Interuniversity papers in demography

Social integration of ethnic minorities: Indicators at the family level

Johan Surkyn

VRIJE UNIVERSITEIT BRUSSEL

IPD-Working Paper 1998-2

Paper presented at the Population Association of America meetings, Chicago, April 2-4, 1998

Interface Demography, Vrije Universiteit Brussel, Pleinlaan 2, B-1050 Brussels, Belgium
Tel: 32-2-629.20.40 Fax: 32-2-629.24.20 E-mail: esvbalck@vub.ac.be
Website: http://www.vub.ac.be/SOCO/
Vakgroep Bevolkingswetenschappen, Universiteit Gent, Korte Meer 3, B-9000 Gent, Belgium
Tel: 32-9-264.91.64 Fax: 32-9-264.91.98 E-mail: John.Lievens@rug.ac.be
Website: http://www.psw rug.ac.be/dephome/popmeth

Social integration of ethnic minorities:
Indicators at the family level

J. SURKYN

Interface Demography, Vrije Universiteit Brussel, Pleinlaan 2, B-1050 Brussels, Belgium

Tel: 0032/2 629 2038 Fax: 0032/2 629 2024 Email: jrsurkyn@vub.ac.be

1.1. Introduction

In this paper we shall investigate several behavioural components of integration, drawing on survey data from the two major Islamic minorities in Belgium, i.e. Turks and Moroccans. Given the central place of the family in Islamic culture, we shall mainly focus on family formation, partner choice, marriage and contraception. These can be regarded as critical subdomains of social life where the relation between cultural values and actual behaviour is under constant stress, due both to the migration itself and to the conditions of living as a minority in a culturally mixed society. In such a situation initially rapid and rather erratic (unpredictable) change could be expected, followed later by a gradual crystallisation of patterns along fewer and clearer lines. The present study wants to offer a closer look at two points. Firstly we shall describe various paths of change and, secondly, we wish to explain the different positions of subgroups along these paths.

1.2. The data

The data were collected in the 1991-1993 period, using questionnaires and “face-to-face” interviews in Turkish and Arabic. Dutch and French versions were also used when preferred by the respondents. Some interviews were even done in the Berber or Kurdish language. Trained interviewers of Turkish and Moroccan origin visited the homes of a random sample of women aged 18 to 49 from the same ethnic background. Unweighted sample sizes were 850 and 868. Weighting was used to correct for (generally small) regional disproportionalities that could occur due to non-response. Overall response rates were 85% and 69% for Turkish and Moroccan women respectively. Less than half of overall non-response is due to actual refusal of co-operation with the survey. Most non-response came from temporary absence from the home or the address given by the National Population Register.

In practical terms the analysis consists of three major parts. First of all, in order to get a firmer grip on integration processes, the distribution of a number of relevant family

formation variables is summarised in a typology or scale, using Boolean analysis. This will permit the identification of a general model of integration trajectories in the Turkish and Moroccan migrant population. Secondly, we shall try to predict the position of individual respondents along this trajectory. Logistic regression (repeated regression) is utilised. The covariates are: age, migration cohort, education, fathers' professional background, ethnic subgroup and region of settlement in Belgium. Finally we shall consider the relation between behavioural change and values, and examine the effects of the continuing migration pressure.

1.3 Integration and behavioural change

Studying integration through behavioural components has drawbacks as well as a number of advantages. First of all we are limited to look back into the past. In the case of family formation, the critical events that make up the life cycle lie further behind for older persons than for younger ones, and may have taken place in very different settings before or after migration. Therefore migration cohort and age will have to be incorporated as controlling variables. Secondly it is obvious that decisions in partner choice and family formation do not necessarily reflect the preferences of the married couple alone. A much broader group will generally have had a say in arranging marriages. In addition, important economic interests and practical (or legal) limitations are likely to play a decisive role along with cultural preferences and practices.

There are advantages as well in studying integration via behavioural forms of adaptation. Behaviour indicators are more easily measurable than values. Moreover, assessing the effects of practical considerations and economic interests is more straightforward for behavioural then for values adaptation, making it easier in the end to tell whether we have really observed modernisation or just pragmatism..

We do not imply that behavioural shifts necessarily reflect a cultural shift behind it, nor that a change in attitude will be expressed in different behaviour. But influences in both directions are to be expected, as the migration situation favours lines of conduct that may lead to a cultural shift through adaptation. On the other hand rapid cultural change can lead to counter reactions as well.

2.1. A Boolean analysis of family formation variables

In Boolean analysis variables are treated in binary format (presence versus absence of a certain characteristic). The rules of Boolean algebra are used for teasing out simpler structures of combinations among a set of indicators pertaining to the same general dimension. This corresponds to a generalisation of scalogram analysis (Guttman, 1950). A Boolean analysis can intuitively be described as lying between the extremes of a perfect Guttman scale on the one hand, and the full unfolding of all possible combinations of responses on the other. In a perfect Guttman scale there will be only N+1 completely ordered patterns for N indicators, the main Guttman characteristic being that higher ranking respondents will automatically also have all the lower ranked characteristics. A perfect Guttman scale is relatively rare, and therefore such cumulative patterns in a set of indicators will only hold for a small fraction of the population. In other words, the Guttman solution will generally have a very low fit parameter. The other extreme will capture all patterns of answers of all respondents (thus yielding a perfect fit), but with a possible 2^N combinations for N items. No reduction in information is obtained. Through Boolean analysis the 2^N combinations can be simplified to a smaller number of patterns. Via Boolean reduction, more condensed and simpler models will gradually emerge, until a level is reached where the model fit drops below an acceptable level.

The example of the Boolean analysis conducted on our survey data will clarify this simple technique. Unmarried women or women married for less than 2 years were excluded from the analysis. Five binary items were introduced:

A: MODCON = ever use of modern contraception. These methods are the mechanical or chemical devices (in most instances the pill, or less often condoms).

B: MONTH2 = having known the husband for at least two months prior to the date of the actual marriage ceremony. Often the couple meets only shortly before the ceremony, especially in arranged marriages, with very limited involvement of the partners in partner choice.

C: MAR19 = age at first marriage being at least 19.

D: NCHILD1 = delayed birth of the first child until at least 2 years after marriage.

E: PCHOICE = individual partner choice (i.e. one step beyond merely having accepted the parental choice).

Table 1: Percentage of Turkish and Moroccan women having the modern characteristic

Item	Turkish women	Moroccan women
MODCON	84.5%	86.4%
MONTH2	68.6%	62.2%
MAR19	46.3%	49.3%
NCHILD1	29.5%	46.5%
PCHOICE	22.6%	24.1%
N of CASES	701	571

Source: Survey: "Gezinsvorming en Waardenpatronen bij Turkse en Marokkaanse vrouwen", V.U.B. en U.G., 1991-1993

These items are presented in ascending order of difficulty, and are systematically coded 0 for not having and 1 for having the "modern" characteristic. PCHOICE is the most difficult item: less than 25% of Turkish and Moroccan women had actively chosen their spouse. The easiest item is clearly MODCON: approximately 85% of women ever (or currently) used one of the modern contraception methods.

Table 1 shows the basic distribution for these 5 items. Distributions are quite similar for both groups of women, though there is a markedly greater insistence on having a first child soon after marriage among the Turkish women. The items are more or less evenly spread in degrees of difficulty, suggesting the possibility of finding a Guttman scale. In fact 44% of Moroccan and 46% of Turkish women were found on the six completely ordered positions that make up the Guttman five item scale. Therefore at least a good partial order must exist in the data. Using Boolean analysis to find structures that comprise not only the Guttman path but also the major alternative response patterns, we found two quite satisfactory solutions. In the Turkish case 78% of all patterns were captured in a structure of just 11 out of a possible 32 (2^5) combinations of answers. A structure of the same dimensions was found among the Moroccan women representing 81% of the observed patterns. Figures 1 and 2 show the corresponding implication schemes. Figures 3 and 4 give a graphic representation of the trajectories of change that follow. Reading these last two graphs gives different levels of information. Vertically the

graph can be read as a scale: the level indicates the number of “modern” answers in every pattern. Characteristics that come in on a higher level can be considered more “difficult” than lower placed ones. Horizontally the graph can be split up in different trajectories that trace possible paths of change in the population. Finally, the separate items are of interest as well. When the difference between two levels consists of just one particular item and the graphical representation therefore narrows down, that item must be a true “milestone” in integration. Crossing such a “milestone” item clearly separates the modern from more traditional patterns, and represents a significant step towards “western style” modernity.

Taking for granted that the five items in the analysis all measure some aspects of demographic modernity, the modernisation process does notably differ between Turks and Moroccans. Initially, use of modern contraceptive techniques enters at level 1, just as would be expected from the marginal frequencies in Table 1. Then paths split up: for the Turkish women either longer acquaintance of the partner prior to marriage or postponement of marriage to a later age is the next step. From that early stage in the modernisation process onwards, the Moroccan women add the possibility of delaying the advent of the first child. Page and Segaert (1997), moreover, found that the Turkish more pronounced wish for early childbirth in marriage is linked to a more marked preference for sons over daughters.

At the third level, having known the husband longer prior to marriage is a general rule for Turkish women. Moroccan women have to wait until the next stage before this barrier can be crossed. The same holds for free partner choice, again being an easier item for Turkish than for Moroccan women. Summarising these findings, it seems that the Moroccan integration process is expressed primarily (and at first) in *delaying* the key decisions in family formation, rather than in changing the nature of these decisions. The Turkish case is very much the contrary: not the timing of events but the nature of the decisions changes first. This blends in very well with other findings from the survey, and suggests more conflictuous intergenerational relations in the Moroccan community. Lodewijkx et al. (1997) noted that Moroccan women have already taken an important step towards later marriage, and that they have been postponing the arrival of the first child after marriage much more than their Turkish counterparts. It would be very premature though to conclude from this that the Moroccan modernisation process is

Figure 1: Implication scheme for the Turkish subgroup

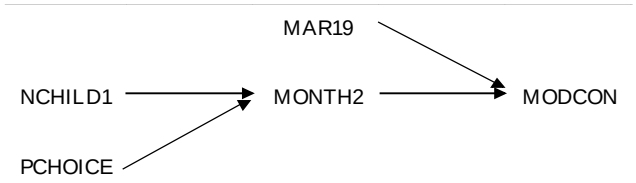


Figure 2: Implication scheme for the Moroccan subgroup

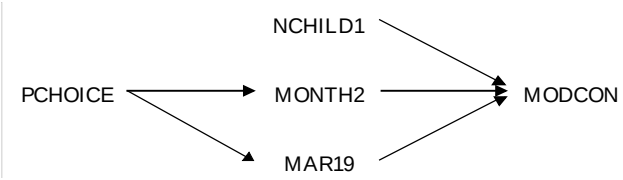


Figure 3: Graphic representation: Turkish women

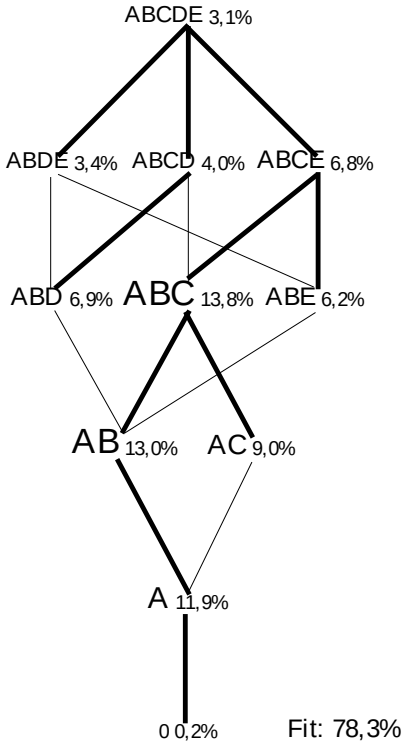
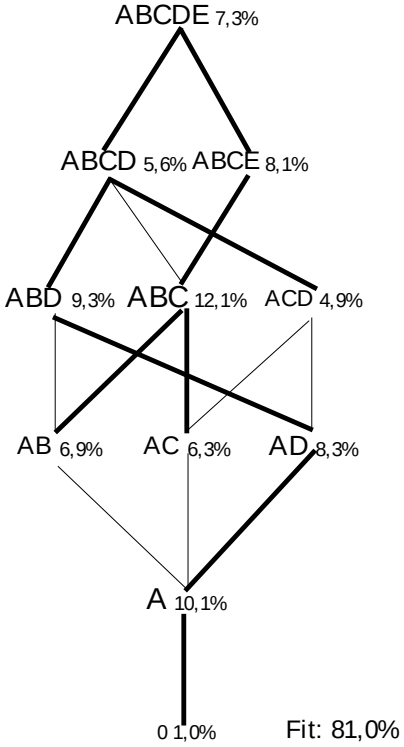


Figure 4: Moroccan women



legend:

a: Ever use of modern contraception

b: Knowing husband at least 2 months before marriage

c: Not married before age 19

d: First child at least 2 years after marriage

e: Individual partners choice

further advanced. First of all the rise in the age at marriage is slower in Belgium than in the countries of origin for both groups. This not only means that modernisation is a very relative concept, it also indicates that selection effects of new immigrants under the legal family reunification scheme blur the picture. Secondly, despite their insistence on having a first child soon after marriage, Turkish women have a markedly lower fertility in the end (Lodewijkx et al., ibid.).

It is also well documented that Moroccan young girls keep going to school until later ages than their Turkish agemates. Undoubtedly school education is used as a way of avoiding an arranged marriage, but there are other motives to this as well. Moroccan boys as well as girls express greater investments in a future in Belgian society and on the Belgian job market (Surkyn & Reniers, 1997). In the Turkish community aspiration levels are often lower and, at school, vocational training is chosen rather than technical or general education. Career choices among Turks are more often oriented towards their own ethnic community and segmented labour market.

To sum up, Boolean analysis goes further than the construction of a scale (in this case: 6 levels representing the number of ranked items pointing towards modernisation). Boolean analysis qualitatively fills in the picture of modernisation at the family level by looking for the major alternative paths of change. As we have demonstrated, Turks and Moroccans choose different roads towards more modern or “western” family formation patterns. Instead of just comparing degrees of modernity on the basis of separate indicators, we have the possibility of studying the unfolding of combinations within and between the migrant communities.

2.2 Converting the Boolean results into a typology

In the following section we shall use the Boolean analysis outcomes primarily for information reduction purposes. The observed response patterns are regrouped in four new levels combining the information on how items are ranked with their intrinsic logical interrelations (Figure 5 and 6). As a general rule level 1 contains response patterns with 0 or 1 modern items, level 2 has the two item combinations, etc. However, the typology for both ethnic groups will slightly differ given the differences in their respective pattern unfolding. This means that answer patterns can be outside the Turkish but inside the Moroccan typology (e.g. combining postponed first child with modern contraception

without other modern items). Also some exceptions to the general rule were made to make levels internally more consistent, again taking into account our Boolean analysis findings. The outcomes are represented on Figures 5 and 6, together with the number of respondents for each of the types.

The first of these four levels consists of people who have either none of the modern characteristics or just MODCON: ever use of modern contraception. About 12% of valid answers fall in this category. For the Turkish subpopulation adding longer acquaintance with the husband prior to marriage or postponing marriage or both puts a respondent on the second level. For Moroccans we accepted postponed conception of the first child as a level 2 item, but not the combination of three modern items. The third level contains the remaining three item combinations for Turks, while all patterns based on the first four (easiest) items are considered level 3 for Moroccan women. Finally, at level 4 the response pattern has to contain free partner choice and at least three other modern items for the Moroccan subpopulation. Level 4 is defined somewhat broader for Turks: all combinations of at least four items are placed at the highest level.

Outside this typology two other outcomes will also be analysed. Firstly, the “outliers” are brought together in type 5. Finding a systematic relationship between such “off scale patterns” and background variables would suggest that there is perhaps more meaningful information yet to be discovered for this group. Secondly, the distribution of missing answers (type 6) has to be investigated to make sure that the valid answers do not merely reflect specific patterns for a selective subgroup of more co-operative, better educated and career- or otherwise more successfully settled immigrants.

3.1. Explaining the differences

The previous section offered a general view of the dynamics of change in family formation. We should, however, bear in mind that the pattern unfolding is performed on the basis of a cross-section. The composition of the Turkish and Moroccan migrant population is continuously changing in terms of migration histories and educational background. Such longitudinal dynamics may very well be responsible for the encountered differences. For instance, it can be estimated to what extent continuous (selective) immigration slows down the modernisation process, or alternatively, how improving education speeds it up. In order to allow for these compositional effects,

Figure 5: Typology of family formation patterns: Turkish women (N=701)

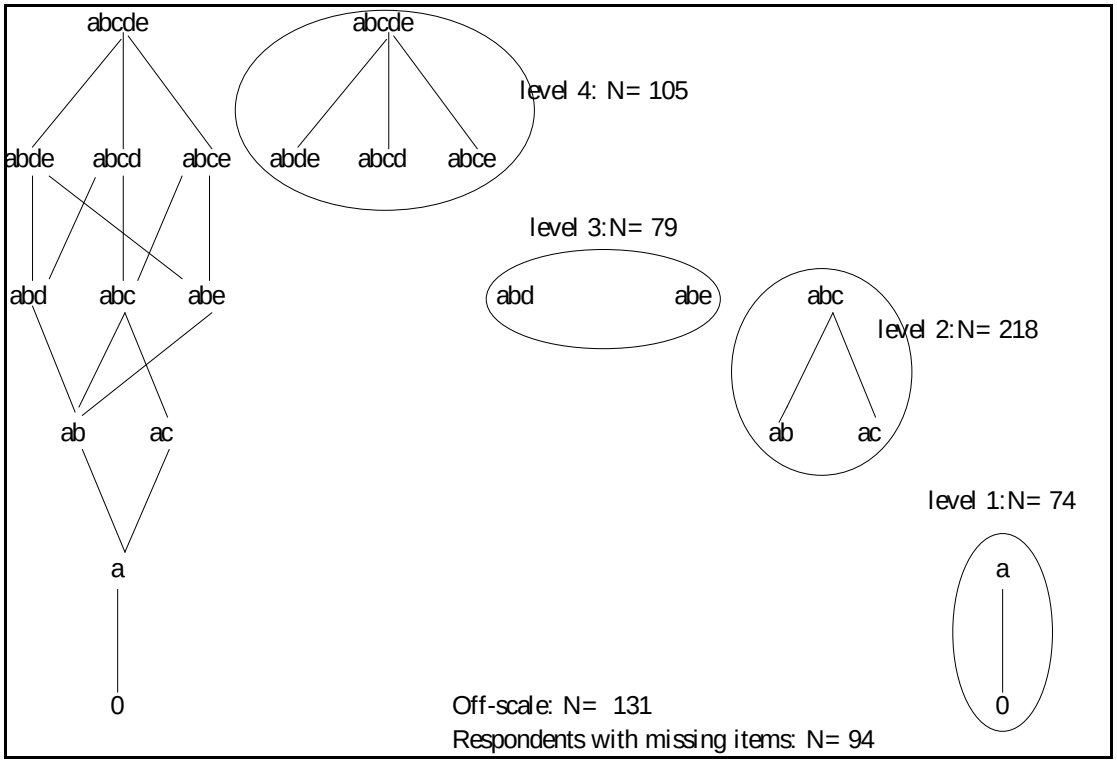
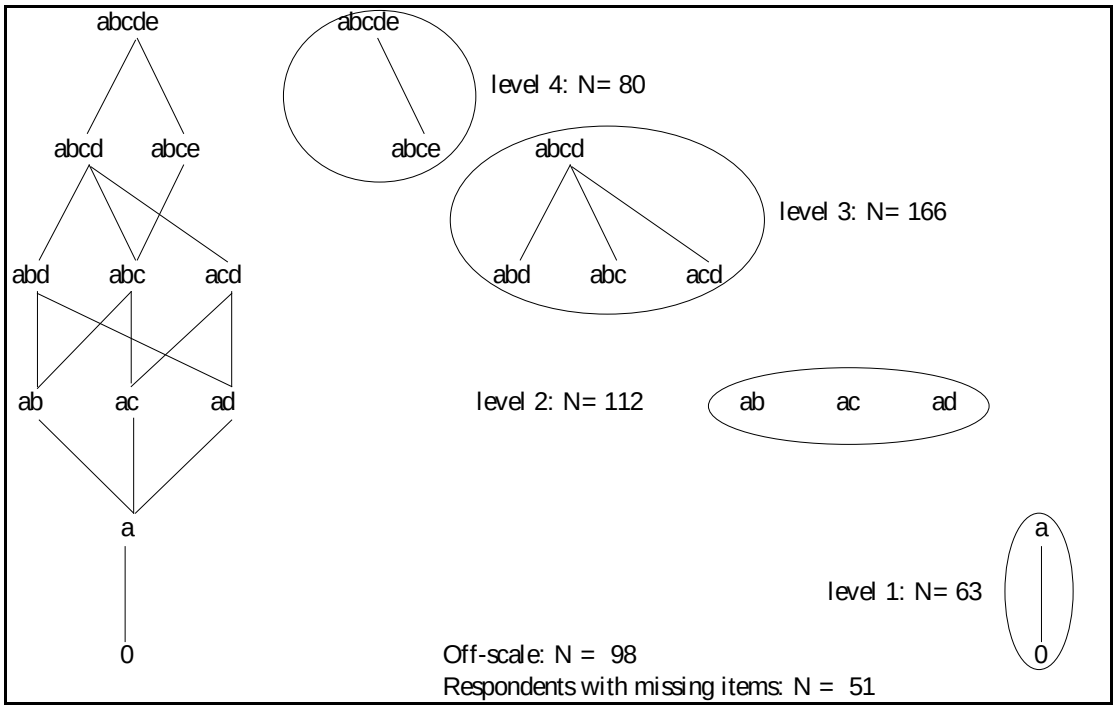


Figure 6: Typology of family formation patterns: Moroccan women (N = 571)



legend:

a: Ever use of modern contraception

b: Knowing husband at least 2 months before marriage

c: Not married before age 19

d: First child at least 2 years after marriage

e: Individual partners choice

several background variables are introduced. The explanatory variables are: (i) a combined age and migration cohort variable, (ii) education, (iii) fathers' professional background, (iv) sub-ethnicity and (v) region of settlement in Belgium. In earlier research on values change (Lesthaeghe & Surkyn, 1995) these variables proved to be highly relevant in accounting for differences along the various attitudinal dimensions of modernity.

Tables 2 and 3 give the distribution of our modernisation typology according to the categories of background variables. Recall that type 5 is made up of answer patterns that lie outside the Boolean solution, and that type 6 consists of patterns with missing values. The first of the five background variables is a generation typology ("GEN5") consisting of five categories combining the information on age and duration of stay in Belgium. The categories are:

1: Age 17 to 29 with less than 15 years of stay in Belgium
2: Age 17 to 29 with a stay of 15 years or more
3: Age 30 to 39 with less than 15 years of stay in Belgium
4: Age 30 to 39 with a stay of at least 15 years
5: Age 40 or more, irrespective of the duration of stay

In general the first and third group consist of respectively younger and older "imported brides". The second group are young women of the second and in very few cases even third generation. The last group almost exclusively contains women who came to join their husbands and who themselves had left Turkey or Morocco in the 1960's and 1970's. The fourth group is mixed. A number of early imported brides are in this group as well as women who - just like group 5 - came to join their husbands.

The second variable "RESEDUC" is an education index based on the age at leaving school. As this information is strongly related to the age cohort, the duration of residence in Belgium and to the country where women attended school, this variable was computed as the surplus or deficit of their age at school leaving compared to the average age for their generation. Again a number of categories were created: (1) more than 3 years earlier than average, (2) between 0 and 3 years earlier than average, (3) between 0 and 3 years later than average and (4) more than 3 years later than average. The third explanatory variable is the region of settlement in Belgium ("REGION"). In the Turkish case it splits

up the Flemish and Brussels regions in: (1) the province of Antwerp, where a majority of immigrants live in the city of Antwerp itself, (2) the province of Limburg where Turkish immigrants are spread over a large number of small towns and rural areas, (3) the provinces of East and West Flanders, where apart from a few small towns also the city of Ghent has an important Turkish community, and finally (4) the Brussels capital with the surrounding province of Flemish Brabant. Whereas Turkish nationals are spread over the whole country, the majority of Moroccans have settled in urban Brussels and Antwerp. Therefore REGION has another composition for them: the first group (1) is again Antwerp, the next (2) is the rest of Flanders and in the last two groups, residence in Brussels is split up in concentration (3) and non-concentration (4) neighbourhoods. The next covariate, "ETHNIC", pertains to the distinction between Kurds and Turks for the Turkish nationals, and between Berbers and Arabs for the Moroccans. Place of birth in Turkey/Morocco and knowledge of the Kurdish or Berber language were used as criteria to define these ethnic subgroups. The last independent variable, "FARMER", indicates whether the respondent's father was a farmer or seasonal worker in agriculture or not.

3.2. Logistic regression estimation of effects

In logistic regression the odds ratio is modelled for finding one of the two possible outcomes of a dichotomous dependent variable, using a number of categorical or continuous explanatory variables. In this application the analysis is performed in three steps, each time refining the scope. Firstly, every single position in the typology is contrasted in turn to all the other ones together. This will tell what the six separate typological positions stand for in terms of the explanatory variables, and how the off-scale and missing answers relate to the others. Secondly, each of the four ranked types is confronted with the three others. If the four levels are truly cumulative we expect effects of an ordinal explaining variable like education to evolve more or less linearly throughout its categories. In a final step contrasts are modelled of belonging to a higher ranked level compared to only the one level just below. This will tell for each single level what climbing one step on the scale of modernisation means, compared to the realisations of the previous (lower) level.

3.2.1. Missing answers

In the first analysis every single typological position is contrasted to all the others jointly. Tables 2 and 4 give the basic distribution of typological positions over categories of the

predictor variables. From these tables the gross (observed) odds ratios can be calculated: the odds (P/1-P) for having the characteristic in each category is divided by the overall odds for that characteristic in the population. This way of calculating the odds ratio corresponds to “dummy-coding” as opposed to “effect-coding” where the odds for each category are divided by the odds for one fixed reference category per variable. Tables 3 and 5 below present the estimated logistic regression coefficients in the form of net odds-ratios or exp.(B) values.

Missings (level 6) will be treated first. In the survey these missings can be refusals on specific questions as well as “don’t know” or “don’t remember”. For the Turkish as well as for the Moroccan women the number of missings increases significantly with age. Among women over 40 odds for not properly answering questions are over three times higher than average, while being only about half the average for young second generation women. Once the other variables have been controlled for, effects of the duration of stay disappear. The effect even seems to have inverted for young Moroccan women, but significance is too low to conclude. The gross effect in Tables 2 and 4 must have been linked mainly to educational differences. It is indeed education that offers the most powerful explanation: women with a low relative education level (compared to the rest of their generation) have a three times higher net odds for missings than average; those with the highest relative education level four times less than average. Regional effects are less pronounced and only tentative conclusions can be drawn due to the low significance of effects. In the Moroccan group the lower incidence of missings in non-concentration Brussels neighbourhoods than in the rest of the capital is perhaps most noteworthy. Among the Turks the better score for Limburg province is remarkable. Comparing ethnic groups, the Kurdish minority has a significantly higher incidence of missings. The Moroccan Berber population, by contrast, has better scores than the Arab-speakers. Women originating from families of farmers score worse than women from self-employed, industrial, urban or other backgrounds. But for Turks as well as for Moroccans the large gross effect (as calculated from the raw percentage distribution) of originating from a farming background almost completely disappears after the other variables have been controlled for. Again educational differences and the link to specific migration cohorts were responsible for most of the gross effect.

Table 2: Percentage distribution of Boolean types: Turkish women

VARIABLE	CATEGORY	TYP1	TYP2	TYP3	TYP4	TYP5	TYP6	TOTAL
GEN5	(1) 17-29/0-14	14	31	12	7	24	12	100
	(2) 17-29/15+	6	33	9	26	20	7	100
	(3) 30-39/0-14	13	32	10	11	24	11	100
	(4) 30-39/15+	11	36	10	22	11	10	100
	(5) 40+	8	23	15	8	18	28	100
RESEDUC	(1) . < - 3 yr.	12	40	10	7	11	20	100
	(2) -3 < . < 0 yr.	11	27	13	8	20	20	100
	(3) 0 < . < 3 yr.	12	30	12	19	21	7	100
	(4) . > 3 yr.	6	36	8	28	18	4	100
REGION	(1) Antwerp	12	24	8	13	30	13	100
	(2) Limburg	9	33	11	18	19	11	100
	(3) W+E Flanders	13	28	12	14	15	18	100
	(4) Brussels/Brab.	10	33	13	14	16	14	100
ETHNIC	(1) Turkish	11	32	12	15	19	12	100
	(2) Kurdish	4	22	8	13	18	35	100
FARMER	(1) Others	9	33	11	20	17	10	100
	(2) Farmers	14	29	11	6	18	22	100
OVERALL	N=701	11	31	11	15	19	13	100

Table 3: Odds ratios (Exp B) of typological positions: Turkish women

VARIABLE	CATEGORY	1vs2-6	2vs1,3-6	3vs1,2,4-6	4vs1-3,5,6	5vs1-4,6	6vs1-5
GEN5	(1) 17-29/0-14	1,44	1,02	1,35	0,52*	1,38	0,79
	(2) 17-29/15+	0,52	1,20	0,72	2,90**	1,05	0,51*
	(3) 30-39/0-14	1,38	1,20	0,77	0,72	1,16	0,99
	(4) 30-39/15+	1,27	1,09	0,81	2,00**	0,62**	0,74
	(5) 40+	0,76	0,62	1,65	0,46**	0,96	3,39**
RESEDUC	(1) . < - 3 yr.	1,16	1,20	1,21	0,31**	0,70	2,70**
	(2) -3<.< 0 yr.	1,08	0,82	1,16	0,73	1,16	1,72**
	(3) 0<.< 3 yr.	1,37	0,83	1,21	1,28	1,10	0,80
	(4) . > 3 yr.	0,58	1,22	0,59	3,45**	1,12	0,27**
REGION	(1) Antwerp	1,11	0,74	0,60	0,85	1,82**	1,04
	(2) Limburg	0,74	1,18	0,99	1,32	1,08	0,73
	(3) W+E Flanders	1,28	0,93	1,20	1,10	0,70	1,35
	(4) Brussels/Brab.	0,95	1,23	1,41	0,81	0,73*	0,98
ETHNIC	(1) Turkish	1,75	1,21	1,57	0,92	0,93	0,57**
	(2) Kurdish	0,57	0,83	0,64	1,09	1,08	1,75**
FARMER	(1) Others	0,79	0,97	1,14	1,30	0,98	0,97
	(2) Farmers	1,27	1,03	0,88	0,77	1,02	1,03

chi sq sig		0,096	0,230	0,344	0,000**	0,040**	0,000**	

Table 4: Percentage distribution of Boolean types: Moroccan women

VARIABLE	CATEGORY	TYP1	TYP2	TYP3	TYP4	TYP5	TYP6	TOTAL
GEN5	(1) 17-29/0-14	14	16	29	8	26	7	100
	(2) 17-29/15+	5	17	28	33	13	4	100
	(3) 30-39/0-14	7	23	41	12	10	7	100
	(4) 30-39/15+	11	22	25	15	21	7	100
	(5) 40+	17	18	27	8	17	15	100
RESEDUC	(1) . < - 3 yr.	12	21	33	4	18	12	100
	(2) -3 < . < 0 yr.	19	22	26	6	16	12	100
	(3) 0 < . < 3 yr.	5	24	27	24	16	5	100
	(4) . > 3 yr.	3	14	32	28	21	3	100
REGION	(1) Antwerp	9	16	35	11	16	14	100
	(2) rest Flanders	9	22	32	10	20	8	100
	(3) Brussels:conc.	13	21	20	15	22	10	100
	(4) Brussels:rest	11	20	34	17	13	5	100
ETHNIC	(1) Arab	8	20	30	17	16	8	100
	(2) Berber	17	19	28	8	18	10	100
FARMER	(1) Others	10	20	29	19	17	7	100
	(2) Farmers	15	20	27	2	22	14	100
OVERALL	N = 571	11	20	29	14	17	9	100

Table 5: Odds ratios (Exp B) of typological positions: Moroccan women

VARIABLE	CATEGORY	1vs2-6	2vs1,3-6	3vs1,2,4-6	4vs1-3,5,6	5vs1-4,6	6vs1-5
GEN5	(1) 17-29/0-14	3,22**	0,96	0,73	0,54	1,92*	0,52
	(2) 17-29/15+	0,33*	0,55	1,08	5,43**	0,79	0,70
	(3) 30-39/0-14	0,92	1,40	1,61*	0,94	0,43*	0,84
	(4) 30-39/15+	1,30	1,31	0,75	0,78	1,50	0,96
	(5) 40+	0,79	1,03	1,05	0,47**	1,02*	3,41
RESEDUC	(1) . < - 3 yr.	1,28	0,98	1,28	0,37*	0,98	3,22**
	(2) -3<.< 0 yr.	4,26**	1,19	0,86	0,42**	0,96	1,10
	(3) 0<.< 3 yr.	0,53	1,40	0,87	1,56	0,85	1,28
	(4) . > 3 yr.	0,35**	0,61	1,04	4,13**	1,25	0,22*
REGION	(1) Antwerp	0,81	0,93	1,33	0,89	0,93	1,29
	(2) rest Flanders	0,59	1,18	1,12	0,62	1,18	1,25
	(3) Brussels:conc.	1,40	1,03	0,57**	1,28	1,30	1,02
	(4) Brussels rest	1,49	0,88	1,18*	1,42	0,70	0,61
ETHNIC	(1) Arab	0,64**	1,07	1,08	1,08	1,00	1,34
	(2) Berber	1,56**	0,93	0,93	0,93	1,00	0,75
FARMER	(1) Others	1,08	1,08	1,06	2,08	0,78	0,86
	(2) Farmers	0,93	0,93	0,94	0,48	1,29	1,16
chi sq sig		0,000**	0,651	0,054	0,000**	0,045*	0,004**

The conclusion from this paragraph must be that in the oldest age group, as well as among women with the lowest relative education levels, care must be taken when dealing with the data since about one in four Turkish women and one in seven Moroccan women in these subgroups have missing information. Furthermore, due to the small subsample, we cannot consider the interviewed Kurdish women to be representative for the whole of their ethnic group. It is also interesting to note that the Moroccan women who more often hesitated to co-operate with the survey in the first place, have a lower non-response rate on the questions we analysed (9% compared to 13%) once they do participate.

3.2.2. Off-scale response patterns

The unclassifiable answers (Type 5) are more evenly spread over the various predictor categories. Young recently imported brides are most often situated in this group, probably due to the disturbance the migration event itself caused in the critical years of their life cycles. Women who migrated at higher ages comply better with the typology. Aside from this generation effect only a few regional effects are significant in the Turkish community: in Antwerp the odds for finding off-scale combinations of answers are almost twice as high as in the rest of the country. The Antwerp Turkish community has a few particularities, but an easy explanation is not readily at hand. Antwerp attracts a major part of the recently arriving young brides and grooms. In the Belgian press the practice of “paper” marriages between Belgian and Turkish partners appear to be reported more often for Antwerp. This term refers to marriages of convenience that are only set up to furnish the Turkish partner wanting to settle in Belgium with the necessary documents. Such marriages generally dissolve once this goal is reached. For Moroccan woman the main regional difference is found between the Brussels concentration neighbourhoods and the mixed neighbourhoods. Again no obvious explanation comes to mind.

3.2.3. The four point scale

Studying the four levels of the scale can best be done by contrasting each single level with the three others together, just as in Tables 6 and 7 (first four columns). Therefore, from this point onwards, missings and off-scale patterns are excluded from the analysis. Compared to Tables 3 and 5 this will yield a clearer picture, since the best indicators for low modernisation levels (i.e. low relative education, older age cohorts) were at the same time among the best indicators for missings. Therefore effects of low education or

belonging to the oldest age groups on the odds for low modernisation levels were underestimated in the previous analysis, as presented in Tables 3 and 5.

Women on the first level of the modernisation scale have either none of the modern characteristics or just “ever use of modern contraception”. These least modernised family formation patterns are in both groups mostly found among the young imported brides (Group 1). The older imported brides (Group 3), who experienced partner choice, marriage, childbirth etc. on average some ten years earlier, are less concentrated in this most traditional group. Even the first generations of imported brides that migrated during the seventies (Group 4) are well represented in level 1, but not as much as Group 1.

It comes as no surprise that young second generation Turkish and Moroccan women, who were raised and educated in Belgium, have generally progressed beyond the lowest levels of modernisation. But it is all the more remarkable that their mothers belonging to the first generation of immigrants consistently show a more modern pattern than those young women who recently arrived as brides. In fact, up until the third level, they keep up with the modernising pace of younger generations who migrated later. Only then the picture is somewhat altered, as the older first generation women very rarely had a say in the choice of their spouses, and therefore seldom reach level 4. The young second generation women, as expected, have much more commonly progressed to level 4. It would appear that, together with their husbands and relatives, the older first generation women have chosen as their daughters-in-law the most traditional young women they could find. At the same time their own daughters have followed a much more modern pattern with respect to these delicate family formation matters.

Finding that the relative education level is an excellent predictor for modernisation comes as no surprise. The education index was not only included in the logistic regression model to prove this point once more, but also as a control variable that may explain why women of rural origin or ethnic subgroups are often found at the lower modernisation levels. Just looking at the extreme levels (1 and 4) our findings confirm the point made above once more. Higher educational attainment fosters modernity, even when an index is used that excludes age and generation effects. We cannot state, however, that the intermediate levels of the scale exhibit the same clear trend. The next section may shed more light on this point, when the cumulative aspects of the four-point scale will be considered.

Table 6: Odds ratios (exp.(B)) of typological positions, Turkish women: Steps 2 & 3

VARIABLE	CATEGORY	1vs2,3,4	2vs1,3,4	3vs1,2,4	4vs1,2,3	2vs1	3vs2	4vs3
GEN5	(1) 17-29/0-14	1,47	1,05	1,32	0,51*	0,76	1,25	0,43
	(2) 17-29/15+	0,41*	1,05	0,59	2,76**	2,53	0,63	2,90
	(3) 30-39/0-14	1,23	1,33	0,73	0,79	1,00	0,67	1,00
	(4) 30-39/15+	1,11	0,84	0,69	1,73*	0,89	0,79	1,99
	(5) 40+	1,22	0,81	2,55*	0,52**	0,58	2,40	0,40
RESEDUC	(1) . < - 3 yr.	1,29	1,49	1,36	0,30**	0,86	1,11	0,36
	(2) -3<.< 0 yr.	1,13	0,93	1,34	0,87	0,89	1,31	0,69
	(3) 0<.< 3 yr.	1,45	0,72	1,24	1,21	0,63	1,40	0,96
	(4) . > 3 yr.	0,47	1,00	0,44	3,17**	2,07	0,49	4,19
REGION	(1) Antwerp	1,49	0,92	0,87	0,93	0,66	0,94	1,04
	(2) Limburg	0,63*	1,14	0,83	1,42	1,68	0,79	1,44
	(3) W+E Flanders	1,25	0,84	1,09	1,08	0,75	1,23	0,98
	(4) Brussels/Brab.	0,85	1,14	1,27	0,70	1,20	1,09	0,68
ETHNIC	(1) Turkish	1,33	0,94	1,23	0,79	0,70	1,22	0,81
	(2) Kurdish	0,75	1,06	0,81	1,27	1,43	0,82	1,23
FARMER	(1) Others	0,77	0,95	1,16	1,32	1,16	1,12	1,20
	(2) Farmers	1,30	1,05	0,86	0,76	0,86	0,89	0,83
chi sq sig		0,019*	0,800	0,055	0,000**	0,120	0,263	0,000**

Table 7: Odds ratios (exp.(B)) of typological positions, Moroccan women: Steps 2 & 3

VARIABLE	CATEGORY	1vs2,3,4	2vs1,3,4	3vs1,2,4	4vs1,2,3	2vs1	3vs2	4vs3
GEN5	(1) 17-29/0-14	3,60	1,03	0,80	0,71	0,39	0,88	0,83
	(2) 17-29/15+	0,31	0,47*	0,93	5,61**	2,27	1,66	3,53**
	(3) 30-39/0-14	0,71	1,14	1,37	0,73	1,58	1,08	0,73
	(4) 30-39/15+	1,34	1,45	0,81	0,83	0,65	0,67	1,13
	(5) 40+	0,94	1,25	1,21	0,41**	1,10	0,95	0,41**
RESEDUC	(1) . < - 3 yr.	1,44	1,11	1,48	0,37*	0,73	1,11	0,34*
	(2) -3<.< 0 yr.	4,22**	1,17	0,82	0,41*	0,27**	0,78	0,60
	(3) 0<.< 3 yr.	0,50	1,36	0,84	1,49	2,62	0,76	1,49
	(4) . > 3 yr.	0,33**	0,57	0,98	4,42**	1,94*	1,52	3,29**
REGION	(1) Antwerp	0,75	0,92	1,41	0,86	1,27	1,27	0,88
	(2) rest Flanders	0,60	1,34	1,26	0,61	1,39	0,93	0,61
	(3) Brussels:conc.	1,59	1,10	0,57**	1,53	0,88	0,67	1,78
	(4) Brussels:rest	1,40	0,74	0,99**	1,25	0,64	1,26	1,05
ETHNIC	(1) Arab	0,61**	1,12	1,12	1,19	1,86**	0,96	1,08
	(2) Berber	1,64**	0,89	0,89	0,84	0,54**	1,04	0,93
FARMER	(1) Others	0,93	0,98	0,93	2,13	1,02	0,98	2,13
	(2) Farmers	1,08	1,02	1,07	0,47	0,98	1,02	0,47
chi sq sig		0.000**	0,234	0,165	0,000**	0.006**	0,469	0,000**

The effects of local residence of Turkish and Moroccan women are treated next. The lowest modernisation levels are found for the Turkish community of Antwerp where also most missings were encountered earlier. The highest modernisation levels are found in Limburg where co-operation with the survey was also best. For Moroccans the main difference is between Brussels and the rest of Flanders and Antwerp together. Metropolitan Brussels is marked by a polarisation between extremely high (level 4) and extremely low (level 1) modernisation levels, whereas our indicators are much more evenly spread in the rest of Flanders and Antwerp. Explaining these regional differences is again not easy, but for the Turkish case we have a few good indications. The Antwerp Turkish population is composed of a number of "transplanted communities" stemming mostly from the Central Anatolian Plateau and from the remote north-east of the country. The Central-Anatolian group originates from rural regions marked by strong religious traditionalism. The north-eastern group comes from an area with the lowest level of socio-economic development in Turkey. It is exactly their traditional attitude towards partner selection, marriage and the family that makes the ongoing recruitment of brides and grooms in Turkey possible. The concentration of these groups in the Antwerp region helps explaining why it became the prime destination for newly arriving brides and grooms in Belgium.

Also sub-ethnic distinctions and farming backgrounds occasionally matter. In the survey, the Kurdish women appear to be ahead of the ethnic Turks. As stated earlier, we cannot be sure that this holds for the Kurdish community as a whole, and not just for a select group that both co-operated and revealed their Kurdish identity in our survey. At any rate, in the Kurdish group used here the effect is probably real as is indicated by other elements. Many of our Kurdish respondents distinguished themselves from the Turkish majority by choosing western Christian names for their children, by not practising their Islamic faith, and by expressing very westernised ideas on marriage and gender roles. Among the Moroccan nationals the odds for high modernisation levels are clearly higher among Arab-speakers than among Berbers. Finally, a farming background lowers the odds for moving upward on the modernisation scale for Turkish and Moroccan women alike, but much of this effect is substantially reduced once controls are introduced for the other covariates.

3.2.4. The scale: what does it measure?

Considering the above findings, the critic's question might be whether our four point scale really measures modernisation. The distribution of the "modern contraception" criterion for instance could be influenced by the fact that partners may continue to live separated for a while after the legal marriage because of the complicated migration legislation. Young couples may never have used any contraception because they simply have not yet realised their desired fertility. We are convinced that these "structural" arguments will have only marginally influenced our findings, as most of them cut both ways. First of all we know from earlier research (Surkyn, 1993; Lievens, 1997) that a majority of second generation women, marry "imported grooms": i.e. men who could only legally immigrate because of their marriage to someone who grew up in Belgium. Therefore the effects of partner separation on contraceptive use, delay of marriage and of the first child or acquaintance of the partner prior to marriage all apply to them as well. Secondly, the argument that having reached the desired family size will push older women to (any) contraceptive methods is obviously valid. But, it does not explain the significantly higher contraceptive practice among young second generation women compared to their more recently immigrated agemates. The explanation for that difference lies elsewhere. Young imported brides may be more aware of their traditional marital duties, among which bearing an heir to the family name. As they live isolated from their own relatives, they are much more dependent from their husband's family with whom they often even share the same house for some time after marriage. The high level of acceptance of traditional family values in this group reflects their weak position, but also the effects of strong parental partner selection. Indeed, as parents of young men who grew up in Belgium have not only marriage to offer but also immigration rights, they can generally choose from a large number of suitable candidates. Young second generation women, by contrast, have a much more independent position towards their in-laws, especially when marrying an "imported groom".

A final element in the explanation lies in the fact that becoming a mother almost always means the end of the working career for young women. As job opportunities are very limited for young recently immigrated women, professional considerations will not really matter for them. For second generation women professional prospects are much better, especially for Moroccan women who invested strongly in education and job qualification.

3.2.5. Cumulativity of scale levels and scale items

On a number of occasions in the previous section the effects of explanatory variables did not gradually augment or decline through the four levels of the scale. The intermediate levels often did not express the cumulative trend we expected. Also, the overall significance of the regression models for these intermediate levels was low, especially for the second one (i.e. the contrast between levels 2 and 3). In order to gain further insight in the cumulative nature of the scale contrasts between successive levels only are analysed in this final step. The results are presented in the last three columns of Tables 6 and 7.

The progression from level 1 to level 2 and further on from level 3 to level 4 is clearly consistent with the explanation we have offered so far. The step from level 2 to level 3, by contrast, shows a different picture. In fact, one could doubt whether there is any real progress in modernisation between these two levels at all, and decide that a model with only three levels would have been just as informative. It should be taken into account, however, that levels 2 and 3 are mainly different in terms of the number of modern characteristics in the response patterns and not in terms of the meaning of these characteristics (cf. Figures 5 and 6). In other words, the lack of explainable differentiation between the intermediate levels does not say anything about the intrinsic value of the separate items that change between these levels, nor about the Boolean analysis that underlies the construction of the scale. A plausible explanation seems to be that cutting the Boolean structure more or less horizontally in four levels had the effect of rather stringently regrouping Boolean paths of different natures. Since the differentiation between paths is most elaborate in the middle of the unfolding, as is shown by the graphic representation being broadest in the middle, this would affect the intermediate levels more strongly than the extremes.

Anyhow, even making abstraction of this, the stepwise evolution through the scale levels still yields interesting results. It becomes clear, for instance, that for Turkish older first generation women level 3 is generally “easier” then level 2. That is so because their marriage took place in Turkey over 20 years ago, when early marriage (before age 19) was a firm rule. To the young second generation women, postponing marriage is not really an obstacle anymore. But instead, delaying conception of the first child and individual partner choice have remained, even today, difficult barriers to cross. Even

those with higher relative education levels are therefore being prevented from reaching the highest levels in the typology. Once this “bottleneck” is crossed, younger or relatively better educated Turkish women easily progress to level 4. Older or relatively less educated women, to the contrary, usually stop at level 3. Women with a farming background, again, are less likely to progress to any higher step in the process.

The Moroccan women present a somewhat similar image, albeit that “later marriage” is not as noticeable as a bottleneck because it is not linked to any specific scale level. This also explains why Moroccan first generation women, compared to their Turkish counterparts, more often progress beyond level 1, and in the first stages of modernisation, more easily surpass younger women who immigrated later. For the ethnic subgroup of Moroccan Berbers level 1 is more difficult to pass. This is partly due to the somewhat lower use of modern contraception (83% of Berber women compared to 88% among Arab-speakers). Finally, but only at the highest modernisation levels, a farming background is again a major obstacle.

3.3 The need for further refinement and contextualisation of the analysis.

One of the major advantages of the Boolean analysis is that different paths of change are allowed to emerge. These were, furthermore, linked to different subgroups. But, the bundling of these (vertical) paths in a smaller number of typological positions hides an interesting diversity of modernisation trends. Thus, compared to the other items, postponing marriage until after age 19, would have been placed much higher on the hierarchy of “difficult” items in Turkey, say 20 years ago. On the other hand, because of the migration pressures still existing in Turkey, individual partner choice (as an indicator for arranged marriages) has remained quite difficult even today for women who grew up in Belgium. Individual partner choice still runs counter to the continuity of chain migration.

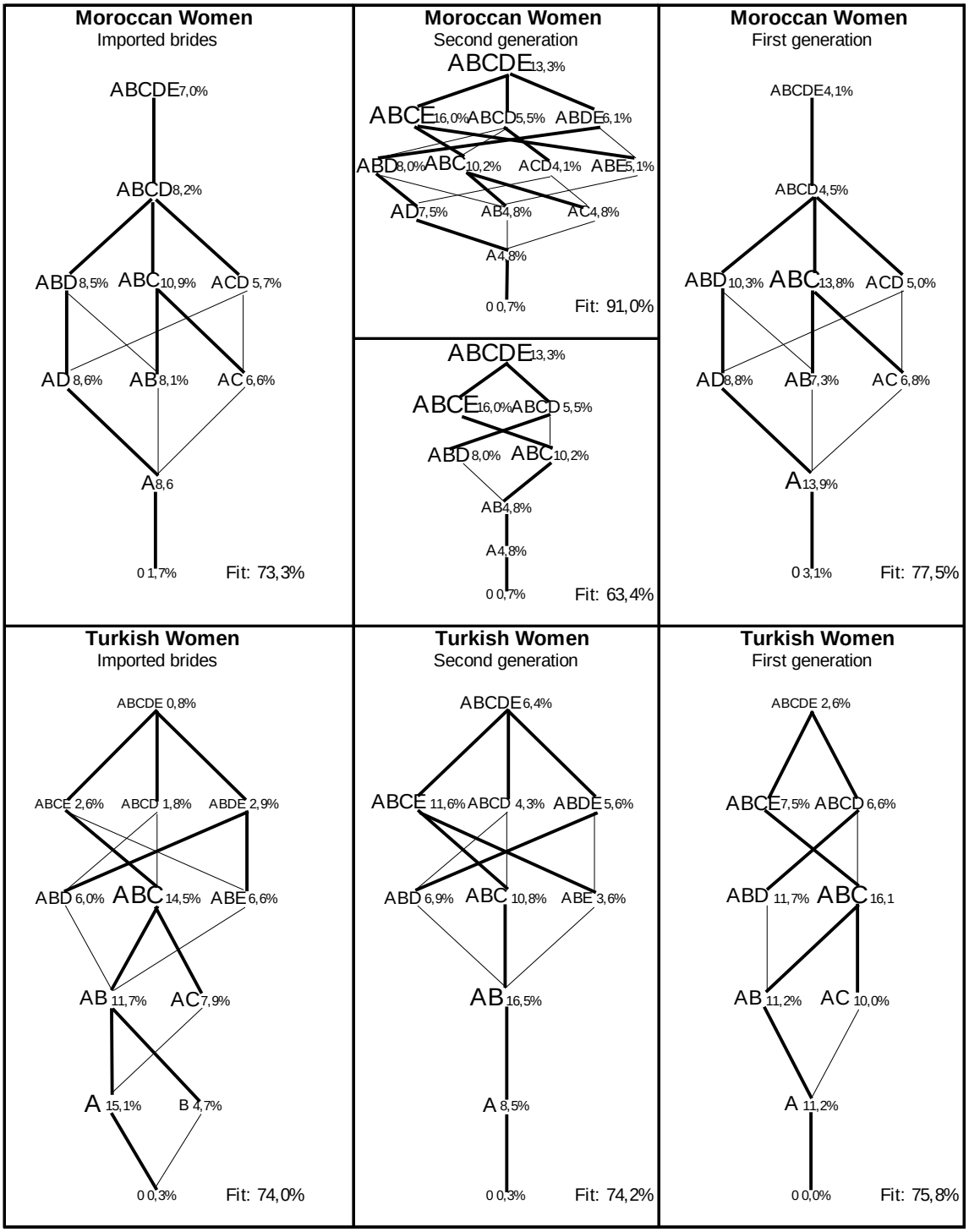
Quite similarly, earlier research based on values change (Lesthaeghe & Surkyn, 1997) proved that differentiating between the various subdimensions of modernisation is extremely helpful in understanding the dynamics of modernisation of ethnic minorities. Change on these different subdimensions occurs at different speeds, and different generations follow their own path in modernisation. In the context of the present study it appears that refining the analysis of the Boolean patterns would be very fruitful as well,

simply because over time and in different settings the meaning of modernisation criteria changes in cultural terms as well as in terms of the opportunity structures that are open to migrants. The ultimate refinement of the analysis in the sense of reconstructing all different modernisation paths, as they historically and contextually changed between generations, migration cohorts and (sub-)ethnicities is beyond the scope of this paper. Sample requirements in Boolean analysis simply would not allow a full analysis in every sub-category. However, we have made a first attempt in this direction, but the sample requirements just mentioned do not allow as fine a differentiation as in the first part of the analysis. Therefore, instead of retaining the 5 generation typology, respondents were regrouped into three somewhat broader categories: “imported brides” (age 17-29, less then 15 years in Belgium), second generation (age 17-29, at least 15 years in Belgium) and the first generation (aged 40 or older). As a consequence only rough comparisons can be made with earlier results.

The Boolean unfolding for these three generations of Turkish women (Figure 6) yields some unexpected results. The second generation has a stronger tendency towards free partner choice than we hypothesised earlier. Also postponement of marriage occurs quite late in the modernisation process. This may partly be due to the fact that unmarried women were excluded from the analysis, thus discarding a small but probably very modernised subgroup among the second generation. This selection criterion does not affect imported brides, as they are all married by definition, nor the first generation because of their higher ages. These last two groups of Turkish women demonstrate the selection of “traditional” brides compared to their mothers-in-law. Imported brides are overrepresented at the lower modernisation levels, the first generation is somewhat underrepresented. It is also noteworthy that the Boolean unfolding for the Turkish first generation shows a very simple, almost Guttman-like structure with a rather good fit. For the other two groups the higher items (especially individual partner choice) are clearly less scaleable.

One might be tempted to interpret this as an indication that strong pressures towards free partner choice are inversing the order of changes in the modernisation process, thus countering the mechanisms behind the ongoing chain migration. In our mind, that would be put too strongly. At the risk of being accused of “hineininterpretierung” (but supported by earlier findings) we would rather say that in the Turkish case a compromise

Figure 6: Graphic representation of Boolean unfolding, using 3 generation typology



A: Ever use of modern contraception

B: Knowing husband at least 2 months before marriage

C: Not married before age 19

D: First child at least 2 years after marriage

E: Individual partners choice

has been growing, based on mutual consent. A relative freedom in partner choice is accepted by the parents as long as other rules concerning virginity, honour and family interests are not broken. This way marrying imported brides and grooms is quite widely accepted and even preferred by all parties involved.

The Moroccan picture is clearly different, although it complies better with the first part of the analysis. The striking resemblance of modernisation patterns for first generation women and imported brides bears witness to this fact. The second generation is more difficult to compare to the others because the model fit of possible Boolean solutions differs substantially from the rest. As opposed to their Turkish counterparts, the Moroccan first generation and imported brides still have individual partner choice distinctly at the top of the modernisation process. The “Turkish compromise” really appears to be limited to that ethnic group only.

3.4. Conclusions

A first set of conclusions pertains to the technique of Boolean analysis itself:

i Boolean analysis offers a broader view on processes of change than some of the traditional techniques for developing scales or typologies, because various paths of change are identified and modelled simultaneously. Therefore it is very well suited for studying social change, as these processes are rarely unilinear and always strongly contextual.

ii Horizontally cutting the Boolean solution into cumulative levels yields meaningful contrasts, especially around both the highest and lowest extremes of the distribution. Near the middle of the distribution the number of possible transitions between two levels increases, and at the same time the modelling of contrasts between these intermediate level becomes more challenging.

iii Irregularities in the cumulative nature of the scale are therefore more likely to occur in the middle, but they can be very informative. In our analysis they led to the discovery of how the “modernity” value of postponing marriage diminished considerably between the generations and how it varied between different contexts. Individual partner choice, by contrast, is in relative terms (compared to the other items) still quite difficult for young Turkish and Moroccan women today, just as it was to the previous generation.

iv Ideally, given a large enough sample, the technique can be used to identify the prime factors that delimit subgroups with their own typical trajectories of change. Such information is meaningful in the sense that it unfolds complexity into constituent patterns.

The second set of conclusions bears more directly on the subject of modernisation of family formation behaviour in ethnic minorities:

v The most compelling finding is undoubtedly the enormous differentiation of modernisation levels between various migration cohorts: most of the young "imported brides" have family formation patterns that are as traditional as those of their mothers-in-law. Clearly, the ongoing chain migration considerably slows down demographic change in Turkish and Moroccan communities as a whole. This is of particular importance for the Turkish community given that they receive more imported brides than the Moroccan population.

v bis The modernisation process among the second generation has progressed to a considerably greater extent among Moroccan women than among Turkish women. In the former group, twice as many women (13.3%) reach the top level of meeting all 5 conditions than in the latter (6.4%). Also at the next level down more second generation Moroccan (27.7%) than Turkish women (21.5%) are being found.

vi Comparing generations and migration cohorts reveals a considerable "generation gap". This gap separates mothers and daughters, as well as agemates who migrated in different periods under different circumstances. The generation gap, in the narrow sense of the difference between mothers and daughters, appears to be the largest among Moroccans.

vii Although not very surprising, the modernising and integrating effect of education must be mentioned. Odds ratios for progressing to higher scale levels among relatively well educated women often exceed those of less educated women by a factor of two to three.

viii Contextual factors occasionally matter. Settlement in the rather closed Antwerp Turkish "transplanted communities", marked even today by a strong ongoing chain migration, clearly works against modernisation. Among the Turkish women, Limburg province is at the other extreme of the scale.

ix Finally, immigrants bring along with them a number of characteristics of their sub-ethnicity or socio-economic backgrounds. Some of these factors maintain an effect long after settlement in Belgium. A rural background slows down the process of demographic modernisation for both ethnic groups, and the same holds for a Berber background among Moroccan women. But, much of these gross effects weaken once the generation and education variables have been controlled for.

References

Janssens, R. (1995): ‘A Boolean Approach to Attitude Measurement’, Vrije Universiteit Brussel, unpublished doctoral dissertation.

Lesthaeghe, R. (red)(1997):’Diversiteit in sociale verandering - Turkse en Marokkaanse vrouwen in België’, VUB-Press, Brussels.

Lesthaeghe, R., Surkyn, J. (1995): ‘Diversity in social change: Turkish and Moroccan women in Belgium’, *European Journal of Population, 11:1-29.*

Lesthaeghe, R., Surkyn, J. (1997): ’Aisha is Fatma niet - Culturele diversiteit en fragmentatie van de moderniteit bij Turkse en Marokkaanse vrouwen in België”, in R. Lesthaeghe (red): *Diversiteit in sociale verandering*, op. cit.: 241-281.

Lievens, J. (1997): ‘Kenmerken van gezinsvormende migratie’, in R. Lesthaeghe (red): *Diversiteit in sociale verandering*, op. cit.: 73-104.

Lodewijckx, E, Page, H., Schoenmaeckers, R. (1997): ‘Turkse en Marokkaanse gezinnen in verandering: de nuptialiteits- en vruchtbaarheidstransities’, in R. Lesthaeghe (red): *Diversiteit in sociale verandering*, op. cit.: 105-137.

Reniers, G. (1998): ‘Post-migration survival of traditional marriage patterns: consanguinous marriage among Turkish and Moroccan immigrants in Belgium’ *Interuniversity Papers in Demography*, 1998-1, VUB-UG, Brussels-Ghent.

Stouffer, S. A., Guttman, L., Suchman, E., Lazarsfeld, P. F., Star, S. A. and Clausen, J.A. (1950): ‘Measurement and prediction’ *Studies in Social Psychology in World War II*, Vol. 4, Science Editions, New York: Wiley.

Surkyn, J. (1995); ‘Turkse en Marokkaanse gezinnen in migratie’, In: *SAFIER*, vol. 1, n°0, p.28-52.

Surkyn, J., Reniers, G. (1997): ‘Selecte gezelschappen. Over de migratiegeschiedenis en de interne dynamiek van migratieprocessen’, in R. Lesthaeghe (red): *Diversiteit in sociale verandering*, op. cit.: 41-72.

Page, H., Segaert, A. (1997): ‘Zonen en dochters - Veranderingen inzake kinderwens’, in R. Lesthaeghe (red): *Diversiteit in sociale verandering*, op. cit.: 163-199.

Acknowledgement

The two surveys from which the date stem were organised jointly by the Vakgroep Bevolkingswetenschappen of the university of Ghent and the Interface Demography of the Vrije Universiteit Brussels. The surveys were financed by the Interuniversity Attraction Pole 37 of the Federal Services for Scientific, Technical and Cultural Affairs (DWTC - SSTC) of the Belgian Government. The present analysis is supported by funding granted by the Research Council of the Vrije Universiteit (VUB).