

Beauty pays

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Beauty pays



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Beauty pays

Oratie

In vrije vorm uitgesproken bij de aanvaarding van het ambt van hoogleraar arbeidseconomie aan Maastricht University School of Business and Economics.

Op 15 April 2010 door

Dr. Daniel S. Hamermesh

Mijnheer de Rector Magnificus, Geachte collega's, Dames en Heren

From the day we are old enough to recognize our faces in a mirror at least until senility sets in, we are obsessed with our looks. A six-year-old girl wants to have clothes like those of her "princess" dolls; a sub-teenage boy may insist on a haircut in the latest style (just as I insisted on my crew-cut in 1955); twenty-somethings primp at length before a Saturday night out. Even after our looks, self-presentation and other characteristics have landed us a mate, we still devote time and money to dyeing our hair, obtaining hair transplants, dressing in the clothes that we spent substantial amounts of time shopping for, and using cosmetics. Most days we carefully select the right outfits from our wardrobes and groom ourselves thoroughly.

The average American husband spends 32 minutes on a typical day washing, dressing and grooming himself, while his married female counterpart spends 44 minutes. There is no age limit for vanity: Among single American women ages 70 and over, for many of whom physical limitations might reduce the possibility of spending time grooming, we find 43 minutes devoted to this activity on a typical day¹. Many assisted living facilities and nursing homes even offer on-site beauty salons. For most people grooming is an activity in which they are willing to invest substantial chunks of their lives.

We not only spend time enhancing our appearance – we spend large sums of money on it too. In 2005 the average American household spent \$754 on women's and girls' clothing, \$440 on men's and boys' clothing, \$892 on infants' clothing, footwear and other apparel products and services², and \$541 on personal care products and services.² Such spending accounted for over 5 percent of all consumers' spending that year, and it totaled roughly \$450 billion. No doubt some of this spending is necessary just to avoid giving offense to family members, friends and others whom we meet; but that required minimal spending is far less than we actually do spend on items in these categories.

There is nothing uniquely modern or American about these concerns about dress and personal beautification. Archaeological sites from 2500 BCE Egypt yield evidence of jewelry and other body decoration, and traces of ochre and other body paints are readily available from Paleolithic sites

1 The data on the time inputs are from the *American Time Use Survey*, 2003.

2 From the Consumer Expenditure Survey, as reported in *Statistical Abstract of the United States*, 2008, Table 664.

in southern France. People in other industrialized countries show similar concerns for their appearance and beauty early in the 21st century: For example, in 2001 German husbands spent 39 minutes grooming and dressing, while German wives spent 42 minutes in these activities, quite close to the American averages.³

All well and good – the time and money we spend on it should enhance our interest in beauty and its effects, but is the concern of economists more than just a prurient one? Why should economists dive into these issues, other than the intellectual imperialism that has encouraged economists to expound on diverse topics from suicide to sumo wrestling, and sleep to commercial sex?⁴ Why should an economist have the *chutzpah* even to discuss beauty, and why should the intelligent layperson spend time paying attention to what an economist has to say about the topic? That time and money are spent on beauty is an insufficient reason for economists to be interested. If these were sufficient, there would be no aspect of human behavior that would be off limits for economic analysis.

Take as given the notion that the scarcity of beauty arises from genetic differences in people's looks, so that by some socially-determined criteria some people are viewed as better-looking than others. By its nature, beauty is scarce. Because it is scarce, we can identify a number of areas where differences in individuals' beauty could influence economic outcomes directly. Markets for labor of a variety of types, perhaps even all labor markets, might generate premium pay for good looks and pay penalties for bad looks. The measurement of pay premia and penalties in different jobs and for people belonging to different demographic groups is a standard exercise among economic researchers. Doing so in the case of beauty is a straightforward application of this general endeavor. With every effect on price, in this case wage rates, which are the prices of workers' time, there will be an effect on quantity. How a personal characteristic alters the distribution of workers across jobs and occupations is perfectly standard fodder for an economist, and beauty is surely a personal characteristic that could change the kinds of jobs and occupations that people enter.

3 Calculated from the 1991-92 Zeitbudgeterhebung. The category is "waschen oder anziehen."

4 Daniel Hamermesh, "An Economic Theory of Suicide," *Journal of Political Economy*, 82 (Jan./Feb. 1974), pp. 83-98; Mark Duggan and Steven Levitt, "Winning Isn't Everything: Corruption in Sumo Wrestling," *American Economic Review*, 92 (Dec. 2002), pp. 1594-1605; Jeff Biddle and Daniel Hamermesh, "Sleep and the Allocation of Time," *Journal of Political Economy*, 98 (Oct. 1990), pp. 922-943; Lena Edlund and Evelyn Korn, "A Theory of Prostitution," *Journal of Political Economy*, 110 (Feb. 2002), pp. 181-214.

A characteristic like beauty that affects wages and employment will also affect the bottom line of companies and governments that employ workers whose looks differ. Are certain industries are likely to be more affected? How does the existence of concerns about beauty affect companies' sales and profitability? Perhaps most important, how can companies survive if beauty is scarce and thus costly?

Taking all of this together, the economic approach to beauty treats it as scarce and tradable. We trade beauty for additional income that enables us to raise our living standards (satisfy our desires for more things) and for such non-monetary characteristics of work and interpersonal relations as pleasant colleagues, an enjoyable workplace, etc., that also make us better off. Researchers in other disciplines, particularly social psychology, have generated massive amounts of research on beauty, occasionally touching on economic issues, particularly in marriage markets. But economists have added something special and new to this topic—a consistent view of exchange and value related to this unusual but central characteristic—beauty.

I want to stress that this discussion is only very partial—I ignore such areas as credit markets, dating and marriage markets, and no doubt many others that already have been or soon will be researched. The main point is that only a little—albeit a very fascinating little—has been done so far; there is a lot more to do, and I hope that this lecture and my previous research in the area will have stimulated and continue to stimulate others to work in this area. I'm an old man; but there is lots of room for young people to do an immense amount of clever and interesting work on beauty and the economy.

What Is Beauty?

One online dictionary gives three definitions of beauty that are relevant for our purposes:⁵

- 1 The quality or aggregate of qualities in a person or thing that gives pleasure to the senses or pleasurably exalts the mind or spirit
- 2 A beautiful person or thing; *especially*: a woman
- 3 A particularly graceful, ornamental, or excellent quality

5 <http://www.merriam-webster.com/dictionary/>

Although English usage describes good-looking men as handsome rather than beautiful, I generally avoid the terms "handsome" and its feminine equivalent, "pretty," and use the term beauty where these gender-specific terms might otherwise be employed. This excludes the second definition. The third definition seems specific to individual traits and insufficiently general to describe beauty in an economically useful way. I'll thus go with the first definition.

The difficulty with this definition is that it is completely vague – what is it that "gives pleasure to the senses or pleasurably exalts the mind or spirit"? The real question for our purposes is: Are your senses, mind or spirit pleased or exalted by the same human characteristics as mine? Think about this issue the following way. Imagine this room being divided into two halves, with the audience members being equally productive employees, and with my wife (over there) and me being two employers producing identical products. Both my wife and I derive pleasure from having beautiful employees.

To start, let's say that my wife views the potential employees in the left-side of the audience as being good-looking, and those on the right-side as being ugly. I, on the other hand, view those on the right as being good-looking, and those on the left as being ugly. That being the case, she will hire those on the left, and I'll hire those on the right. Most important, neither she nor I will have to pay extra to indulge our preferences for beauty, because we are not competing for beauty. She gets what she wants, I get what I want. There's no extra pay for beauty, because we don't agree on what is beautiful.

What if, however, my wife and I agree that those on the left are beautiful and those on the right are ugly? Then we will both be willing to pay extra to employ workers on the left. The amount of extra pay that the left-side workers receive will depend on how much my wife and I value their beauty. If I am more concerned about beauty, at some premium pay to left-side workers she will drop out of the bidding for their services. The beauty premium will be the extra pay that I am required to offer left-side workers to have the pleasure of employing them.

The main point is that for there to be a beauty pay premium employers must at least to some extent agree on what is beautiful. So the question is: Do people agree on what is beautiful? There are two different ways to answer this question. The first, which has been used only rarely, is to look at how raters' assessments of people's beauty vary when they view the same individuals at different times. Answers using this approach can be seen from a study based on pictures of economists. I asked four students

who were just beginning their graduate studies in economics to rate the looks of 312 pictures of economists, many of whom were included multiple times and submitted a different photograph each time. Of course, the same individual received different ratings for different pictures, but those differences were small compared to the differences in the average ratings among different individuals.⁶

In a nationally-representative study undertaken in Canada, in which the same people were interviewed in 1977, 1979 and 1981, each individual was contacted by a different interviewer in each year. The interviewers were asked to assess looks using a 5 to 1 scale:

- 5 Strikingly handsome or beautiful
- 4 Good-looking (above average for age and sex)
- 3 Average looks for age and sex
- 2 Quite plain (below average for age and sex)
- 1 Homely

Comparing ratings in adjacent years, 54 percent of women and 54 percent of men were rated identically in each of the two years; and only 3 percent of women and 2 percent of men received a rating in the second year of a pair that differed by more than 1 from the rating they received in the first year of the pair.⁷

The second way of testing for consistency in our views of others' beauty is to ask a group of individuals to provide independent ratings of another person's looks. Typically this has been done by showing each of a number of people, none of whom can contact the others, the same photograph. While there will be disagreements, the question is whether they are small, so that the averages inform us about general perceptions of each person's looks.

As an example, take ratings of a group of law students' photos, which were assessed on this same 5 to 1 scale.⁸ Complete agreement – all four observers giving the exact same score to a photograph – was fairly uncommon, occurring in only 14 percent of the photos. But near agreement,

6 Daniel Hamermesh, "Changing Looks and Changing Discrimination: The Beauty of Economists," *Economics Letters*, 93 (Dec. 2006), pp. 405-412.

7 These are calculated from some of the raw data analyzed in Daniel Hamermesh and Jeff Biddle, "Beauty and the Labor Market," *American Economic Review*, 84 (Dec. 1994), pp. 1174-1194.

8 These are calculated from the raw data analyzed in Jeff Biddle and Daniel Hamermesh, "Beauty, Productivity and Discrimination: Lawyers' Looks and Lucre," *Journal of Labor Economics*, 16 (Jan. 1998), pp. 172-201.

which I define as all four ratings the same, as three of four raters rating the picture identically, or as two pairs of raters who differ by only 1 point on the scale, occurred with the photos of 67 percent of the female students and 75 percent of the male photos. Only 2 of the 2221 students were rated differently by all four raters. Complete disagreement about looks is an extraordinarily rare event. There are consistent differences in how individuals rate each other's beauty. Within the same culture some people are always harsh in rating their fellow citizens' looks, and others are consistently more generous. In one study sixty interviewers rated at least ten subjects. The average ratings ranged from 3.64 (closer to above-average than to average) down to 2.40 (closer to plain than to average). But only 10 percent of the differences in the ratings of interviewees could be ascribed to judgments by raters who applied particularly harsh or generous standards. While interviewers do have different standards, the effects of their differences are dwarfed by the inherent differences in interviewees' looks.

In sum, human beauty is a subjective concept; but people have similar subjective notions of what constitutes beauty. There is an English-language saying, "Beauty is in the eye of the beholder." That's true; but people tend to behold others similarly. What this means for our purposes is that the second possibility in my artificial example above—my wife and I agreeing more or less that folks on the left side of the audience are the good-looking potential employees—is the likely outcome; and that means that there is good reason to expect premium pay for some (good-looking) workers, and penalty pay for other (bad-looking) workers.

How Much Does Beauty Affect Earnings?

The devil in this question is in the details of other factors that might be related to beauty and that have their own, independent effects on earnings. The choice of factors is essentially arbitrary, but a thorough approach would take anything that has been shown to affect earnings, and would then adjust for its impacts in order to isolate the effect of beauty on earnings. These other factors include: Education (increasing earnings); age (increasing earnings up to some point, perhaps to the mid-50s for a typical worker, then reducing earnings); health (healthier people earn more); intelligence (higher measured IQ increases earnings); trade union membership (increasing earnings); marital status (positive effects among men, negative effects among women); race/ethnicity (minorities earn less than non-Hispanic whites); size of city (higher earnings in bigger cities and in metropolitan as opposed to non-metropolitan and

rural areas); region; nativity (immigrants earn less than natives); family background (lower among people whose parents were immigrants); size of company (higher in big firms) or plant (higher in larger plants); years with the company (increasing earnings until late in a person's tenure with the company). Numerous studies have shown that each of these factors affects earnings. Since some or all might also be correlated with looks, to isolate the effect of looks on earnings we need to adjust earnings using data on as many of these other factors as we can obtain.

Let's take the example of the U.S., where this issue has been most thoroughly studied. Table 1 shows the average impacts of beauty combining data from two different random samples of Americans in the 1970s. All the percentage effects shown in the Table are for people rated below-average (2 or 1 on the 5 to 1 scale, between 12 and 15 percent of the sample members) or above-average (4 or 5 on that scale, around 30 percent of the sample members) compared to those in the average group (people rated as 3, who constitute a majority of all workers). The penalties for below-average looks, and the premia for above-average looks, are based on statistical analyses that adjusted earnings for large numbers of the other factors in order to infer the effect of differences in beauty. Throughout this table and all the others presented here an asterisk (*) denotes that the impact is statistically different from zero. The asterisk indicates that we can be fairly sure that looks have some effect on earnings.

Table 1 Best Estimates of the Percentage Impacts of Looks on Earnings in the U.S., 1970s (compared to average-looking workers, rated 3)

	Women	Men
Looks		
Below Average (2 or 1)	-4.1*	-12.9*
Above Average (4 or 5)	7.8*	3.7

** Denotes an effect or difference that is statistically different from 0 here and in subsequent tables.*

If asked, "What is the overall effect of looks on earnings in the U.S.?" the best answer, based on this Table, is that the bottom 15 percent of women by looks, those rated as below-average (2 or 1), received about 4 percent lower pay than average-looking women. The top one-third of women by looks, those rated as above-average (4 or 5), received about 8 percent more than average-lookers. For men the comparable figures are a 13 percent penalty and a 4 percent premium.

These estimates mean little by themselves without comparisons to the effects of other determinants of differences in earnings. How does the 17 percent excess of good-looking men's earnings over those of bad-looking men's compare to the effects of differences in other characteristics on men's earnings? How does the 12 percent shortfall of plain or homely women's earnings compare to other effects on women's earnings? By far the most thoroughly examined factor affecting earnings is education. A good estimate for the U.S. today is that each additional year of schooling raises the earnings of otherwise identical workers by around 10 percent, with effects that are smaller, but still substantial in northern European countries.⁹ This effect is about the same as that of women's good looks; and it implies that men's good looks have an impact on their earnings at least as large as an additional 1-1/2 years of school.

There have been many efforts to measure the effect of beauty on earnings in other countries, regrettably, to my knowledge, none for the Netherlands. Interest in the topic is hardly limited just to the United States. All of these have tried to adjust for many of the same determinants of earnings that were used to isolate the effects of beauty in the U.S. The availability of information on all these measures differs across countries and sets of data, so that the studies are neither entirely comparable to those from the U.S. nor to each other. They are also not comparable for another crucial reason: There are international differences in the willingness of raters of beauty to classify people as being below-average in looks, with Americans being unusually willing to make these relatively harsh judgments when they interview respondents or evaluate their photographs. This too might cause the estimated effects of beauty elsewhere to differ from those in the U.S.

Table 2 assembles the results of a number of studies of the general impact of beauty in foreign labor markets. For each study the table lists the percentage effect of being below- or above-average in looks compared to the average-looking worker. It also lists in parentheses the percentage of workers classified as below- or above-average in looks. Not all the estimated effects make sense: In a few cases the statistical analyses suggest that the below-average looking earn more than the average, or that the above-average looking earn less than the average. These cases, though, are few; and in none of them is the surprising effect statistically different from zero.

9 The 10 percent figure comes from a multivariate regression estimated over a large random sample of Americans in 2007 (from the Current Population Survey, Merged Outgoing Rotation Groups). The true figure is probably much higher for the gains from finishing high school, or finishing university.

Most of the results in Table 2 show that in other countries too there are significant negative impacts on earnings of being below-average in looks. In most cases there are also significant positive effects of being above-average. No generalizations about cross-country differences in the effects of beauty on earnings are possible. But it is true that the negative effects of being below-average in looks typically (although the Korean results are the exception) exceed the positive effects of being above-average. One explanation is that so few people are classified as below-average in these studies. Even if a person in the 10th percentile of beauty is penalized to no greater degree than a person at the 90th percentile is rewarded, the statistical analysis would show that the penalty for the relatively few people rated below-average exceeds the premium for the substantial fraction of people who are rated above-average.

Table 2 Percentage Effects of Looks on Hourly Earnings (and Percent of Workers Rated Below- or Above-Average), Various Countries

Looks:	MEN		WOMEN	
	Penalty	Premium	Penalty	Premium
	Below-Average	Above-Average	Below-Average	Above-Average
Canada	-12.9* (8%)	11.5* (34%)	13.0 (9%)	13.8 (33%)
Shanghai	-24.6* (2%)	2.9 (32%)	-31.1* (2%)	9.7* (34%)
Australia	-18.0* (3%)	-3.1 (38%)	-3.2 (6%)	-6.9 (41%)
United Kingdom	-13.8* (2%)	0.6 (24%)	-10.3 (2%)	-2.3 (36%)
Korea	-1.0 (11%)	10.1* (5%)	-1.0 (8%)	8.8* (13%)

Source: Daniel Hamermesh and Jeff Biddle, 1994; Daniel Hamermesh, Xin Meng and Junsen Zhang, "Dress for Success – Does Priming Pay?" *Labour Economics*, 9 (Oct. 2002), pp. 361-373; Andrew Leigh and Jeff Borland, "Unpacking the Beauty Premium: Is It Looks or Ego?" unpublished paper, Australian National University, 2007; Barry Harper, "Beauty, Stature and the Labor Market: A British Cohort Study," *Oxford Bulletin of Economics and Statistics*, 62 (Dec. 2000), pp. 771-800; Soohyung Lee and Keunkwan Ryu, "Returns to Plastic Surgery and the Marriage and Labor Market," unpublished paper, University of Maryland – College Park, 2009.

As discussed, making comparisons of these effects to those shown in Table 1 for the U.S. is difficult for a variety of reasons. Nonetheless, the effects of beauty in other countries do not seem that different from those in the U.S. The effects in the U.S. may be somewhat larger, but not hugely so. As in the U.S., so too in most of these countries, good looks are rewarded, and bad looks are penalized, even after accounting for a large variety of other factors that affect earnings.

Men's Beauty and Women's Beauty – Why Different Effects?

The astute reader will note from Tables 1 and 2 that it seems like men's looks have bigger effects on their earnings than do women's. How can this be, given the apparent pre-occupation in most cultures with female beauty? Why doesn't beauty have a bigger impact on women's earnings than on men's? There are two, unrelated reasons, and I would like to go through each of them separately.

Ask what we would observe if both genders faced the same penalty on their earnings, say 10 percent for being below-average, and the same premium for having above-average looks, say 5 percent. Assume too that all adults were working for pay. What if there were also no differences by gender in the underlying distributions of beauty ratings? Then it would be the case that careful measurements of the effects of beauty on earnings would show the same results for women and men.

This point sounds reasonable, but it is wrong, because the assumption that all adults work is incorrect: As an example, in 2008 only 82 percent of Dutch women age 25 to 54 were in the labor force, while 94 percent of Dutch men in that age group were. The difference exists in all wealthy countries. This difference in labor-market participation would not be a problem here if non-participation were random – if the choice of staying out of the labor market were unrelated to beauty. But it is reasonable to expect that the choice is not random. The economic theory of participating in the labor force – of working or seeking work – states that people choose to work if the gains from working exceed the gains from staying at home. The gains from working are what you can earn. The gains from staying at home are the enjoyment of your leisure, the value to you and your family of what you do while at home and the savings of costs for commuting and child care.

So if being plain or homely reduces earnings, it reduces the incentive to be in the labor market, and it increases the likelihood of remaining at home. Then since not everyone works for pay, the people who are out of the labor market are those whose looks are generally below average

for their age. Those remaining in the labor market tend to be among the better looking. Even this non-randomness wouldn't be able to explain gender differences in the impact of beauty on earnings if men and women were equally responsive to the incentives to work. But massive amounts of economic evidence demonstrate that women's decisions about whether to work for pay are more responsive to pay incentives than are men's¹⁰.

This is all economic theory and is indirect, with the causation moving from beauty to labor-force participation, as affected by what people can earn, to the earnings that we observe among those people who choose to work. Is there any evidence that, in fact, beauty affects the likelihood that women work, with little or no effect on men? One of the American data sets from the 1970s and the Canadian data set from 1977-81 allow us to infer the effects of beauty on whether women or men will choose to work or not. In both sets of data there is no effect of looks, either above- or below-average beauty, on whether a man is working for pay. But being above-average in looks raises the likelihood that a woman works by about 5 percent compared to the average-looking woman. And the relatively small fraction of women whose looks are rated below-average are about 5 percent less likely than average-looking women to be in the labor market (and that much more likely to stay at home). The effects of looks on a woman's likelihood of working are not small, given that the average-looking adult woman in the U.S. today has only a 60 percent chance of working for pay.

This discussion shows that one explanation for the surprisingly larger effect of looks on men's than on women's earnings is that women have much more latitude than men in choosing whether or not to work for pay, and that beauty affects that choice. Part of the reason for the gender difference in the effects of beauty on earnings is that beauty alters the mix of female workers, so that the distribution of workers contains proportionately fewer below-average and more above-average looking women. The same is not true for men.

The other reason why the wage effects are less for women than men is that there is another important market where looks are traded for economic gains—the market for spouses. Bad-looking women are no less likely than good-looking women to be married; but the interesting question is about the characteristics of the husbands each group

10 Compare, for example, the surveys of empirical evidence by John Pencavel, and by James Heckman and Mark Killingsworth, in Orley Ashenfelter and Richard Layard, eds., *Handbook of Labor Economics*, Vol. 1. Amsterdam: North-Holland, 1986; and the survey by Richard Blundell and Thomas MaCurdy in Ashenfelter and David Card, eds., *Handbook of Labor Economics*, Vol. 3A. Amsterdam: North-Holland, 1999.

obtains. Consider how beauty is exchanged in marriage for the partner's other characteristics, particularly his/her earnings capacity. Table 3 shows the relationship between one's spouse's beauty and one's own education. I focus on education since it is probably the most important determinant of earnings potential in most developed countries. The data for the United States are from surveys collected in the 1970s, while those for China are from a 1995 survey in Shanghai. For China I have combined below- and average-looking individuals, since very few respondents were classified as below-average.

The data show that, except for the comparison of good-looking to average-looking wives in the U.S., beauty has the expected effect on the education level of the spouse you have matched with. Below-average looking individuals match with spouses with less education. In the American data this is especially true for women in the bottom 15 percent of looks: Their husbands have on average one less year of schooling than other husbands. A husband's bad looks are less strongly related to his wife's education. These effects do not arise from differences in the spouses' ages or from differences in their health, as the estimates adjust for both of these factors. They result from sorting among spouses, from the exchange of characteristics in the marital match.

The effects are not small. The discussion of beauty in the labor market showed that an extra year of schooling is associated with about 10 percent extra earnings among men. As compared to an average-looking woman, the estimates in Table 3 suggest that a below-average looking woman is married to a man who will bring about 11 percent (10 percent per year times $1.1 = 12.4 - 11.3$ years) less earnings into the household. If men on average earn 50 percent more than women, this means that this is the same effect as an earnings penalty on her wages arising from her bad looks of over 15 percent.

Table 3 Looks and Spouse's Education in Married Couples, U.S. and Shanghai

Spouse's Looks	United States		Shanghai	
	Years of School of:		Percent with high-school or more:	
	Husband	Wife	Husband	Wife
Above-average	12.4	12.8*	59*	49
Average	12.4	12.4		
			50	46
Below-average	11.3*	11.9*		

(below- or average in China)

**Denotes statistically different from the average spouse.*

Although measured differently, the Chinese results are very similar to those from the U.S. 59 percent of above-average-looking wives have husbands with at least a high-school diploma, while only 50 percent of average- or below-average-looking women do. As in the U.S., the differences between their wives' education of men classified by looks are smaller. Again, education seems to be traded for looks; and it is men's education in particular, which is positively related to their earnings potential, that is traded for feminine beauty.

These calculations also help to explain the apparently surprising lesser impact of beauty on women's earnings than on men's. Women's major additional income disadvantage arises because the husbands they match with earn substantially less than the husbands of better-looking women. The bad-looking women thus share in fewer resources in marriage than their good-looking counterparts.

Beauty in Different Occupations

You are not going to choose to become an opera singer unless you have some natural vocal gifts; and you are not going to become a professional tennis player unless you have at least some basic level of physical coordination. These are fairly esoteric occupations with few practitioners. Unlike vocal ability or physical coordination, beauty is a general characteristic. Does your beauty affect the occupation you choose to enter, as the cartoon in Figure 1 suggests? It seems reasonable to believe that your beauty will help to determine the career choices that you make as a worker. Put crudely, does the old saying, "A beautiful face for radio," describe people's behavior generally?

Figure 1



“It was God who
made me so beauti-
ful. If I weren’t, then
I’d be a teacher.”

Supermodel **LINDA EVANGELISTA**

This discussion makes it sound like some occupations will have only good-looking workers, others only plain people. Going still further, why doesn't the very best-looking one percent of workers enter the occupation that rewards beauty most generously? Why don't the ugliest ten percent of workers wind up in those occupations where looks matter least? If people behaved this way, the effects of looks on earnings and on other outcomes within each occupation would be imperceptible, or at most tiny, since the distinctions among the looks of people in each occupation would be minute.

People do not choose to enter occupations based solely on their looks and on the potential productivity of their looks in various occupations. We would expect that being good-looking would help an opera singer. Yet not all opera singers are beautiful. Indeed, the greatest soprano of the 20th century, Maria Callas, was no beauty at all. Whatever her lack of good looks may have cost in success was far more than compensated by her extraordinary voice and musicality. As a more recent example, Dustin Hoffman's aunt told him, "You can't be an actor; you're too ugly." Yet two Best Actor Oscars have made it clear that looks are not the only thing that determines success in screen acting.¹¹

We choose our occupations based on the mix of our skills, interests and endowments, of which looks are just one among many. That choice is partly based on the importance attached to these different skills and endowments by the market, and beauty is only one of the many things that are favored by the market. And it is favored differently in different occupations. We will thus find that workers within an occupation are not homogeneous in looks. We will, though, find less variation in looks within an occupation than in the workforce as a whole. On average, better-looking people will choose occupations where their looks are productive, and worse-looking people will shy away from those occupations.

Some evidence for attorneys in different specialties demonstrates this fact. Take a set of attorneys, all of whom graduated from the same prestigious American law school in the 1980s, and all of whom were observed working in legal careers in the early 1990s.¹² Table 4 lists the average beauty (standardized so that the overall average for the entire set was zero) of the attorneys classified by their legal specialty. Some legal specialties require more contact with non-attorneys than others. In some

11 Abigail Pogrebin, *Stars of David*. New York: Broadway Books, 2005, p. 10.

12 From Biddle and Hamermesh, 1998.

other specialties the lawyer works essentially "in the back room." The table shows clearly that attorneys who are litigators—who must negotiate with other attorneys and must appear before judges and juries—are better looking than their peers. And the worst-looking attorneys are those who do regulatory and administrative law—and who are thus least likely to have to appear in court.

Table 4 Averages of Beauty by Legal Specialty, Attorneys in Year 5 of their Careers, During the 1990s

Litigation		Corporate and Financial	Regulation and Administrative	Other
			Men, 1980s Cohort Year 5	
Beauty	.0099	-.0577	-.1311	-.0525
N =	133	366	113	145
			Women, 1980s Cohort Year 5	
Beauty	.2506	.2168	.0032	.0500
N =	56	126	46	57

This evidence shows that people do sort themselves according to their looks among occupations when choosing their careers—even among narrow specialties within an occupation. Nonetheless, a huge number of studies for a large variety of occupations have shown that beauty has independent effects on earnings and other outcomes. Consider first the attorneys whose beauty by legal specialty is shown in Table 4. In Table 5 I list the effects on their earnings, after accounting for many other factors that affect earnings, of a move from the median beauty in the sample to the 84th percentile of looks. Except right when they start their careers, differences in their beauty have statistically significant effects on their earnings. And these effects are not small: Five years after receiving their law degrees the attorney who is in the 84th percentile of looks is earning 4 percent more than his average-looking counterpart; and by fifteen years after the degree that difference has widened to 6.5 percent. Moreover, as the final column shows, it's not just that the better-looking attorneys are working more hours (presumably because they attract more clients); even adjusting for hours worked, the better-looking attorneys are earning 5.5 percent more per hours.

Table 5 Estimates of Percentage Effects of Beauty on Annual Earnings, Law School Year 15 Sample, 623 Men

	Year 1	Year 5
Stdzd. Beauty (Move from Average To 84th Percentile)	0.69	3.96*
	Year 15	Year 15 (adjusts for hours)
Stdzd. Beauty (Move from Average To 84th Percentile)	6.49*	5.56*

An occupation that particularly interests me is that of professors. The outcome is not their pay – it's how their students evaluate their teaching. Nonetheless, there may be a link between these evaluations and pay and/or promotion. University administrators claim that they pay off for good teaching, and, rightly or wrongly, most universities use teaching evaluations as a major input in their judgments of teaching quality. That better teaching performance generates higher pay is a mantra among university administrators – after all, they do need to make the customers believe that their opinions about the service-providers matter.¹³

Table 6 Teaching Evaluations (Measured on a 5 to 1 Scale), Moving from the 16th to the 84th Percentile of Looks

Undergraduate Teaching Level			
Percentile of looks	All	Lower Division	Upper Division
16	3.84	3.81	3.88
50	4.05	4.10	4.00
84	4.26	4.39	4.12

13 Statistical evidence in favor of the notion that teaching quality affects salary is offered by William J. Moore, Robert Newman and Geoffrey Turnbull, "Do Academic Salaries Decline with Seniority?" *Journal of Labor Economics*, 16 (April 1998), pp. 352-366, who demonstrate the link between receipt of teaching awards and salary. The evidence on the impact of teaching evaluations is less direct, but my personal experiences in evaluating young faculty for tenure and both junior and senior faculty for teaching awards suggest that evaluations receive a lot, perhaps even too much attention in these processes.

In a study using professors at the University of Texas at Austin, with the looks rated by students who had never seen those professors, we found that the average student evaluation differed sharply by the professors' looks.¹⁴ The good-looking professors received instructional evaluations that were substantially higher than those obtained by their worse-looking colleagues. The sizes of the effects of beauty on course evaluations are implied in Table 6, where I list the average student evaluation (5 is best, 1 is worst) going from the 16th to the 84th percentile of professors' looks. Moving from the bottom sixth of looks to the top sixth yields an effect equal to one standard deviation in the evaluations. And the effects are even bigger if we go from the very ugliest professor in the sample, who would get an instructional rating of 3.52, to the best-looking professor, who would attain an average instructional evaluation of 4.50.

A similar approach was undertaken using instructional ratings of German university professors.¹⁵ The author argued that American students' ratings of their professors, and Americans' ratings of people's looks, may differ and be related differently from those in other countries. Certainly, Americans appear to scale their ratings of people's looks differently from citizens of other countries. As in the American study, the ratings of beauty by one group of students (who were not in the professors' classes) were statistically significantly related to the evaluations that the German instructors received from the (different) students in their classes. While the impacts were not as large as those in the American study, they were still substantial. No doubt the results would be different still in other countries, for other kinds of students and using different methods. Nonetheless, it does appear that, even in an occupation like college teaching, where we don't think beauty will be very important, differences in beauty produce impacts on an outcome that is arguably linked to economic rewards.

Does It Pay to Become Beautiful? Can We Make Ourselves Beautiful?

Given this evidence that it pays to be beautiful, why don't people invest more in themselves, become better-looking and earn more? That people are spending on beauty – spending both time and money – along a whole variety of dimensions is clear. The question is whether this spending pays off.

14 Daniel Hamermesh and Amy Parker, 'Beauty in the Classroom: Instructors' Pulchritude and Putative Pedagogical Productivity,' *Economics of Education Review*, 24 (Aug. 2005), pp. 369-376.

15 Bernd Süssmuth, 'Beauty in the Classroom: Are German Students Less Blinded?' *Applied Economics*, 38 (Feb. 2006), pp. 231-238.

Perhaps the spending does pay off, but the costs of the improvement, both in money terms and in pain and suffering, are insufficient to induce people to undergo the surgery. These possibilities are suggested by some results describing examples of plastic surgery in Korea. For most people in the study the economic gains from the improvements in beauty were very far from justifying the monetary cost of the procedure.¹⁶

If plastic surgery cannot convert us all to beauties, or we cannot afford the cost of surgery, or we don't want to bear the pain of the surgery that would be required to accomplish this, maybe a simpler approach would work: Buy better clothing, use more cosmetics, get better coiffed, etc. Magazines and newspaper columns are devoted to "dressing for success" and "beauty makeovers," including recommendations of the appropriate clothing, hair style, manicure, etc. Does this kind of spending really work? Can we make ourselves more beautiful by spending more on non-surgical methods of beauty enhancement?

The survey that underlay the information from Shanghai shown in Tables 2 and 3 collected information on the amount that women spent each month on clothing, cosmetics and hair care. Figure 2 shows the relationship between a woman's average beauty rating and her monthly beauty spending. Comparing a woman who spent the average of 88 yuan to another who spent nothing, her spending only raised her looks from a rating of 3.31 to 3.36 on the five-point beauty scale. One might think that these women could do better by spending still more, and it is true that spending 400 yuan, over 20 percent of average household income, would raise the rating of the average woman's beauty to 3.56. But the data make it very clear that the extra effect of this spending diminishes the more one has already spent. More important, the average economic payoff to spending was only 4 cents per 100 spent.

Just as much of our spending on health may not increase our longevity, but may let us enjoy life more, so too it may make sense to spend on plastic surgery and better clothes. But the best reason for this kind of spending is that it makes you happier. It is not a good investment if you seek only the narrow goal of economic improvement.

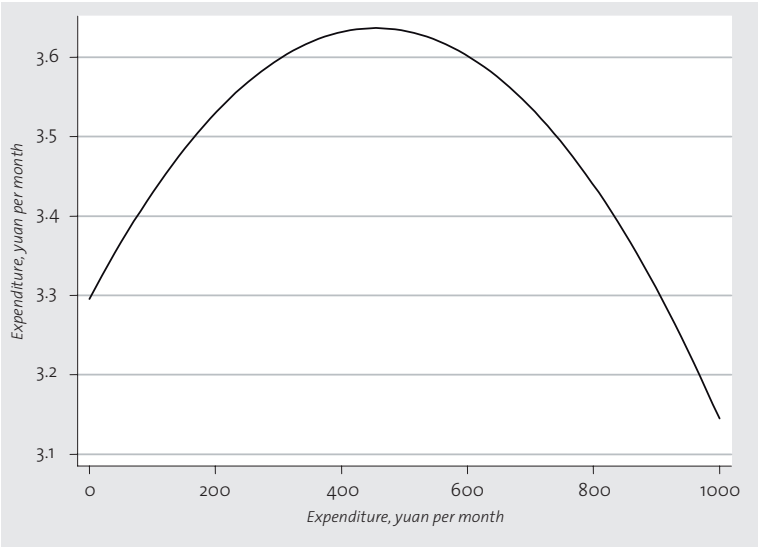
Additional evidence fortifies this conclusion: A small-scale study took pictures of people at an early age and asked raters to rate them and photos of the same people taken much later in life. The ratings were very highly correlated across the subjects' lifetimes.

16 Lee and Ryu, 2009.

The general conclusion is, "Ugly ducklings generally blossom into ugly ducks."¹⁷ Beauty is essentially immutable – the ugly are stuck with their disability.

Someday technology may allow us to reach the point where we can improve our beauty easily and without great cost. Right now, though, we are so far away from that point that for most of us the beauty that we have attained as young adults is not going to be greatly altered by natural changes that occur as we age, nor by any surgical or cosmetic efforts that we undertake to improve it. We are basically stuck with what nature and perhaps early nurture have given us.

Figure 2 Relation Between Cosmetics/Clothing Spending and Appearance, Shanghai, 1995



How Can a Company Survive if It Pays Extra for Beauty?

In discussing with a class of first-year university students whether having good-looking salespeople raises a company's sales, I asked whether the students cared about the looks of employees at the companies they dealt with. One young woman said that she certainly does care, and that, for example, she would not buy cosmetics from a salesperson who was

17 Elaine Hatfield and Susan Sprecher, *Mirror, Mirror*. Albany, NY: SUNY Press, p. 282.

not well groomed and at least decent-looking. The brand of cosmetics that she chooses to buy may be the same no matter who sells it. But presumably the saleswoman's looks would convey something to my student and others about the product, which would make buying it more or less desirable to her.

This suggests an answer to one of the questions I posed at the start of this lecture: How can a company that pays extra for good-looking workers survive in competition with companies that choose not to pay this premium and hence have lower labor costs? A good-looking attorney might be able to attract more clients and bill more hours, at higher hourly fees, if potential clients believe that s/he is more likely to be successful on their behalf. The attorney may be no better at writing briefs, doing legal research or developing oral arguments, but clients may believe that s/he will be more likely to prevail before a judge or jury, or in negotiations with other attorneys. In a very real sense the product in the former example, and the service in the latter, are inextricably tied to the salesperson's or service provider's looks.

If we think of looks as part of a product or service, and if we assume that potential customers value looks, then it is clear how better-looking employees can raise a competitive company's sales. At the same average cost of all the other inputs into the product and at the same price charged, customers will be more likely to buy the product and/or will be willing to buy more of it. More will be sold; and the company will expand at the expense of its competitors. Alternatively, what if the company has some monopoly power over the sale of its product or service? Tying its product or service to a better-looking provider will enable the company to sell it at a higher price and/or sell more of it, even though the product is little different from a product offered by another company. Regardless of the structure of the markets in which it operates, the company that can tie its goods and services to better-looking workers will be able to increase its price, the amount it sells, or both, and thus increase its revenue – the total value of its sales. The beauty of the seller becomes an integral part of what the company offers.

A good example of how beauty affects a company's revenue is a study of Dutch advertising executives that Gerard Pfann and two other co-authors did with me.¹⁸ At the time covered by the data (the mid-1980s through mid-1990s) the Dutch advertising industry contained many companies,

18 Gerard Pfann, Jeff Biddle, Daniel Hamermesh and Carina Bosman, "Business Success and Businesses' Beauty Capital," *Economics Letters*, 67 (May 2000), pp. 201-207.

with most of them, including nearly all the larger firms, located in the Randstad. Because the nature of the markets they served differed between this area and the rest of the country, and because they differed by size, we divided the advertising companies into four types along two criteria: Randstad or rest-of-country, and large (10 or more employees) or small firms. Over half of all sales were by large firms in the Randstad. Thus while the industry was competitive, in the sense that there were many firms, with no single firm having a market share even approaching 10 percent, many of the companies had niches where they had some market power – some ability to set price.

Table 7 The Percentage Effect of an Increase in Advertising Executives’ Beauty on Sales, the Netherlands, 1984-94

	Large Firms	Small Firms
	Effect of Move from Average to 84th Percentile of Beauty:	
Area: Randstad	9.64*	-7.50*
Other	9.12*	13.31*

The beauty of the companies’ directors was rated on the 5 to 1 scale by a group of Dutch adults. These executives direct their company, engage in creative activities, and market their products. The impacts of an increase in their average beauty on their company’s sales, adjusted for the company’s size, are shown in Table 7. Except among small advertising firms in the Randstad, where the effect of beauty on sales was surprisingly negative, a company that had better-looking executives had higher total sales. Combining all companies together, moving from the 16th to the 84th percentile of average looks of executives across the companies is associated with an increase in sales of 7 percent. If we delete the anomalous results for small firms in the Randstad, the effect is 10 percent. Having better-looking executives in a company in this industry generates fairly substantial increases in revenue.

These effects are very large; but how do they compare to the possible effects of beauty on what a company has to pay to its (good-looking) workers? The answer is clear: Given the estimates in Tables 1 and 2, the extra costs of beautiful workers are more than offset by the extra revenue that their good looks generate for their employers. The net effect is that the beauty generates additional profits.

The point of this section is contained perfectly in the cartoon in Figure 3. It suggests that the supposed new manager is just not capable of bringing in more business and inducing subordinates to work harder. She may have the same education and the same tangible skills as the good-looking incumbent seated at the desk, but her obviously deficient looks would make her less productive, in the sense that she would not generate as much revenue for the company.

Figure 3 De Tijd, July 28, 2000.



Public Policy Toward Beauty?

You might ask: Why would anyone think that beauty and its treatment in the labor and other markets is a matter for public policy? Most industrialized societies have instituted policies designed to protect disadvantaged citizens in a variety of areas. These include the labor market, the housing market and rights of access to public facilities. Protected groups include racial, ethnic and religious minorities; women; older citizens; and disabled citizens. In some places protection is also provided based on sexual orientation. The question here is whether it would make sense to offer similar protection for what one journalist I talked with called the "looks-challenged" citizen – for example, the ten to fifteen percent of citizens whose looks are considered by their peers to be below average, or perhaps only the one to two percent who are considered homely.

Are there good arguments for providing these protections? Do the potential benefits outweigh the potential costs? That there are likely to be benefits seems certain, since most proposed policies generate some benefit to at least some people. Whether other citizens might be disadvantaged by those policies – whether the policies generate unintended negative consequences for society as a whole – is always a more difficult question to answer. But it needs to be addressed when any new policy proposal is presented. That is especially true in the case of beauty, given the novelty of the idea of protecting this particular group.

First of all, is beauty an immutable characteristic, like race or gender; or can the ugly easily alter their negative circumstances? The answer on this is clear from the evidence of the value of plastic surgery and cosmetics/clothing – beauty, while not immutable, is changed only with great difficulty, and the possible changes are quite small.

If we offered protection to the ugly, would people take it? Who would admit to being ugly? The answer on this is clear: With a sufficient financial incentive, people will be happy to join the class of protected citizens. Given that the beauty penalties on earnings discussed here amount to a lifetime earnings loss of perhaps \$250,000 in the United States, recovering that amount would seem like a more than sufficient incentive for a person to seek help.

One might argue that courts and regulatory agencies could never agree on who might be qualified to receive help – who is among the protected ugly. But the discussion here has made it clear that we do agree on who is beautiful – and who is ugly. Not perfectly, but sufficiently closely that there should be no trouble identifying who might be in a protected group.

Given these considerations, why not protect the ugly—offer equal pay programs, monetary compensation, and penalties on employers who refuse to hire and promote ugly workers? After all, the source of their disability is all of us—all consumers, employers and citizens generally who prefer to deal with better-looking people and who must be compensated, in the form of lower wages, to deal with bad-looking salespeople, workers and fellow employees.

On its own merits protecting the ugly through legislation and regulation seems as reasonable as protection for racial, ethnic and gender groups. And if there were no side-effects of that protection, I would very much favor it. But I do not. The reason is simple: Protection of yet another group is likely to detract from the political energy needed to protect other groups. This is a political opinion, not an economic analysis. But there is no doubt in my mind that political willpower is scarce. That being so, the question becomes where we want to spend that scarce resource. My own preference—and others will surely differ—is to spend it elsewhere, in the United States particularly on racial minorities. In other countries, with which I am less familiar, I have little doubt that there are groups that are more deserving of legislative and administrative protections than the indigenous ugly.

The Future of Beauty

Before thinking about the future of beauty, we need to think about its past. Why is it that humans generally react positively to what I trust I have shown are the generally agreed-upon characteristics that lead us to say that some people are good-looking? Popular books have tried to explain the biological basis for this behavior or to exhort people to grow out of what is viewed as a concern for something that should no longer be relevant for purely biological purposes.¹⁹ Beauty may have been correlated with health, and thus reproductive fitness, before the Industrial Revolution. But in rich countries today, and in much of the rest of the world too, most people obtain sufficient nourishment that their physiognomies are not impaired, so that variations over a wide range of looks do not indicate variations in health and the ability to reproduce.

So why does beauty still matter in most of our economic transactions? I believe the answer is that our reaction to beauty—the rewards that employers pay because customers and other employees like having good-

¹⁹ Nancy Etcoff, *Survival of the Prettiest: The Science of Beauty*. New York: Doubleday, 1999; Naomi Wolf, *The Beauty Myth: How Images of Beauty Are Used Against Women*. New York: Anchor Books, 1992.

looking people around them, as do the employers themselves – is an atavism. We are programmed to like the symmetry of face – the symmetry of features – that is what typically describes a person who is generally regarded as good-looking.²⁰ Our attitudes toward human beauty are leftovers from days when human beauty was more than an aesthetic issue.

Where will we be one hundred years from now – will this atavism disappear, or, at least, will it cease having pervasive economic effects? In economics the best way of predicting is to use rational-expectations forecasts. The studies for the U.S. cited in Table 1 are based on data from the 1970s, and some of those summarized in Table 2 use data from the early 2000s. I don't see much of a trend in this admittedly tiny sample of research. That being the case, I doubt that beauty will disappear as a determinant of economic outcomes. The good-looking will continue to be favored, both monetarily and in other exchanges; the bad-looking will be disfavored.

Does this mean that the bad-looking are hopelessly disadvantaged? The answer is yes and no. The answer would be yes, in the sense that the rapidly-expanding body of research that I have presented makes it clear that bad-looking people generally earn less than good-looking people who are otherwise identical. There are other areas of economic activity that I have not discussed where the same disadvantages exist and that have been and will be demonstrated by future research.

The answer would be no, in the sense that looks are only one of the many earnings-enhancing characteristics that people possess. As the title of an advice article in a magazine for middle-aged women suggests, "Make the Most of Your Looks."²¹ If I am bad-looking, I will avoid occupations (movie actor?) where my bad looks will penalize me greatly. Instead, I will choose an occupation where the skills that I possess in abundance have a chance to bring me the biggest rewards, both monetary and non-monetary, and where the rewards for the good looks that I lack are less important. So yes, plain people are penalized; but they can and should structure their careers to avoid the worst effects of those penalties. In the end, bad looks are a disadvantage and are likely to remain so. But they are not a crucial disadvantage, not something that cannot be partly overcome.

20 Judith Langlois, Jean Ritter, Lori Roggman and Lesley Vaughn, "Facial Diversity and Infant Preferences for Attractive Faces," *Developmental Psychology*, 27 (Jan. 1991), pp. 79-84; Judith Langlois and Lori Roggman, "Attractive Faces Are Only Average," *Psychological Science*, 1 (March 1990), pp. 115-21.

21 *More*, October 2008, p. 143.

Apologia and Thank You's

As you may have noticed, I am more than slightly older than the typical person giving an inaugural oration. You might wonder: What is going on here? I have been teaching in universities since 1968, and I became the American equivalent of *hoogleraar* in 1976. (In the U.S. that is called a full professor; I call it a dead-end job.) For this reason of extreme age, as proud as I am of taking up this position, this lecture does not represent achieving a new pinnacle in the same way that it has for so many others.

What this lecture, and my new position as professor of labor economics at Maastricht University, do represent is a new stage of my life—a chance to try my skills at teaching and research in a different environment from that in which I have operated for so many years. You might ask: "Why Maastricht?" There are several answers, but without doubt the main one is my friendship and collegiality with your own Professor Gerard Pfann. I believe Gerard invited me to a conference that took place in Amsterdam in January 1992. We spent a lot of time chatting about work and about life, and I realized (and I think he did too) that we both enjoyed each other's company and could benefit from doing joint research.

Gerard invited me to spend a month in Maastricht in Summer 1994, and I have been back many times since. During this period he and I have worked on and published a number of papers together, including three on labor demand (one of my four major areas of research over the last 45 years), one on the economics of beauty and one on academic labor markets (two of my other main areas of concentration). At this point Gerard is my modal coauthor; and, given my advanced age, I should think he will remain so. It has, I believe, been a productive scholarly relationship. As important, it has resulted in our families becoming increasingly close. Given that my sons are nearly middle-aged adults, and our grandchildren are only just entering adolescence, it has been a pleasure to watch Sara, Thomas and Florens grow up. And it has been a pleasure spending time with Carina and the kids, and to have them spend time in Austin. So to the entire Pfann-Furnée family, my thanks.

While Gerard was clearly the main impetus for this new activity, it was certainly facilitated by the staff and faculty in the Algemeene Economie. I thus thank Joan Muysken (and some day, perhaps, I'll be able to pronounce the Dutch "uy" sound!), and also the secretarial staff in the Faculty, particularly Silvana deSanctis.

When I was here a year ago, one of the colleagues mentioned that he assumed this position was a part-time job for me during retirement. It is part-time—I am here for only one teaching block per year. And I like

to think that I will not be working as hard in the next three years as in the past 42, although a rational expectations forecast would suggest that thought is incorrect. In fact, however, the U.S. has no mandatory retirement. I can stay at the University of Texas at Austin until I am no longer able to stand in front of a classroom or run a regression. But staying there would restrict my life and prevent me from enjoying the kind of variety that makes life fun. The University of Texas has kindly offered me an arrangement where I am paid only half-time, and teach only in Fall semester. This allows me to be here – to enjoy the spice of life that I covet.

During each of my two-month stints in Maastricht my wife, Frances, will be here with me. I fell in love with her at first sight (I completely agree with Paul McCartney) when I saw her at a religious service in New Haven, Connecticut, in September 1965. We have been married for 43 years. She is the mother of our two sons, and the grandmother of our six grandchildren. She reads my papers, or at least the less technical ones; she has been a continuing sounding board for my ideas, including encouraging me to truncate the bad ones; and she has been a consolation in times of adversity, which have thankfully been remarkably few. I have been blessed in many ways, but most of all, by having met her.

Ik heb gezegd.