Gulatti, et cetera). However, representatives of these fields of research are hardly aware of the present state of the art of network modeling. Many of them apply sub-optimal, sometimes even wrong statistical techniques, which could lead to questionable conclusions, or no satisfying answers at all. This also holds for respectable journals in these fields; they also are not aware of new developments in the field of network modeling, although they favor network related submissions of papers. (For more details, see also the research plan of the Dep. of PA&O). A dataset on the evolution of collaborating organizations within the genomic industry was collected in 2003 by Peter Groenewegen, Gerhard van de Bunt, and Maurits de Klepper. The data include information

about several types of partnerships (ranging from 'weak' to 'strong' ties), actor and higher-level attributes. Within the context of the Ph. D. project of Drs. W. Stam, new data (also longitudinal data) will be collected.

In the same area, a promising collaboration that has just started is with Chris Snijders (University of Eindhoven). The plan is, to write a research proposal about the use of statistical network models in the field of the evolution of inter-organizational networks in relation to the development of new technologies, in order to get funding from Geert Duisters (University of Eindhoven), who has invited us to write this research proposal. The research proposal will be written in Fall 2004. Depending on the outcome, this project will either be one of the major tasks the coming years, or a collaboration on an occasional basis.

Next to the evolution of inter-organizational networks, also the evolution of intra-organizational networks is part of this project. The emphasis will be on instrumental relationships, such as advice and communication, on affective relationships, such as trust, and friendship, and the formal hierarchy. SIENA offers the opportunity to relate the evolution of network structure to actor attitudes, such as job satisfaction, and commitment, behavior, such as dealing with conflicts, and strategies, such as the distinction between formal and informal (e.g. via third persons) of control. This is a follow up of the Ph.D. projects of Wittek and Van de Bunt, and in collaboration with a Ph.D. student from the Faculty of Economy and Public Administration of the Free University.

Two longitudinal network datasets are available (four waves). The first one was collected by Rafael Wittek and Gerhard van de Bunt within five organizations, four Dutch and one German. The data include quantitative information about approximately ten types of networks, actor and higher-level attributes, and decision-making processes. The set also contains data about the so-called cognitive social structure of one organization at one moment in time. The second dataset was collected by Zuzana Sasovova in three department of a general hospital in The Netherlands (three waves). In between the first and second wave new technology is implemented. Next to three types of networks, it also includes data on actor attributes, and several types of attitudes towards the introduction of new technology. The final sub-project, the least important one in terms of time spent, is about strategies pupils use in order to make friends when they enter high-school. This is in collaboration with Chris Baerveldt from the University of Utrecht and Ronan van Rossum from the University of Gent. Within a rational choice framework, several strategies are distinguished, depending on actor attributes such as gender, the former configuration of the pupil's network, and the number of existing friendships. Data were already collected in approximately 30 classes. Ultimately we will have data of about 75 classes. It contains e.g. information about the actual friendship and desired friendships. The analyses ask for a combination of complex network models (SIENA and p*) and multi-level models.

Two Ph. D-projects are run: one with Wouter Stam, entitled "Entrepreneurs, networks, and dynamics in innovation communities: The case of open source software", and one with Suresh Bhagavatula, entitled "Micro firm entrepreneurship in a low technology cluster: A social network perspective of Handloom in India".

One year plan

- obtain funding for the project "Collaboration, knowledge production, and network dynamics" from NWO-MaGW, Open Competition (in collaboration with P. Groenewegen).
- Submit a paper, entitled "Dynamics of Collaboration in Interorganizational Networks: An application of actor-oriented statistical modeling" to the Academy of Management Journal (co-author P. Groenewegen)

3-year plan

- Submit a paper with M. de Klepper and P. Groenewegen, entitled "Multiplex embeddedness in interorganizational networks"
- Submit a paper with C. Baerveldt, R. van Rossum, and M. Vermande, entitled "Linking, jumping and other selection strategies in freshmen networks".
- Submit a paper with M. de Klepper and P. Groenewegen, entitled "The evolution of interorganizational networks in genomics"
- Submit a paper with Z. Sasanova, entitled "The Effects of Ambivalence on Social Influence in Attitude Formation"
- Submit a paper, entitled "Friendship: a Mokken scale analysis based operationalization procedure"

Project 2: Dynamics of Trust

Participants: Dr. G.G. van de Bunt

Dr. K. Bijlsma-Frankema (Dept. PA & O, VU)

Another aspect of intra-organizational networks, not necessarily longitudinal, is trust. So far, this project has been restricted to, first, antecedents of trust, and second, structural equation modeling of trust processes. This is done in close collaboration with, again, the Dep. of PA&O, called 'Learning and Trust in Organizational Renewal' (for more details, see the research plan of the Dep. PA&O. Future plans involve the introduction of social networks (e.g. trust, communication, friendship, and advice) to the problem at hand, namely to model the evolution of trust in general, and trust networks in particular. In May 2004, a second wave of a large-scale data collection project at 'Amsterdam Thuiszorg' will been carried out by Katinka Bijlsma-Frankema. A third wave will follow in due time, which will also include data on social networks. Data about antecedents of trust, and performance measures that can be related to trust are also part of the dataset. These measures are available on two levels, the team level and the individual level. Another already collected dataset by Claudia Rens that is suitable is about trust and performance in two organizations, a network organization and a relatively 'classic' organization.

One-year plan

- Submit a paper with R. Wittek, entitled "Organizational Governance, Informal Networks, and Oppositional Solidarity in Organizations" to the journalHuman Relations.

3-year plan

- submit a paper with K. Bijlsma-Frankema, entitled "A few cues to trust: a serendipity pattern approach to antecedents of trust in managers"
- submit a paper with M. de Klepper and R. Wittek, entitled "The evolution of organizational trust in two departments of a general hospital"
- submit a paper with K. Bijlsma-Frankema and B. Roosendaal, entiled "Differential effects of attractiveness of the organization and trust on heed and performance in a network and a divisional form of organizing".

Program: Methods and Applications of the Classification of Quantified Token Sequences

Participants: - Dr. C.H. Elzinga

- Dr. M. Malo (Universidad de Salamanca, Departemento de Economía e

Historia Económica)

- Dr. F. Munoz-Bullon (Universidad Carlos III de Madrid, Sección de

Organización de Empresas)

In many areas of research, data have the form of token sequences, i.e. ordered collections of encoded events. Examples are utterances during conversation, jobs in a career, significant events in a life course, phrases in birdsong, behavioral patterns in mating, etc. Token sequences become quantified if each token (event) is associated with a number. Often, such numbers refer to quantities like duration, frequency, pitch, evoked potential, etc. Token sequences can be used for classificatory purposes, provided the sequences can be represented in a metric space. Methods to metrically represent token sequences are well developed in microbiology and electronic messaging. However, these methods presume theories that are not easily translated to other domains and cannot handle quantifications. Elzinga (2003, forthcoming) developed representations and algorithms to represent token sequences in highdimensional metric spaces in such a way that the representations constructed only use order information. Because of this property, the resulting representations are free of substantive theory. Therefore, these methods can be used in a broad range of substantive applications. Application software (SEQStat) with a simple and friendly user interface and options to handle (select) covariates has been developed; a β-version for Windows 2000+ is available. A disadvantage of the methods (as well as of those developed by others) is, that the algorithms are of high complexity and therefore require quite some computational effort. The present project aims for improving available algorithms and develop less complex algorithms, stabilize SEOStat, investigate the relations between the full representation and partial, lowerdimensional representations and to further develop descriptive statistics for sets of token sequences.

One-year goal

- Submit a paper to the journal "Demography" that analyzes several cohorts of the British Household Panel Survey to see if an "unemployment scar" is useful for classifying job careers.

Long-term objectives

- Apply and improve methods and algorithms in collaboration with substantive research in any area.

Program: Judgment and choice in culture and religion

Participants: Dr. P.H.M.P. Roelofsma

Dr. D. Read (London School of Economics) Dr. M. Schut (Artificial Intelligence, VU)

Dr. F. Yates (Michigan State University, Ann Arbor) Prof. Dr. A.F. Droogers (VU, Hollenweger Instituut)

The research area of this program consists of reasoning-, problem solving- and decision making processes that occur in higher mental activities like diagnosis, prognosis and preferential choice. The research area is also referred to as "thinking and deciding". The three main questions are:

- 1. The *normative* question: How should we evaluate thinking?
- 2. The *descriptive* question: How do we think? What prevents us from doing our best thinking?
- 3. The *prescriptive* question: What can we do to improve our thinking and decision making, both as individuals and a society?

The current research program examines the cultural components of judgement and choice. It aims to study the higher mental and motivational processes related to human judgement, decisions and rationality in different cultural domains. The program incorporates normative, descriptive and prescriptive approaches and combines both applied as well as and fundamental research. The long term target is to elaborate the research in both western and non-western cultures as well as in religious and non religious contexts. With regard to religious context, particular interest will be given to collaboration with the Hollenweger institute at the Vrije Universiteit. Key questions are: How do people make decisions and why do they prefer one alternative to others? How do people differentially value time, outcome and probability? What makes experiences and life pleasant and unpleasant? How do people make inferences from possibilities, evidence, and goals? How is judgement and choice influenced by culture and religion? How culturally dependent is 'information search' and 'information representation'? Questions like these substantiate in two current project-themes that are carried out in collaboration with others:

Project 1: Cultural Bias and Human error

This project hosts 4 subprojects:

-Examining human error in a pathogenic culture: towards safe medical research.

Master thesis Astrid Diemer (COM)

-How to prevent Human error in radiology research (COM).

Master thesis Reina Kloet

- -Tendency to certainty in religious beliefs. Do religious beliefs lead to overconfidence? (Roelofsma and Van der Veer).
- -Why do Christians score higher on Lie scales? On the cross cultural validity of diagnostic tools (together with Van der Berg).

Project 2: Experienced and intertemporal utility

-How do people derive utility from religious and spiritual experience, or do they really? Master thesis Elise van Wijlen (COM), Roy Schrijvers (TH) Martin van Beek (MT)

-How to measure temporal utility (together with Martijn Schut).

One-year plan

- Sent out papers.
- Substantiate the program.

 Develop Internet research tool.

Long term target

- See above. Fund raising and develop Ph. D-projects.