

SOCIAL DISTANCE, MARRIAGE PATTERNS AND SOCIAL STRATIFICATION IN NEW ZEALAND 1981–2001: USING CENSUS DATA TO MAP MOVEMENT IN SOCIAL SPACE

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Structure of Presentation

- Introduction
- Literature review: Historical theoretical approaches to stratification research
- Pierre Bourdieu: social distance/social capital
- Methodology for research
- Early analyses and findings
- Conclusions
- Discussion



Literature Review

Interrelated areas of literature

- Historical and contemporary theories of class/ social stratification systems and reproduction
- Social stratification measurement methodology, schema and theoretical underpinnings
- Empirical and theoretical investigations of marriage/cohabitation patterns



Bourdieu: Transmission of Class Inequalities

- Reproduction, persistence and transmission of class inequalities/stratification from differences found and marked in social interaction of actors/groups of actors
- Relationships and social actions reflect, differentiate and renew class positions
- Bourdieu's expansion on Marx's Capital: *Access to and utilisation of multiple capitals*
 - Economic
 - Social
 - Cultural
 - Symbolic
 - Linguistic



Data & Methodology

Data

- National-level data (NZ Household censuses) for a 20 year period (1981–2001)

Analysis

- Correspondence analysis: a relational and social distance model for categorical data (used in Camsis scale construction)

Toolkit

- SAS and SPSS computer programmes for data analysis



Camsis Scale

- Origins in Cambridge friendship scale
- National specific, and:
 - Allows international comparisons
 - Includes status in calculations
 - Gender friendly



Census Data Variable Types: 1981–2001

Data types

- Marriage/cohabitation status
- Employment/Occupation
- Ethnicity
- Immigration
- (Education)

Initial investigation: 1981–1991–2001 Censuses

- Marriage/cohabitation
- Employment/Occupation variables

(Full- and part-time employment)



NZSCO Occupational Categorisations

Major	Occupations: 2001 Census
1	Legislators, Administrators and Managers
2	Professionals
3	Technicians and Associate Professionals
4	Clerks
5	Service and Sales Workers
6	Agriculture and Fishery Workers
7	Trades Workers
8	Plant and Machine Operators and Assemblers
9	Elementary Occupations (incl. Residuals)

Examples of Occupational categories (Major aggregation)

Reflective of tasks expected, skills required and educational level expected

Ordinal listing as reflective of social order/class structure/ social capital

Based on ISCO schema



Correspondence Table: 2001 Census Major Level

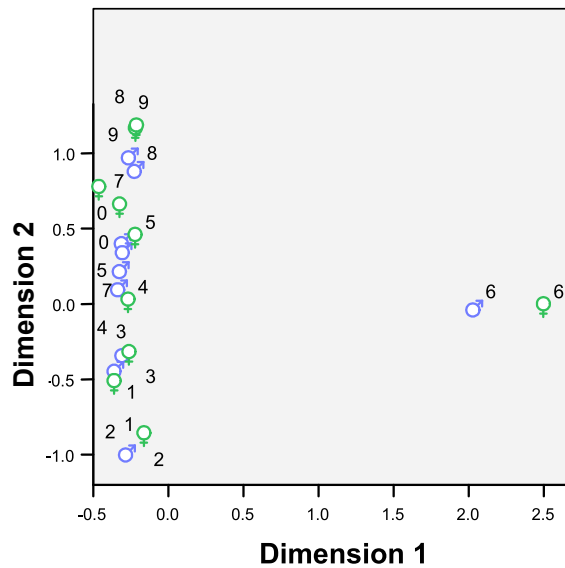
NZ Census 2001: RR table	Females Major_2									
Males Major_2	1	2	3	4	5	6	7	8	9	Row Totals
1 Legislators, Administrators and Managers	19632	13686	9354	17805	8925	1338	507	1305	1545	74100
2 Professionals	6189	21729	8085	10806	4722	708	312	642	804	53997
3 Technicians and Associate Professionals	5151	9852	8904	10959	5946	636	378	852	1074	43755
4 Clerks	1785	3213	2619	5760	3114	282	159	699	867	18501
5 Service and Sales Workers	3291	4401	3624	6630	8100	414	261	858	1074	28656
6 Agriculture and Fishery Workers	2331	4797	3018	4959	4584	16683	183	1023	1260	38829
7 Trades Workers	6840	8754	8193	18015	12723	1269	1713	2760	3219	63480
8 Plant and Machine Operators and Assemblers	3945	5028	5247	10899	10980	1689	642	5199	4428	48060
9 Elementary Occupations (incl. Residuals)	1695	2094	2130	4569	4362	516	240	1179	3084	19875
Column Totals	50862	73557	51177	90405	63453	23535	4395	14520	17355	389247



Correspondence analysis 1981–1991–2001 Censuses Not Controlled

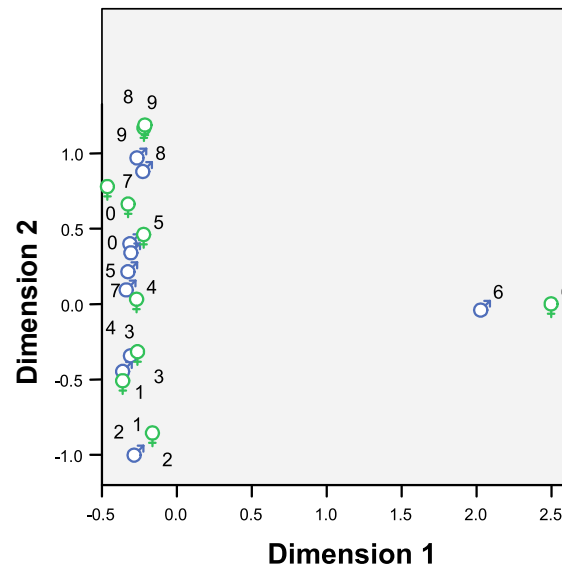
2001

NZSCO99 category by Gender



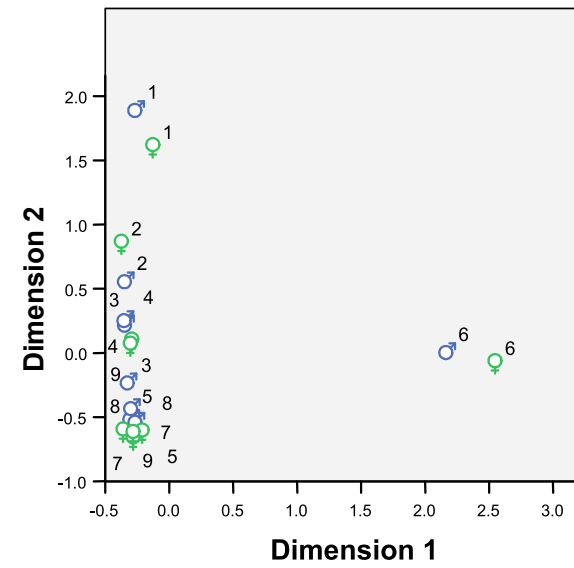
1991

NZSCO90 category by Gender



1981

NZSCO68 category by Gender

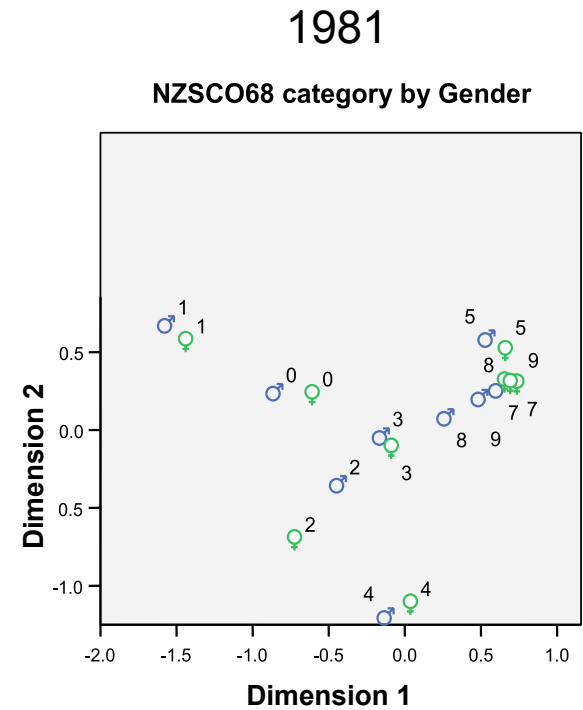
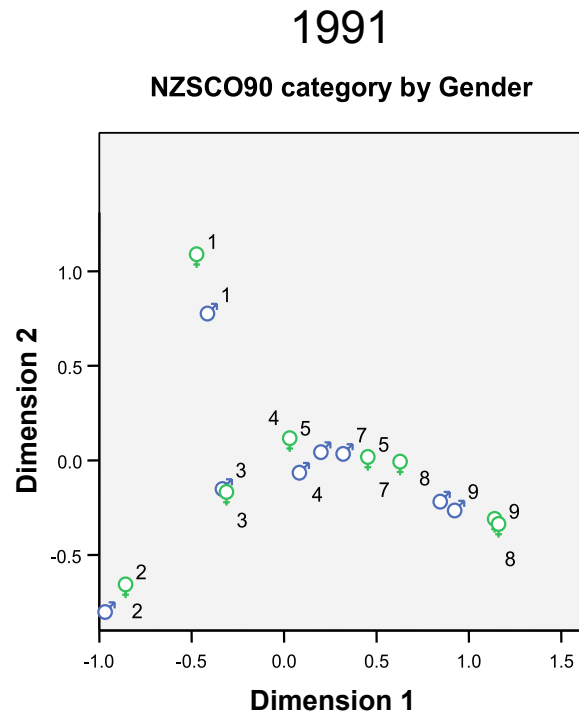
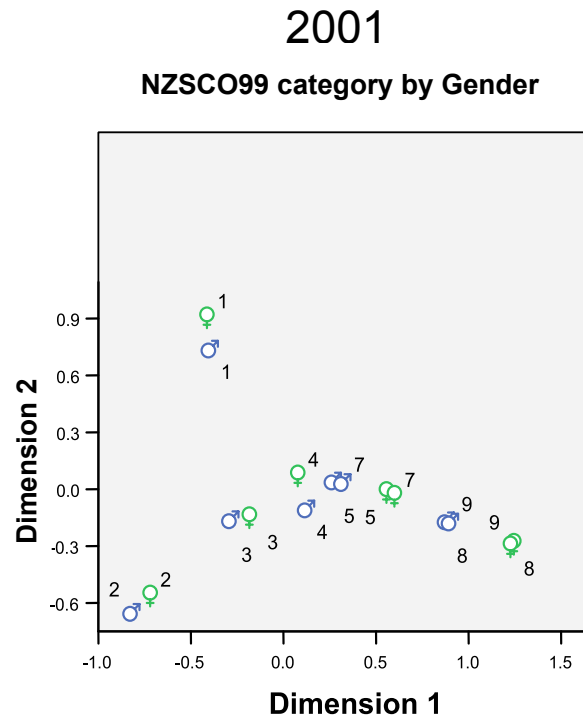


♂ Major_1

♀ Major_2



Correspondence analysis 1981–1991–2001 Censuses Controlling for ‘Specialities’



♂ Major_1

♀ Major_2



Dimension Scores: 2001 Census Controlling for 'Specialities'

2001 -Row Coordinates (Male)

	Dim1	Dim2
1 Legislators Administrators and Managers	-0.2303	-0.3194
2 Professionals	-0.4708	0.2870
3 Technicians and Associate Professionals	-0.1674	0.0738
4 Clerks	0.0652	0.0489
5 Service and Sales Workers	0.1474	-0.0155
(6 Agriculture and Fishery Workers) (Controlled)	(1.5492)	(-0.0820)
7 Trades Workers	0.1765	-0.0119
8 Plant and Machine Operators and Assemblers	0.4942	0.0760
9 Elementary Occupations (incl Residuals)	0.5067	0.0791

2001 -Column Coordinates (Female)

	Dim1	Dim2
1 Legislators Administrators and Managers	-0.2348	-0.4026
2 Professionals	-0.4091	0.2382
3 Technicians and Associate Professionals	-0.1046	0.0579
4 Clerks	0.0440	-0.0382
5 Service and Sales Workers	0.3160	-0.0002
(6 Agriculture and Fishery Workers) (Controlled)	(2.0331)	(-0.0935)
7 Trades Workers	0.3406	0.0083
8 Plant and Machine Operators and Assemblers	0.7072	0.1191
9 Elementary Occupations (incl Residuals)	0.6967	0.1250



Camsis Algorithm: A Finer-grained analysis?

An example of common marriage/cohabitation patterns and pairings at occupational unit level

M = Property manager $6111 \times 10 = 61110 +$
employment status = 2 = **Occlst = 61112**

F = Farm manager $6112 \times 10 = 61120 +$
employment status = 2 = **Occlst = 61122**



***Some fun for statisticians
and a cure for Sociologists who have trouble sleeping at night***

- ***This SPSS syntax programme is for Major level data.***
 - **descriptives var=htd3 wtd3**
- **/save /statistics=all .**
 - ***(creates by default standard normal vars, mean 0 sd 1, prefixed by z).**
 - **descriptives var=zhtd3 zwtd3 /statistics=all.**
 - *** then generate to fit within desired range and precision.**
 - **compute hitcs3=(trunc(10*((15*zhtd3)+50)))/10.**
 - **compute witcs3=(trunc(10*((15*zwtd3)+50)))/10.**
 - ***compute hiscs=(trunc(10*((15*zhisd1)+50)))/10.**
 - ***compute wiscs=(trunc(10*((15*zwisd1)+50)))/10.**
 - **descriptives var=hitcs3 witcs3 /statistics=all.**
 - *** finally, 'crop' any extreme values that exist.**
 - **recode hitcs witcs (lo thru 1=1) (99 thru hi=99).**
 - **descriptives var=hitcs3 witcs3 /statistics=all.**



gb91isco88.sav - SPSS Data Editor

File Edit View Data Transform Analyze Graphs Utilities Window Help

D : fcamsis

	isco88	stdempst	ukempst	mcamsis	fcamsis	isei	trei	var
1	1	LEGISLATORS, SENIO	Self-employed (principals) (UKE	-3	59.6	53.5	.	.
2	1	LEGISLATORS, SENIO	Employer (ICSE-93 2) (UKEMP	-2	62.8	55.1	.	.
3	1	LEGISLATORS, SENIO	Employee (ICSE-93 1) (UKEMP	-1	61.5	58.4	.	.
4	1	LEGISLATORS, SENIO	Status unknown (UKEMPST 1 -	Missing	61.4	58.0	.	.
5	1	LEGISLATORS, SENIO	-6	Self-employed with 25 or	65.2	66.8	.	.
6	1	LEGISLATORS, SENIO	-5	Self-employed with fewer	62.4	54.1	.	.
7	1	LEGISLATORS, SENIO	Own account (ICSE-93 3) (UKE	Self-employed without e	54.6	52.0	.	.
8	1	LEGISLATORS, SENIO	-4	Manager (large establish	61.5	58.3	.	.
9	1	LEGISLATORS, SENIO	-3	Manager (small establish	61.5	58.3	.	.
10	1	LEGISLATORS, SENIO	-2	Supervisor	40.0	59.5	.	.
11	1	LEGISLATORS, SENIO	-1	Employee	67.1	67.5	.	.
12	2	PROFESSIONALS	Self-employed (principals) (UKE	-3	76.2	80.5	.	.
13	2	PROFESSIONALS	Employer (ICSE-93 2) (UKEMP	-2	77.8	84.0	.	.
14	2	PROFESSIONALS	Employee (ICSE-93 1) (UKEMP	-1	70.0	69.2	.	.
15	2	PROFESSIONALS	Status unknown (UKEMPST 1 -	Missing	71.0	69.9	.	.
16	2	PROFESSIONALS	-6	Self-employed with 25 or	78.2	84.7	.	.
17	2	PROFESSIONALS	-5	Self-employed with fewer	67.6	75.1	.	.
18	2	PROFESSIONALS	Own account (ICSE-93 3) (UKE	Self-employed without e	74.6	79.3	.	.
19	2	PROFESSIONALS	-4	Manager (large establish	70.3	70.1	.	.
20	2	PROFESSIONALS	-3	Manager (small establish	70.3	70.1	.	.
21	2	PROFESSIONALS	-2	Supervisor	57.7	63.0	.	.
22	2	PROFESSIONALS	-1	Employee	78.1	69.5	.	.
23	3	TECHNICIANS AND AS	Self-employed (principals) (UKE	-3	64.3	69.4	.	.
24	3	TECHNICIANS AND AS	Employer (ICSE-93 2) (UKEMP	-2	68.5	65.2	.	.
25	3	TECHNICIANS AND AS	Employee (ICSE-93 1) (UKEMP	-1	60.5	57.9	.	.
26	3	TECHNICIANS AND AS	Status unknown (UKEMPST 1 -	Missing	61.0	58.8	.	.
27	3	TECHNICIANS AND AS	-6	Self-employed with 25 or	71.8	73.1	.	.
28	3	TECHNICIANS AND AS	-5	Self-employed with fewer	64.5	63.9	.	.
29	3	TECHNICIANS AND AS	Own account (ICSE-93 3) (UKE	Self-employed without e	63.6	71.2	.	.
30	3	TECHNICIANS AND AS	-4	Manager (large establish	63.4	62.9	.	.
31	3	TECHNICIANS AND AS	-3	Manager (small establish	63.4	62.9	.	.
32	3	TECHNICIANS AND AS	-2	Supervisor	58.6	67.9	.	.
33	3	TECHNICIANS AND AS	-1	Employee	57.6	55.4	.	.
34	4	CLERKS	Self-employed (principals) (UKE	-3	61.0	67.1	.	.
35	4	CLERKS	Employer (ICSE-93 2) (UKEMP	-2	72.7	73.9	.	.
36	4	CLERKS	Employee (ICSE-93 1) (UKEMP	-1	47.0	54.5	.	.
37	4	CI FRKS	Status unknown (UKEMPST 1 -	Missing	47.3	54.7	.	.

Data View Variable View

SPSS Processor is ready



Conclusion

- Examination of social stratification/homogamy in NZ over 20 years (1981–2001)
- Bourdieu's habitus/field/multiple capital approach to social stratification
- Looking at levels of social interaction between couples in the 1981, 1991 and 2001 Census data
- Using correspondence analysis/NZ census data
 - Five different levels of analysis
 - Allows for optimum level of detail
- Early Findings
 - 1981, 1991 and 2001 data indicate relative closeness between couples of similar occupations
- Building the Camsis scale for NZ

