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# Physical stature of Jewish Dutchmen: an overview of three cases from the nineteenth century

## 1. Introduction

Since a few decades there is a wide public debate about the integration of minorities in Western European nation states. This is also the case in the Netherlands. One of the aspects (or elements?) of this discussion is whether there has been any economic integration of minorities or convergence conform economic standards between them and autochthonic persons since the early seventies. Although there has been some improvement, immigrants from Mediterranean countries such as Morocco and Turkey still have **evidently** lower incomes, higher rates of unemployment and more often flexible contracts than their indigenous counterparts (Gijsberts, Huijnk and Dagevos 2012). The average body height is another or an alternative indicator that demonstrates they are still in a disadvantage. Eighteen-year old boys and girls with Turkish or Moroccan roots are short in comparison with their indigenous peer group.<sup>1</sup> Later growth studies in the future have to indicate whether or not the Turkish and Moroccan are able to reduce this difference in next decades.

In a Dutch historical perspective the process of integration or convergence can be studied for one minority: the Jewish population. Since the Jewish got civil rights at the closing of the eighteenth century the process of integration during the nineteenth century might be interesting. This was the case in the most European countries. Recent historical studies on the stature of Jewish population in European countries are rather scarce. Recently, a study is published about the Russian part of Poland in the nineteenth century (Kopczynski 2011) and there is a minor study on the principality of Salm-Salm in the first half of that century (Aschoff and Hiermeyer 2009). Furthermore Komlos (1992) paid some attention to the stature of Jewish conscripts in Vienna between 1860 and 1900.

However prior to the first world war a large number of published studies in which warden attention was paid to the average of Jewish populations. In 1899 the American economist William Z. Ripley published *The races of Europe*. This work reflects the scientific spirit about this turn of the century. Both Darwinism as the nationalism contributed to a scientific climate in which much attention was for the peoples or races of Europe and their historical origins. Archaeologists, anthropologists, historians and doctors were given attention to the anthropometric characteristics of peoples identified by them. In the chapter that covered the length differences in Europe, Ripley spent a great deal of attention to several studies to the length of Jewish communities in Europe.

In all the recent studies stature was acquired from medical examination of conscripts. The studies of Kopczynski about conscription in Poland in the second half of the nineteenth century and Aschoff & Hiermeyer about stature in the Princedom of Salm demonstrate that during the nineteenth century the average height of Jewish conscripts was below that of other conscripts. In his study from 1899 Ripley reached the same conclusion. Furthermore, the Polish study of Kopczynski shows that the

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<sup>1</sup> Turkish and Moroccan boys of eighteen years are on average 178 centimeters tall, which is six centimeters below the national average of 1,84 meter. For girls the difference is more than eight centimeters (162 centimeters and 170 centimeters respectively (Van Buuren et.al. 2010).

average stature of Jewish conscripts did not increase as much as the other conscripts, which means there was a divergence in stature during the second half of the nineteenth century.

For several reasons, I am not able to present a general overview of the level and development of stature of the Jewish conscripts during the nineteenth century. These figures have to be collected from individual data in the original registers. Therefore, I will use three case studies. These case studies cover the whole or nineteenth century and are a pretty good reflection of the three distinguishable regions rural-traditional, modern-agrarian and urban (Drukker en Tassenaar 1997). The data were extracted from two databases. The first database is containing all (24,475) conscript records of the years 1821-1860 from the province of Drenthe and were collected by Tassenaar (2000). A database of the conscripts of the municipality of Groningen contains 3,728 records from the conscript years 1866-1876 (Tassenaar 2010). Groningen was and still is the capital of a province with the same name. This database is extended with data (2,534 conscripts) for the years 1898-1902. Furthermore, there is a study on the difference in mean height in Amsterdam the Dutch capital. The study on Amsterdam (Bolk 1910) is based on a sample of 2.000 non-Jewish and 750 Jewish conscripts for 1850 as well as for 1900.<sup>2</sup> The data of this three data sets permit us to shed some light on the central question how did the Jewish **manage** in the nineteenth century.

## 2. Data and methods

Since the 1970s the body length is used as an indicator for the standard of living, which is since then is a fully-fledged instrument in historical research has developed. This indicator is now regarded as an independent and additional criterium. In addition to the body length are now also other body measurements (anthropometric data), for example: the birth weight and the Body mass index (BMI) are also recently used. For almost all historical periods is research done to length to get a picture of the level or development of well-being (Koepke & Baten, Van Bavel 2010). Some historians emphasize the independent value as an indicator of body length and handle the concept of the biological standard of living (Komlos 1998; Baten; 1998; Tassenaar 2000), other researchers see the length especially as an alternative to the GDP per capita. This article describes the first line followed. Following the example of the majority of the authors will be the most robust measure – especially in the case of non-truncated populations – be used: the average length.

In most cases, especially for less recent periods used the body length. Roughly speaking, two approaches can be distinguished: by means of archaeological research (the length of the thigh bone (femur)) and via length data in written sources (mean height). These data can be derived from military lists, which were the outcome of examination from general conscription or mustering. This kind of data can be found from the eighteenth century onwards. The availability of this source from the 19<sup>th</sup> century onwards for a lot of continental European countries is a result of the Napoleonic governance instrument of general conscription. From the early nineteenth century onwards, those lists are available for the Netherlands.

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<sup>2</sup> Since the study is from 1910, the methodology is a bit vague. Bolk indicates they used a few places (perhaps municipalities) but does not indicate precisely which are included.

All data of this study are derived from military registers. On January 8<sup>th</sup> 1817, Dutch parliament accepted *de Nationale Militiewet* (the Law on the National Militia). The most important aspect of this new legislation was the introduction of general conscription. From that year onwards all male inhabitants of the Netherlands, of course with Dutch nationality, had to be medically examined in the year they reached the age of 19.<sup>3</sup> This examination included the measurement of body height, which is of considerable value for this study. All information on stature was collected in the lists even if conscripts were shorter than the minimum height, which means that the data are not hindered by truncation. Therefore it is possible to use the mean height and standard deviation from the whole population.

From 1863 onwards the age of examination shifted to those who had reached the age of 19 on January 1st. In 1893 the moment of examination, which originally was in February or March was rescheduled to the Autumn, more particular between October 7<sup>th</sup> and November 7<sup>th</sup> (Groustra 1901). These shifts have consequences for the comparison of the average height because men were still growing at that age. On average that could young men could make a gain of 2 to 3 centimeters (Jacobs and Tassenaar 2004, p. 183).

The conscription was controlled by a council of three men (*de militieraad*): a military commissioner, a member of the Provincial states and a member of the local authority. Each province had one or more officers, named *militie-kommissaris* (military commissioner) who supervised a number of districts (*kantons*). Each district contained a number of municipalities. Shortly, after January 31st they had to deliver alphabetical lists containing all men of the age of 18, from 1863 onwards all males of the age of 19, to the provincial government. Registration was not based on the place of residence of the young males but on the place of living of the parents or guardians. In most cases the place of residence of the parents and conscripts were the same.

Not all data in this study could be collected in the original lists because not all of them have survived the twentieth century. Instead I make use of results from research of physicians from the early twentieth century. In that period, a few physicians and anthropologists from several European states studied the difference in average height between the Jewish and non-Jewish population. In those studies the difference this In most cases it was found the explanation for the difference in length- usually to the detriment of the Jewish population by racial factors (Bolk 1910, p. 1822; Mikalewski 1912; Czekanowski 1916.). The Dutch also opined that the doctor Bolk (pathologist) explanation for this structural difference had to be found in the racial component and assumed that the maximum length for Jews was lower than at ' European races ', no doubt inspired by the then dominant authority of Darwinism, he believed that each race a ceiling – in the form of a maximum length (physiological maximum size). For non-Jewish people of Amsterdam would this maximum size to 190 centimetres. The Polish anthropologists explained this difference in length both Miklaszewski and Czekakanowski on the basis of racial characteristics as because of economic conditions.

### 3. Comparative analysis

The development of average height of Dutch conscripts can be represented graphically represented by a V-shape. (insert graph). The potato crisis in the mid-forties and high agricultural prices can explain the downward trend from the early nineteenth century. Afterwards, an upward trend

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<sup>3</sup> The Law of the Militia formulated it this way: examined are those boys which are 18 on January 1

started that lasted until the beginning of the twenty-first century. Although, a general upward trend was manifest in all regions, nevertheless there was a great regional variation. At the beginning of the nineteenth century the conscripts of the Southern and Eastern provinces were taller than their counterparts from the Northern and especially the Western provinces. At the end of the century this picture was reversed. The tallest conscripts lived in the Western and Northern provinces. (Drukker en Tassenaar 1997) Furthermore there was another shift in the spatial pattern. At the start of the nineteenth century conscripts from rural municipalities were much taller but at the end of the age urban conscripts could overlook their rural counterparts (Tassenaar 2000, Bolk 1910).

In the first decades after the introduction of general conscription in 1817 the conscripts from Drenthe belonged to the tallest men of the Netherlands. Striking is the tremendous decrease in average height from the middle of the nineteenth century. Tassenaar has demonstrated that this decline was caused by modernization of the economy, the transfer from nutrients to regional markets and the potato crisis in the mid-forties. A few aspects are striking with respect to the Jewish conscripts from this province. In the first place, it has to be noticed that on average Jewish conscripts were by four centimeters' shorter than the rest of the conscripts. Furthermore it has to be mentioned that different from the general trend the average height was constantly at the same level in the period 1821-1860. The stature of Jewish conscripts seemed neither influenced by the potato crisis nor by the increase of food prices.

There was also a substantial difference in average height between Jewish and Non-Jewish conscripts from the 1866 -1876 database of Groningen (conscript years). The difference was just a bit smaller than in the Drenthe database. Because the conscripts of Groningen had, as consequence of a change in the (legal) moment of measurement), an additional year to increase their stature, the difference in the biological standard of living in both Northern provinces was more or less the same. After all, especially the shorter conscripts, including most of the Jewish conscripts could grow in this additional year because they had not completed their growth. In general there was a decline in differences in average heights between conscripts from different regions or social groups between the period before 1861 and after 1863.

The differences between Jewish and non-Jewish conscripts in both databases are in line with the results of Kopczynski and Asschof & Hiermeyer. In the middle of the nineteenth century the position of the Jewish population was rather weak from an economic perspective. There are some explanations for this retarded position. First of all it is striking that almost all conscripts and their parents were economically active in a small number of occupations or sectors. The occupational data from the Groningen and Drenthe population support this image. More than 75 % of the Jewish conscripts in Drenthe were salesmen, in practice peddler, as profession. In this rural County was this sector is not very highly developed. The large number of itinerant merchants suggests that their income will have been very modest, which is also in line with the image from tax data.

Interestingly, Jewish young men in both provinces were especially active in a very limited number of economic sectors and that during the entire study period also remained. There was a bit more diversification in Groningen but this was only in minor extent. Jewish conscripts were not or highly underrepresented in booming economic sectors such as transport, construction and civil service. Three-quarters of them was active in trade, food consumption or brush manufacturing. Since of the

other conscripts 60 percent was without any occupation, there were only a few Jewish teeners were occupied in other sectors.

The Jewish conscripts were both in Drenthe as in the modern Groningen unable to exploit their economic opportunities to the same extent as non-Jewish peers. In the most important sectors of the economy, agriculture, peat extraction and shipping was no Jewish conscript working. Also in crafts and civil service they were under-represented. They failed voluntarily or consciously not to be in otherwise economically active. In the second half of the nineteenth century, this modest change in. As a result of the modernization came the commercial sector in the middle of the nineteenth century the trading company in development in the larger places of Drenthe. Precisely in these municipalities were the Jewish conscripts around the middle of the nineteenth century long as their hometown even though. The decrease of the length, which so characterized the Drentse conscripts, for this group was not perceptible. Another element is the p. ..In the period between 1876 and 1898 the mean height of Jewish conscripts from Groningen (city) increased with more than 2.5 centimeters. However, this was only half of the improvement in stature of the non-Jewish conscripts. Therefore, a significant process

In the last quarter of the nineteenth century there was a process of divergence in the biological standard of living. During this period, the same increase in socioeconomic inequality was visible in the Dutch capital (Amsterdam) and in the parts of Russian Poland. The sample of Amsterdam from 1850 showed a difference in height of barely two centimeters around 1850. Half a century later, this gap had been increased to 6,5 centimeter. This divergence cannot be explained by the change in age of examination. On the contrary one should expect that especially groups with a shorter stature should gain most in this additional year.

This trend is also visible in the information sessions of 1866 and 1902 (conscription years) for Polish-Russian smaller cities and Polish-Russian countryside. In this case, took the difference in length of 2.5 to 3.5 centimetres (between Jewish conscripts and peasants) and of 1.9 to 2.9 centimetres (and residents of small towns between Jewish conscripts). At the information meetings from Warsaw 1888 and 1912 respectively, but only marginally, the same pattern is also apparent. The difference in length between Jewish and non-Jewish conscripts from the Polish capital rose from 3.4 to 3.9 centimetres (Kopczynski 2011, p. 206-207).

This overall trend at the end of the nineteenth century deserves an explanation. Perhaps, the circumstances of the Jewish population can help us to shed some light. The booming sectors in most urban centers as Groningen were construction trade and the civil service. Even at the beginning of the twentieth century were young Jewish men hardly active in these sectors. A few civil servants and a single painter are the exceptions on the rule. As far as Jewish conscripts were employed in the ?sectors they fulfilled professions as store house servant and tailor. Of economic integration to have been only partially. The economic activities of Jewish young men remained essentially limited to a number of traditional sectors: trade and food consumption. The only striking exception was the amount of eleven photographers under Jewish conscripts in the conscription of 1898-1901. The professional differentiation had a very gradual character. Other (smaller) towns as Assen and Meppel in the northern part of the Netherlands show the same pattern (Hulst en Luning 1993, p. 76-80; Derksen en Hulst 1991 p 327-328).

How far does migration disturb the regional pattern in the Netherlands? Between 1870 and 1940 Amsterdam was the magnet that attracted a lot of Jewish persons from the other parts of the Netherlands. As far as people migrated from Groningen they went to Amsterdam. Around 1900 the average height of conscripts in Amsterdam and Groningen was equal. If the tallest Jewish people had migrated to Amsterdam the mean height in this place should have been higher than in other places like Groningen. But that was not the case!

For the cohort measured between 1866 and 1876 It is possible to focus in more detail on the conscripts that migrated from Groningen to Amsterdam. In total 106 (68%) of the 156 measured conscripts stayed their whole life in Groningen. Of the remaining 32 %, 22 went to Amsterdam. The did not belong to the most successful persons of the Jewish community. For example, the were shorter than their counterparts.

Although, in an economic perspective a few Jewish entrepreneurs penetrated the top of Dutch society, there was no general economic convergence between the Jewish and Non-Jewish population of the Netherlands

## Conclusions

I investigated the changes in stature of Jewish and Non-Jewish conscripts in Amsterdam (northern Holland) and Groningen (Groningen) during the second half of the nineteenth century. In the middle of the nineteenth century the position of the Jewish population was rather weak from an economic perspective. In the last decades of the nineteenth century there was a general process of convergence in the biological standard of living (height). However, during this period Jewish conscripts in Amsterdam, Groningen the center of agricultural trade and in the parts of Russian Poland did not have the same increase in stature as there non-Jewish counterparts. What caused this striking divergence is rather puzzling. An aspect might be that Jewish conscripts were highly underrepresented in booming economic sectors such as transport, construction and civil service. An explanation could also be that the prices of food products which were allowed by the Jewish food laws did not decrease in the same pace as other foods. Furthermore, non-Jewish conscripts gained less in stature because their morbidity rates declined less than the non-Jewish population. As a result of their religious rules of hygiene they had in the middle of the nineteenth century a relatively low morbidity level.

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<b>Table</b>					
The height of conscripts in Drenthe (cohorts years 1821-1860) by decade (cm)					
	Age	Mean Height (cm)	N	Mean Height (cm)	N
	18 3/4	Jewish conscripts		All conscripts from Drenthe	
		159,17	453	165,49	26187
Conscription years:					
	1821-1830	159,35	74	164,49	6131
	1831-1840	158,93	113	164,40	5658
	1841-1850	159,94	116	163,48	6752
	1851-1860	158,68	154	161,91	7646

<b>Table</b>				
The height of conscripts in Groningen (city) cohorts measured in 1866-1876 (cm)				
	Age	Mean Height (cm)	Standard deviation	N
Jewish conscripts	19 3/4	160,6	7,7	178
Other		164,3	8,7	3550

Table				
Stature of conscripts in Groningen (city) cohorts measured in 1898-1901 (cm)				
	Age	Mean Height (cm)	Standard deviation	N
Jewish conscripts	19 1/2	163,3	7,4	90
Other		169,5	6,7	1812

Table				
The height of conscripts in Amsterdam cohort measured				
	Age	Mean Height (cm)	N	
Jewish conscripts	18 3/4	156,5	750	
Other		158,5	2000	

Table				
The height of conscripts in Amsterdam cohort measured				
	Age	Mean Height (cm)	N	
Jewish conscripts	19 1/2	162,9	750	
Other		169,4	2000	

Table					
Occupations of Jewish conscripts in Drenthe (conscript years 1821-1860) and Groningen (1866-1876)					
Occupation:	Drenthe		Groningen		
	(1821-1860)	1866-1876)	1866-1876)	1898-1901	
	%		%	%	
Salesman	77,9	Salesman	32,6	Salesman/Sales representative	34,2
Slaughterman	7,0	Slaughterman	16,0	Slaughterman	15,8
Housepainter	3,7	Brush constructor	7,4	Photographer	6,2
Other	9,6	Other	29,7	Other	31,6
None	1,8	None	14,3	None	12,2
N	457		175		114