# Planning Full-Size Life Careers <br> Consequences of the Increase in the Length and Certainty of our Life Spans over the Last Three Hundred Years 

Arthur E. Imhof


#### Abstract

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Until recently, human life spans were very unreliable. Our ancestors counterbalanced this insecurity by pursuing various non-egocentered strategies. With the life span's increasing length and standardization, these became obsolete and were abandoned. Today, almost all of us have the chance of living life to its maturity. In order to make full use of it, however, we must plan full-size life careers from a very early stage. Otherwise the years gained will largely be wasted. The article starts by summarizing demographic development over the last three centuries. These "hard facts" are then correlated with evidence from other sources, for example from fairy tales and sayings. Finally, recent developments in Japan, the country with the highest life expectancy in the world today, are discussed.


Professor Arthur E. Imhof, Department of History, Free University of Berlin, Habelschwerdter Allee 45, D-1000 Berlin / West 33, Federal Republic of Germany.

## Introduction

One of Grimm's fairy tales is called "Three Score and Ten" [in German it is called "Die Lebenszeit" i.e. "Lifetime"] and reads as follows:
"After creating the world, God decided to fix the life span of each of His creatures. The donkey came and asked: "How long shall I live, O Lord?" "Thirty years", said God. "Does that suit you?" "Oh Lord", replied the donkey, "that's a long time. Think of the hard life I lead, carrying heavy loads from morning to night, hauling sacks of grain to the mill so others can eat bread, with nothing to encourage and refresh me but kicks and blows. I beg you remit some part of my term." God took pity on him and struck off eighteen years, whereupon the donkey went away comforted and the dog appeared. "How long would you like to live?" God asked him. "Thirty years were too many for the donkey, but I should think they'd be just right for you." "Lord", said the dog, "is that your will? Think of all the running I have to do. My feet
couldn't stand it that long. And when I have no more voice to bark with or teeth to bite with, what will I be able to do but limp from corner to corner and growl?" God saw he was right and struck off twelve years. Then came the monkey. "You, I trust, will be glad to live thirty years", said the Lord. "You don't have to work like the donkey and the dog, and you're always cheerful." "Ah, Lord", he replied, "it may look that way, but the truth is something else again. Even when it rains porridge, I have no spoon. People are always expecting me to amuse them by making faces and cutting capers. If they give me an apple and I bite into it, it always turns out to be sour. How often a grin conceals a sad neart! I could never put up with such a life for thirty years." God was merciful, and took off ten.
Last came the man. He was cheerful, bursting with health and vigour, and he asked God to fix his life span. "Thirty years", said the Lord. "Will that be enough for you?" "Too short!" the man cried. "Just when I've built my
house and lit a fire in my own hearth, just when the trees I've planted are beginning to flower and bear fruit, just as I'm settling down to enjoy life, you want me to die. O Lord, give me an extension." "I'll add the donkey's eighteen years", said God. "Not enough!" the man replied. "Very well", said God, "you can have the dog's twelve years as well." "Still too little." "All right", said God, "I'll throw in the monkey's ten years, but no more. That's all you get." The man went away, but he wasn't satisfied.
So the years of a man's life are three score and ten. The first thirty are his human years. They pass quickly. His health and spirits are good, he enjoys his work and is glad to be alive. Next come the donkey's eighteen years. Burden after burden is put on him: he has to carry the grain that feeds others, and kicks and blows are his reward for his faithful services. Then come the dog's twelve years: he lies in the corner and growls, but he has no teeth left to bite with. And last of all come the monkey's ten years, when the man goes soft in the head, does foolish things, and becomes the laughing stock of children."
When the brothers Jacob and Wilhelm Grimm (1785-1863 and 1786-1869 respectively) collected their fairy tales at the beginning of the nineteenth century, it was simply a matter of traditional experience that adults seldom lived to be more than seventy years old, and that their life spans were subject to natural physical and psychological aging processes. Ethnologists are acquainted with an even more minute segmentation of the human life cycle in ten year phases from dozens of lifestage rhymes (Joerissen-Will 1983). These rhymes, with some variations, usually read as follows:
> "With ten years a child; with twenty years a youth; with thirty years a man; with forty years doing well; with fifty years standing still; with sixty years starting to age;
> with seventy years an old man; with eighty years no longer wise; with ninety years sport for children; with hundred grace from God."

Comparing what is said in the fairy tale with the life-stage rhyme one is surprised to find that in the former a person "goes soft in the head, does foolish things, and becomes a laughing stock of children" between the ages of sixty and seventy, while aging is a slower process in the latter. In the rhyme a man is not sport for children until he is ninety. Similarly, according to the fairy tale only the first thirty years of life are really good "human years". After that everything is downhill. In the rhyme, by contrast, a man does not reach his zenith until the age of fifty, and does not begin getting old until he is sixty. - Are these two different systems of measurement? That may be the case, but to an historical demographer a number of other considerations present themselves. - And with that I have arrived at my topic.

Historical demography as a relatively new sub-discipline of European social history concerns itself only at a very basic level with statistics, figures and computer print-outs. Of course hundreds of dates of birth, marriage and death from dozens of parish registers have to be gathered and analyzed: a time-consuming task, which usually involves data from the sixteenth or seventeenth century to the present. Therefore, historical demography can practically only be pursued in research teams and with the help of a computer. Once the data banks are established, the historian's imagination, which has only temporarily been suppressed, is soon kindled again. Suddenly people made of flesh and blood emerge, before his mind's eye, out of the immense and anonymous collection of data: live human beings who were born here or there, lived for a time, did or did not have children, and, finally, met with a more or less premature death at the hands of "Plague, Hunger and War". In subsequently interpreting the statistics, tables and figures a number of other sources, besides just the "hard facts", come into play. "Go beyond the decimal points" becomes the motto, whereby one gladly borrows from disciplines like ethnology, folklore, art history or literary studies. At this stage, historical demography becomes truly interdisciplinary.
It is here, however, not the place to teach a lesson in historical demography (as an intro-
duction cf. for ex. Dupâquier 1984, and Willi-gan-Lynch 1982). I would prefer to summarize some of the results of my roughly fifteen years of research in this field and present them for discussion within the context of our present topic, the "Life Cycle". For lack of space, a simplified schematic sketch will have to suffice. I will contrast conditions as they were "earlier" with those of "today". "Earlier" means the time about three hundred years ago, that is around 1680. From then on there are numerous parish registers available for the compilation of historical demographic data banks. Conditions "today", on the other hand, refer to the 1980s.

It is, of course, obvious that developments over such a long period of time seldom take a direct course. It would be no problem to continually point out dozens of class, confessional, period or regional variations. That is, however, not the point here, but rather to establish a basis for an interdisciplinary discussion with ethnologists. This is not possible without some "hard facts". They shall serve as a solid foundation upon which I will comment from my perspective as an historical demographer. Subsequently, ethnographers will have their turn. All their objections, comments and contributions are more than welcome as a dialogue is sought across the borders of the individual disciplines. They can only serve to stimulate historical demography.

## I: A full-size life span for everyone: a recent phenomenon

Anyone happening to take a European death register from about three hundred years ago into his hand will find a picture similar to that which I have schematically represented at the upper left of Figure 1. In it one person lived to be sixty years old, another ten and a third eighty, while two children were carried to their graves before their first birthdays. The number of years lived by each of these five persons total to a sum of 150 . That results in an "average" of thirty years. It is possible, that a figure of this sort is being referred to as "his human years" in the fairy tale.

Today, as can be seen in the upper right of Figure 1, one person lives to be sixty-eight, an-
other eighty-two, another seventy-four and another seventy-six. Calculating the arithmetic average we come up with a figure of seventyfive years which more adequately reflects the reality of our day than was the case with the average of thirty years three hundred years ago. Only since the standardization of our life spans at a relatively uniform length does it make sense to speak of an average life expectancy as a relatively certain quantity. In former times it was the variations from a far more theoretical average that were more important.

The life span which is, today, similar for everyone: for every man, every woman and above all for every child is a recent phenomenon. It has existed since, at best, about two or three generations. If one examines the development more closely, one sees that there is practically no infant and child mortality in Western Europe today; on the upper end, however, the process has obviously not yet come to its conclusion. The distribution of the age at death has already come into narrow focus, but is not yetas one look at the obituaries in the daily papers tells us - concentrated at one point. In addition, the average age of adults at death is not invariable. It is still rising a bit from year to year. The average life expectancy for German men was sixty-seven years in 1970/72, by 1981/83 it was seventy. For German women it rose from seventy-four to seventy-seven years in the same time period (Statistisches Jahrbuch 1985, 78).

If, against this background, we consider the fairy tale and the life-stage rhyme again, then we may find that the former refers to figures from an earlier period of experience, while the latter may be based on a later state of development. The task which presents itself to fairy tale and life-stage rhyme researchers is to ascertain the period in which these originated and to correlate the results of their research with those of historical demography (as was attempted, for example, by Schenda 1983).

What was said above tends to make it seem more appropriate not to pay so much attention to the "average length" of lifetimes in talking about their historical development, but rather to consider the differing distribution of ages at time of death. In the two middle segments of


Fig. 1. A schematic representation of life courses (above), the distribution of age at time of death (middle) and survival curves (below) "earlier" (c. 1680; left) and "today" (c. 1980; right)

Sources: These topics were dealt with in greater detail in two previous articles: 1. From the Old Mortality Pattern to the New: Implications of a Radical Change from the Sixteenth to the Twentieth Century. In: Bulletin of the History of Medicine 59, 1985: 1-29;
2. Life-Course Patterns of Women and their Husbands: 16th to 20th Century. In: Aage B. Sorensen et al. (eds.): Human
Development and the Life Course: Multidisciplinary Perspectives. Hillsdale (New Jersey) 1986: 247270.

Figure 1 the "earlier" distribution is contrasted with the distribution "today". About 25 per cent of all deaths pertained to infants and small children, another 25 per cent to youths. For the other half of the original number born that reached adult age it was indeed true that: "In the middle of our lives/death is all around us." Today, on the other hand, we are pretty sure of our lives until about the age of sixty. Death only begins his real harvest among those over seventy or seventy-five.

This is the topic of the two lower segments of Figure 1. The survival curves express how many, of 1000 persons born at the same time, reach an age of one, ten, twenty, thirty etc. years. "Earlier" 500 out of 1000 persons lived to see their twentieth birthdays. Hence it took two births to produce one adult. Today, by contrast, half of the people born in a given year are still alive at the time of their seventy-fifth birthdays. Let us take, as a further example, the fiftieth birthday, then we find that in the
"earlier" period only 200 out of 1000 were still alive, while today nine out of ten people live at least this long.

We cannot stress the quintessence of our life spans' having attained a certainty that was unthinkable just a few generations ago strongly enough. Of even more importance is the fact that today everyone has his life span. "Earlier", by contrast, a quarter or even - if one considers children and youths - half of the life courses never even got going. Today, it is worthwhile to invest in life courses, in our own as well as those of our children, students, contemporaries: financially, educationally and emotionally. Parents no longer have to produce four children when they want to have two. When someone dies in a traffic accident at age thirty-five, or commits suicide at age thirty, then the obituary accusingly asks "Why?"

How many years do we then have the right to live?

Great existential uncertainty was caused in former times by the troika that was mentioned above and that still rings in our ears from the All Saint's Litany: "Lord preserve us from plague, hunger and war." "Plague" must be understood as the collective form of all sorts of pestilence, regardless of whether smallpox, cholera, or another of the formerly epidemic infectious diseases. "Hunger" and "war", by contrast, usually took their greatest toll indirectly. The poor harvests which periodically recurred no longer caused people to starve in the seventeenth, eighteenth and nineteenth centuries, but they did lead to the spread of "hunger epidemics", for example typhoid fever or other gastro-intestinal disorders, caused by the qualitatively and quantitatively inadequate nutritional substitutes consumed. Similarly, relatively few people died as a direct result of military activity. Here, again, the "war epidemics" which the troups spread in their paths or which eminated from their quarters like brush fires were much worse. Typhus comes to mind here as an example of a skin disease spread mainly by body lice (which were of course likely to be in uniforms that were worn for weeks without being washed).

The middle and lower segments of Figure 1 contain references, important in the context of
the history of mentalities, to the epidemiological transition which took place some time between "earlier" and "today". If about four-fifths of our forefathers died of parasitic and infectious diseases at the beginning of this century, today we die to about the same extent of chronic diseases, particularly cardiovascular diseases and cancer. It is, of course, correct to say that those infectious and parasitic diseases took their toll at every age and therefore made every human existence uncertain. It is, however, just as correct to draw attention to the fact this "old form of dying" was usually a matter of a few days. Because we did not become immortal as a result of the reduction of infectious diseases, we now have those conditions which existed before, which played a role less frequently but now have a much better chance of ravaging us.

Our chronic and irreversable causes of illhealth do not only kill us with greater frequency at an advanced age, beyond sixty and seventy, but they also kill us - and this in contrast to plague, smallpox or typhus - slowly. This "new form of dying" is often a long and torturous process, that does not just last for days, but for weeks, months or years. It is trying, because we have to deal with it both on physical and psychological terms and because the result is in death's favor all along. It is this dying - and not so much death - that many of us are afraid of today: afraid of the dependency it causes, the possibility of years of senility, of burning out in stages, of not being able to die, of miserably having to wait for death as a release.

Undoubtedly, in this context we find ourselves in an unfortunate situation today. Many of us are inclined to ask faintheartedly - particularly when we ourselves or our direct relatives are involved - if we have really made a good exchange in eliminating infectious diseases as a likely cause of death making room for chronic conditions. By doing so it was not only our life spans that we lengthened but also our process of dying.

While considering centuries here - from 1680 to 1980 - it is perhaps not so out of the way to have a look into the future as well. One does, of course, have to be very careful about
extrapolating lines of historical development into the future; everything can turn out differently than expected. Keeping these reservations in mind, let us look again at the right and left halves of the three segments in Figure 1 for conditions "earlier" and "today" and let us imagine three further segments for some point in the forseeable "future", for example the year 2000 or shortly thereafter. These may appear as follows. At the top the life courses will be even more standardized. Ever more people will live to a similarly high age, whereby the average number of years lived will probably increase. For the segment in the middle this would mean that the distribution of the average age at death would be more narrowly focused at about the age of eighty-five. At the bottom the rectangularization of the survival curve would be even more pronounced. With the exception of a few accidental deaths and suicides, practically everyone would see their eightieth birthday and die sometime between the ages of eighty and ninety.
In this context, however, we encounter a moment of uncertainty which played an important role in the fairy tale related at the outset: the length of biological life expectancy. The question is how long a person could live, on the average, if he did not - as has usually been the case - prematurely fall prey to some lethal cause of ill-health. In other words: how many years, on the average, has nature forseen for human beings? All living things have - as biologists put it - mean maximum life expectancies. In the fairy tale the donkey had twelve, the dog eighteen, the ape twenty and human beings "three score and ten". In the life-stage representation human beings do not usually go to their graves until they are one-hundred. Historical demographers have arrived at a mean maximum life expectancy based on death registrations for the last three or four centuries that lies between the two mentioned above: eighty-five years. This figure remained practically constant during the entire period researched. Octogenarians had an average remaining life expectancy of four to five years in 1600 ; in the Federal Republic of Germany today they have six to seven years ahead of them.

Hence, what has been happening in the course of this period, and what can be documented by historical demography, is that more and more people have been able to take advantage of an ever greater part of the life span nature foresaw for us. Putting it in biological, medical historical or even historical demographic terms: while the genetically pre-programmed physiological life expectancy of human beings has remained constant the ecological life expectancy has increased two-and-a-half-fold between the seventeenth century and today. It has risen from the former average of thirty years lived to its present average of seventyfive (Grmek 1983, 159-163). It could be eightyfive, or at least it could have been in the period studied.

If this development continues for some time, then the day may not be too far off when our ecological and physiological life expectancies finally coincide. Then, the survival curve will show the expected "rectangular" shape, life courses reach an interchangeable standard length of around nine decades, and the ages at death will therefore no longer be scattered, but conform to this norm of about eighty-five or ninety years. The certainty of this prognosis is, however, related to the constancy or relative constancy of our physiological life expectancy. But even if - as is subject to quite some controversy (Fries and Crapo 1981; Manton and Stallard 1984) - a gradual expansion were to take place here, this would not necessarily stand in the way of the following line of reasoning.

The fact that our ecological life expectancy is still rising at present is due to the fact that after the reduction in the number of deaths resulting from parasitic or infectious diseases, deaths which are now a result of chronic conditions are met with later and later in life. Today we generally do not die of cancer or cardiovascular diseases at an age of twenty or thirty or forty years, but rather at sixty, seventy or eighty, and the tendency is rising. If this continues we may see the day when we approach the limits of our physiological life expectancy regardless of whether it is, as today, eightyfive or ninety or ninety-five years -, before we have even reached the symptom threshold, not to mention the lethal phase of one of these
chronic diseases. This would mean nothing other than that we would once again - as did our forefathers - die a quick death as the result of one of the usually unimportant causes of illhealth, but - in contrast to our forefathers only after we had lived a full, long and mature life to its very end. We would no longer need to be afraid of death or of the manifold dependencies which may precede it, we would be healthy and independent until our last breaths. The unfortunate situation we find ourselves in at present is, when seen against this background, only a transitory phase we have to go through. In the long run, however, there is little room for pessimism.

Yet even without looking into the future, the implications of the expansion of our ecological life expectancies which has taken place thus far are so tremendous that it is worth our while to reflect upon them more intensively.

## II: Implications of full-size life spans on our living together

In part one we emphasized the former physical uncertainty of every human existence at every age as the most important difference between "earlier" and "today" with the relative certainty of our life courses at least until the age of sixty or seventy. Our forefathers would have been behaving very unwisely if, in the face of this omnipresent uncertainty, they had put any given EGO, their own or someone else's, at the center of their thoughts and actions. Considering the strategies they employed to attain stability in their everyday lives, our eyes are opened to conditions and modes of behavior such as those described by Ferdinand Tönnies (1855-1936) over one-hundred years ago in his book "Gemeinschaft und Gesellschaft" originally published in 1887 . According to him the historical development of social life has been from the "Gemeinschaft" as a quasi natural, emotionally intimate organism in the form of families or groups of village neighbors to the colder form of the "Gesellschaft" with rational, means-to-an-end ways of thinking.

Even though, in principle, I see this the same way, I would like to argue the point somewhat
differently in light of Figure 1. In light of the reconstruction of genealogies or the remodeling of marriage markets an historical demographer would hardly consider claiming that the locally confined and easily observed "Gemeinschaften" which he has, of course, also recognized were the result of a natural growth process. If at all, they were so only to the extent that nature threatened human beings with "Plague, Hunger and War" and forced our forefathers to live in "Gemeinschaften". These communities and their commonly cherished ideals stood at the middle of all their thoughts and actions. They promised more certainty and stability than the unreliable life span of any single EGO. In terms of time they outlasted any single life span, no matter whether short or long. Every EGO was orientated toward this sort of a center for the length of its earthly life. In order to illustrate this sort of behavior I would like to introduce some concrete examples from my research. They belong to those, of which I am happy to admit, that they are the result of ethnographic stimulation (for example, from the work of Netting 1981 (and earlier) or Stoklund 1985 (and earlier): Netting researched a Swiss micro-population in the Canton of Valais over a period of 300 years, Stoklund a Danish on the Island of Laesö over 700 ).
The farm called Välteshof is situated in the small village of Leimbach in Schwalm, northern Hessen. Source materials allowed me to investigate it from the sixteenth century until the present time. With its forty hectares of good land it was one of the largest and most prosperous farms in the area. The land under cultivation would easily have been enough for a number of families. Yet although the Välteshof was in an area where one finds partible as well as impartible inheritance customs, it was never divided. It was always passed from one generation to another intact, even when there were a number of heirs. Considering marriage strategies in detail, one soon finds that the other daughters and sons were also well taken care of. They also profited from this system of transmission. The unimpaired reputation of this respected farm helped them to far better marriage partis than if they had only


Fig. 2. Adult life courses and the question of stability in life "earlier"
(c. 1680; left) and "today" (c. 1980; right).

Sources: This topic was dealt with in greater detail in two previous articles: 1. Nos ancêtres à la recherche de stabilité. In: La France d'Ancien Régime. Etudes réunies en l'honneur de Pierre Goubert. Paris 1984: 301-315; 2. Die verlängerte Lebenszeit Auswirkungen auf unser Zusammenleben. In: Saeculum 36, 1985: 46-69.
come from a five-hectare farm. One did not just many the progeny of the next best farm. Arrangements were deliberately made between farms similar in size and constancy of reputation.

Between 1552 and 1977 a total of sixteen generations succeeded each other on the Välteshof. Some of the farm administrators became old, or even very old: eighty-three, eighty-five, ninety. Yet none of them would even have considered running the farm at such
an advanced age. How could they have, they were probably far better acquainted with the life-stage rhyme than we are! And did it not clearly and directly state: "with sixty years starting to age; with seventy years an old man; with eighty years no longer wise; with ninety years sport for children"? And this is just how we find them, in keeping with the wisdom of this saying, turning the farm over to the next generation at sixty or sixty-five. In order not to be left with nothing to do they reserved a few
tasks for themselves in the very detailed transfer contracts, for example the care of a few beehives, a piece of garden or a field. More importantly, they were always supposed to have a horse available to them, to ride "outside of the district": a wise distribution of tasks. The young, physically more able generation had, as was fitting, the manual labor on the farm; the older, by contrast, more mature, cautious, wiser and diplomatic generation could take care of relations with nearer and more distant neighbors or relatives, if necessary mediate in disputes between farmers or with the ruling class. And if the protagonist in fact no longer, as had obviously been the case earlier, stood at the center of activity, but rather more in the background as an éminence grise, it was psychologically easier for him to deal with this transition within the framework of this system. Or it may not have been a problem at all: when we consider the motto over many an old farm, which ethnographers usually know better than we historians do:

This house is mine and yet not mine;
To whomever follows it will be the same.

Running the farm until one's last breath was not the most important goal in life, it was more important to ensure that the reputation of the farm remained intact and that the next generation was able to take it over and run it in just as good a condition, as was the case when one stepped into the shoes of one's predecessors. In the farm's, and not simply in one's own, best interest, one was only able to bear the responsibilities as its administrator for as long as one was in good physical condition, that is until about the age of sixty. By that time one had done his duty and could retire to a position as one of the final links. It was the next generation's turn. In this system there was no life's work, as there is today, that is related to one person and that comes to an end with our EGO and therefore always keeps us under pressure to use our time efficiently. There was only a temporary role in a common cause that withstood the passing of generations. In this sense our forefathers' horizon, in relation to time, had quite a different dimension than ours does
today. Besides this, their lives were made up of two segments: one that was more or less long on earth and another which was incomparably longer in eternity. Dying and death were somewhere between these two as passages; they were followed by resurrection and, finally, eternal life in God's glory. We have increased our life expectancies at birth in the course of the last three hundred years two- and threefold, but at the same time most of us have lost our belief in eternity. Our lives are, on the whole, infinitely shorter than those of most of our still religious forefathers.

The two lines quoted above express another aspect as well. It was not just by chance that I spoke above of the farm administrator and not of its owner. None of the representatives of the sixteen successive generations on the Välteshof would have considered himself the owner. They were only temporary administrators, just as in the rhyme: "This house is mine and yet not mine". The idea of playing a role expressed here becomes even more obvious when we look at the names of all these farm administrators. With one single exception they were all called Johannes Hooss! How was this possible? Was not a high rate of infant and child mortality at that time mentioned in part one? And now, of all places, on this farm the son Johannes is always supposed to have survived? The riddle is easily solved, when one analyzes the system of naming on the Välteshof. Not only one son was christened with the name Johannes, a number of them were, in an extreme case as many as nine. In order to differentiate between them they were given second names: Johannes-Jakob, JohannesKlaus, Johannes-Andreas etc. In this way, even with infant and child mortality rates as high as fifty per cent, there was always, with the one exception mentioned above, at least one Johannes alive who was able to take over the farm and run it during his physically best years. And this for more than four hundred years: a truly remarkable stability! It was, however, only attainable because these administrators did not place their EGOs at the center, but rather only played the role of "Johannes Hooss". Not the one or the other Johannes, born then or having died then was
important, but rather someone's assuming and fulfilling this role in the best interest of the Välteshof. The farm and its unimpaired reputation over many generations, and not one individual named Johannes, stood at the center.

If someone were to ask me how representative this Välteshof example is for that time, then I would say that this question is "wrong" because it is ahistorical. At a time when not only an individual's physical world was much smaller than it is today, usually ending at the edge of the next forest or the next mountain chain, but also when individual life spans had extremely varying lengths, in short: at a time when these many small worlds were much more colorful and the individual life courses were far more inimitable, there could not have been a representative world, nor a representative life course. This has only been possible since our worlds and world views have been normed, equalized, standardized and homogenized. Today they are almost interchangeable. We can cite one example and it is representative of a hundred others. This was not the case in earlier times.

Representative of earlier times is much more the condition of omnipresent uncertainty and inequality. The strategies that were developed and doggedly followed in order to attain stability could take on hundreds of different forms. In the case described for the Välteshof the solution and the possibilities of solving this problem were different from those already employed in the neighboring village of Loshausen where many of the farms were only five hectares, i.e. barely large enough to feed one family. But there one will also have tried to attain stability, since human beings do not seem to be able to live without it. In this area of research scholars of European ethnology should be particularly able to offer a large number of differentiated answers, ranging from the stability producing traditions of the worldly sphere, to gestures, deportment, rites and rituals to the religious practices of common people which survived over generations.
In the same measure that our life spans became more certain, so have these strategies and forms of behavior which formerly provided stability become more and more obsolete and
have been abandoned. Where traditions are still maintained today, or where they are resurrected, one often finds that this has more to do with attracting tourism than with the supporting of the long duration of mental structures in local communities. Saints such as Rochus and Sebastian lost their raison d'être with the disappearance of the plague. We also no longer need Saint Blasius since most of us are now able to turn to a more effective throat, nose and ear doctor. And the high pressure hoses of our fire departments have also served to wash away Saint Florian. The saints in heaven are becoming extinct. - Have we actually considered the fact that one of the reasons for the increasing de-Christianization of Western society since the eighteenth and nineteenth centuries can be sought and found in the transition from uncertain to certain life spans? And how counterproductive this secularization process has been for the length of our life spans? What does a two- or threefold increase in our earthly existences mean when compared with the simultaneous loss of our belief in eternity? Very little indeed!

The fundamental change from an uncertain to a certain life span just mentioned not only led to symptoms of dissolution in the Community of Saints; it also caused the bonds among earthly beings who had formerly been forced to live in close-knit communities by "Plague, Hunger and War" to become looser. The more certain the individual became, the more he was inclined to leave the old communities with their tight restrictions and restraints and to become a part of a society, in Tönnies' sense, as a liberated EGO. As historical demographers we were surprised only by the speed with which this happened and is still happening.

A whole series of statistical evidence indicates that the development in this direction, as can be seen, for example, in Figure 3 for the Federal Republic of Germany over the last two or three decades. An increasing reluctance to become enmeshed in long-lasting personal commitments and responsibilities is simultaneously expressed by a decrease in the number of legal marriages (on the other hand more consentual and easily dissolved co-habitation),

Fig. 3. The increasing reluctance to make longterm commitments as seen in the Federal Republic of Germany, 19601982, resulting in a decrease in the number of marriages and livebirths, and an increase in the number of divorces and one-person households.

Source: Statistisches Jahrbuch 1985: 66, 71, 76, 80.

a drastic increase in divorce rates (and fewer re-marriages of the divorced), by a likewise drastic fall in the number of births (not only per woman, but also because fewer couples have any children at all), and most strikingly, by a steady increase in the number of oneperson households. In 1961, in the Federal Republic one out of five households consisted of one single person only, in 1970 one out of four, in 1982 one out of three. In the big cities, as for example in Hamburg, more than $40 \%$ of all households ( $40.6 \%$ ) consist of a single person, in West Berlin even more than half of them do
( $53.3 \%$ ). Of course, one has to be careful in interpreting these figures, since they do not mean that more than $50 \%$ of all inhabitants of Berlin live as singles. But the trend is clearcut, and it is being repeated in many other parts of Europe as well (cf. for Switzerland 1960-1980: Buscher 1986).

To stress the connection between a society on its way towards an association of singles, on the one hand, and an increasingly safe and standardized long life span of practically all of its members, on the other, I would like to introduce the striking example of Japan into this
discussion. Until recently, Japanese society was considered to be particularly collectivistic. During the past decades, however, things have been, and still are, rapidly changing.
Figure 4 shows, at the top, the number of persons per household in Japan from 1955 to 1980 in comparison with those in the Federal Republic of Germany from 1950 to 1982. At the bottom, we find the percentage of one-person households in both countries during the same time periods. Obviously, Japan is undergoing the same fundamental shift from an older, more traditional society of the type "Gemeinschaft" to a more "modern" one of the type "Gesellschaft", which at its extreme end would eventually lead to an "association of singles". At the moment, the time lag seems to be somewhat more than thirty years. In 1955 Japan had an average of 5.0 persons per household and 3.5 per cent of all households consisted of one person, in 1980 these figures were 3.3 persons and 15.8 per cent. Japan thus reached a point in this development at which Germany found itself in 1950. Here, again, we have to be careful with the extrapolation of historical findings into the future, even the very near future. But if this development continues in the same steady manner as it has during the past decades, then by the year 2000 the average Japanese household will consist of about 2.7 persons, but 25 per cent will consist of only one person, i.e. the same percentage as Germany had in 1970.
Figure 5 demonstrates the life spans' development as an underlying process of what has been shown in Figure 4 in both countries. When tracing the life expectancy bars for Japanese men (top left) and Japanese women (middle left) from 1899/1903 to 1983, we easily discern a concave pattern (see the schematized shape of the curve, bottom left). Repeating the process with the bars for German men and women from one period to the next (top and middle right) reveals a convex pattern (bottom right). In Germany life expectancy at birth increased rapidly in the first half of this century and has only slowly gained ground since the Second World War. In Japan exactly the opposite thing happened with the big jump taking place between 1947 and 1960. For men this
meant an increase from 50.1 to 65.3 years and one for women from 54.0 to 70.2 years, or for both sexes a yearly increase of one additional year of life. In Germany, by contrast, the big jump in life expectancy took place more than a generation earlier with the break-through coming between 1901/1910 and 1924/1926. In that period, the life expectancy for men increased from 44.8 to 56.0 years and for women from 48.3 to 58.8 years. This is to say that the aging process of German society started at least one generation earlier than that of the Japanese. In Germany, as well as in many other European countries, we have had more time to get accustomed to a large proportion of old people and to the various effects, impacts, implications and consequences of a longer and more certain life expectancy for everyone on the individual, the family, and society. In Japan, on the other hand, the more recent and spectacular increase in life expectancy during the 1950 s, ' 60 s and ' 70 s, along with the old age boom, which resulted from it, came as a shock and many Japanese still seem to be living and behaving under the influence of that shock. In the meantime however, Japan has superseded all other countries in the world with regard to the lengths of the average life span, ahead of even the Scandinavians who topped the list for many years. In 1984, Japanese women passed the threshold of eighty years for the first time in history ( 80.14 years at birth; 74.54 years for men).

As already outlined, my theory - derived from observations of traditional European peasant societies - is that the uncertainty of life at the time of the old mortality pattern forced our ancestors to develop strategies in which more durable values, such as the enduring prestige of a prosperous farm, were placed at the center of one's thoughts and actions instead of an individual EGO. Only after the change from the old to the new mortality pattern with its far more certain, more reliable, and longer life span resulting in a quasi-guaranteed duration of any single EGO, could the traditional non-egocentered world be, and in fact rather quickly was, abandoned and replaced by an EGO-centered one, as has been so predominant in the Western World for several years now.

Fig. 4. Japan is following Germany, with a time lag of about thirty years, towards becoming an "association of singles", expressed in a decrease of the mean household size and an increase in oneperson households in per cent of all households.

Sources: Japan Statistical Yearbook 1985: 47-48; Statistisches Jahrbuch 1985: 66. This topic was dealt with in greater detail in a previous article: Individualismus und Lebenserwartung in Japan. Japans Interesse an uns. In: Leviathan 14, 1986, 361-391 This article could be prepared thanks to a Research Fellowship generously granted by the Japan Society for the Promotion of Science in the first half of 1986, for which I would like to express my gratitude.

## JAPAN

GERMANY
Persons per Household



One-person Households in per cent



In Japan, on the other hand, where the old mortality pattern lasted several decades longer and where the break-through in increasing life expectancy occurred only after the Second World War, the non-egocentered "Weltanschauung" lasted correspondingly longer and the shift towards a more ego-centered world and more individualistic and egoistic behavior only began in the second half of this century. But then, the change came about very rapidly. Japan was a collectivistic society of the type "Gemeinschaft", but it is no longer so. The ongoing shift from a "Gemeinschaft" to a "Gesellschaft" seems clear-cut and straight forward.

It is true that the Japanese have come the furthest in the convergent development of ecological and physiological life expectancy, but
these also have not yet reached a point where they completely coincide. The average life expectancy of Japanese women is now over eighty, but not yet eighty-five or ninety; and that of Japanese men is even lower. And as long as this gap still exists, many Japanese women and men will still be confronted with the much feared problems of old age, the various forms of senility and senile dementia (Alzheimer's disease!), the dependency that results from it, the need for constant care, and the fear of not being able to die (Council for Science and Technology 1986).

At the height of this sudden jump in life expectancy and the resulting old age shock in 1972, a novel appeared in Japan, a terse and pithy literary treatment of what was then a


Fig. 5. Life expectancy at birth in years for men and women in Japan 1899/1903-1983 (left) and in Germany 1901/1910-1981/1983 (until 1934 German Empire, from 1949 Federal Republic of Germany; right). - In Japan, the increase of the bars from period to period follows a concave pattern but in Germany a convex (at the bottom).

Sources: Japan Statistical Yearbook 1985: 55: Statistisches Jahrbuch 1985: 78.
very current topic. The novel was "Kōkotsu no hito" by the famous authoress Sawako Ariyoshi (1931-1984) (literally "A man in ecstasy", published 1984 in an English translation as "The Twilight Years", all quotations are from this English version). Carefully researched statistical, medical-geriatic, psychological, economic and religious details give the novel a solid foundation. In Japan the book
was a sensational success. During a single year over one million copies were sold. The nation seemed to have been waiting for just this sort of literary documentation of the topic. I would like to deal with the book a bit more in detail here and to recommend it as well, because, in a nutshell and with plenty of food for thought, it represents something that may happen to us more frequently in the near future - before the
gap between ecological and physiological life expectancy here, hopefully, becomes narrower.

The plot of the novel is quickly told. The Tachibana family lives on the outskirts of Tokyo in a modestly comfortable one-family house. The husband Nabutoshi, is a white collar employee in a trading company. His wife, Akiko, works full-time as a secretary in a lawyer's office. Both of them are in their "best years". They have only one son, Satoshi. He is intensively preparing himself for his college entrance examination. Nabutoshi's parents live in a small house which was built for them in the garden attached to his house. The father, Shigezō, is eighty-four and the mother a decade younger. One day, without any warning, she suddenly dies of a stroke. Only then does it become apparent just how senile Shigezō has become. He is no longer able to take care of himself and needs permanent supervision. Hence, the drama can begin.

In accordance with Japanese tradition it is the duty of the oldest son to take the father into his house and the duty of the daughter-inlaw to take care of him. Akiko, however, is very attached to her position and refuses to stay at home. Since Shigezō repeatedly wanders away from home, none of the very few existing homes for the aged is willing to take him in. The only alternative is to put him away forever in a mental asylum, a completely unacceptable thought for the Japanese. In the end a solution is found. Akiko begins to work on only three days a week and spends the other four looking after her father-in-law. On the other three days a student couple, who move into the empty garden house, takes charge of Shigezō.

One may see through the authoress' didactic intentions or admire how she very subtly describes, step by step, the Tachibana's long and painful learning process and how the mother, Akiko, and the son, Satoshi, progress from their original disgust at the old man's senile behavior to being able to accept it. It is, in any case, impressive to see how Satoshi's attitude changes, at first aghast, pleading "Dad, Mum. Please don't live this long!" (Ariyoshi 1984, 132) to finally saying: "I wish Grandpa had lived a little longer" (Ariyoshi 1984, 216). Even more penetrating, is the description of Akiko's
metamorphosis, as the person who suffers most, giving in more and more on the path from her original opinion that the situation was "totally unacceptable" (in this case with regard to the idea of her giving up her job, but actually in relation to the entire situation which is unbearable for her (Ariyoshi 1984, 70)); via the heartfelt insight that "She might be troubled at this moment about Shigezō, but was there any guarantee that she herself would not suffer the same sad fate thirty or forty years hence?" (Ariyoshi 1984,74); and then in wavering resignation "Things would be infinitely easier for her if Shigezō died! She no longer felt guilty about her secret thought" (Ariyoshi 1984,110), and finally: "...starting today, she vowed to prolong his life for as long as she possibly could, knowing in her heart that she was the only one in the family who was able to do so" (Ariyoshi 1984, 187). What is protrayed here is a perfect example of learning through experience, bearing fruit in what the Japanese still call "the philosophy of resignation".

At this point, I would like to cite a number of passages from Ariyoshi's novel. They pungently outline the reactions of people confronted with the sudden increase in life expectancy, for example perceiving a relative who went on living physically, but much less so mentally. In the novel, the Tachibanas thus register, dismayed and speechless, the fact that Shigezō "cries like a baby" (Ariyoshi 1984, 203). "Every night the old man got up to empty his bladder; ...he urinated in the garden like a dog" (Ariyoshi 1984, 81).
Their momentary speechlessness is, however, soon overcome and the descriptions of the senile grandfather become just as drastic as they are sometimes brutally accurate, particularly those by the man's own son and his grandson. Nabutoshi states coldly: "Dad's turned into a complete idiot....Dad is the most wretched example I've ever seen" (Ariyoshi 1984, 78). "I just can't stand it" (Ariyoshi 1984, 69). And Satoshi digs further: "He's not a child. He's an animal" (Ariyoshi 1984, 82).
Yet eventually they all begin to reflect on the situation. Is the increase in life expectancy really a blessing? Nabutoshi says: "I don't think this kind of tragedy ever occurred when
a man's average life span was only fifty years. Now, thanks to an improved diet, we live much longer. But does the world realize what wretchedness awaits us in our old age?" (Ariyoshi 1984, 71). "Buried in a cheerless existence, ...miserably waiting for death?" (Ariyoshi 1984, 65). "When I look at Dad, I feel that l've just got to die before I go senile. Why do people live so much longer these days? It's frightening to think of a world where no one dies and everyone keeps growing older and older" (Ariyoshi 1984, 83). Akiko "never dreamed that such a hellish fate awaited the elderly" (Ariyoshi 1984, 92). "How tragic it is to grow old, thought Akiko" (Ariyoshi 1984, 143). "Old age was a far more cruel fate than death" (Ariyosh 1984, 154). "I pray that I won't suffer a similar fate. I'm sure no one willingly grows old" (Ariyoshi 1984, 164). - No wonder that Nabutoshi poses the rhetorical question: "Don't you think that ideally a man should die the minute he retires?" (Ariyoshi 1984, 83). And that the neighbor, Mrs. Kadotani, herself in her seventies, reasons that: "A family should celebrate when someone old dies" (Ariyoshi 1984, 81).

Reflection becomes deeper and deeper. What, actually, should we do with so many additional years? Do they really represent a gain? Shigezō "had lived too long without finding any pleasure in life. What had he lived for all these years?" (Ariyoshi 1984, 123). "After all, what's the use of living if you don't know what's going on any more?" (Ariyoshi 1984, 183). "What did he live for all his life?" (Ariyoshi 1984, 185).

The shock that the Japanese experienced then was based on just that dilemma. They had learned, generation after generation, to live lives of about sixty years and to fill them adequately, but not to live ones that suddenly lasted much longer and which went in the end through a hell of chronic ailments and senility. If it were, as was the case earlier, over suddenly, although meanwhile at a more advanced age, then it might be acceptable. But as it was? For example the case of the over sev-enty-year-old grandmother: "She died at once
when she had the stroke. Don't you think it was an ideal way to go? She didn't suffer at all" (Ariyoshi 1984, 21). But the Japanese who were becoming increasingly older in the 1960s and 1970s were not able to die at the end of their suddenly extended lives in this "more pleasant" manner: "I imagine when one's bedridden, one isn't happy about living to a ripe old age" (Ariyoshi 1984, 31). What one would like was, perhaps indeed, a longer life, but also one that was healthy up until the end, and then to be able to fall to the ground like a ripe apple. Such, in any case, was Nabutoshi's wish: "He fervently hoped he would fall to the ground and die bravely when he grew old" (Ariyoshi 1984, 136).
Ariyoshi, incidentally, described such an ideal case of sudden death after a long and fulfilled life; an ideal case today, but perhaps typical of the future? - When Akiko visited a center for the aged one day to see if it was suitable for Shigezō, the ninety-year-old Mister Suzuki had just died after playing his favorite game in perfectly sound mind and body. The old people who were there discussed his death without much concern: "He was lucky never to have known a day's illness all these years and to have died without suffering any pain. ...I wouldn't mind dying like that. ...Every elderly person present viewed the death dispassionately - they even envied the dead man, ...a perfect specimen of an old person sound in mind and body" (Ariyoshi 1984, 122-123). The old people were not afraid of death, but of the more modern phenomenon of not being able to die. Having had enough of life makes them apparently willing to accept death. What they pray for is a quick and benign death like Mister Suzuki's (Wöss 1984). Ariyoshi's additional lesson is taught through her heroine when she tells us: "Akiko resolved to keep both her mind and body active. She would cultivate various interests to keep her busy in her old age" (Ariyoshi 1984, 185). That brings us, finally, to the crucial point of this contribution and to its conclusion, namely: "Growing old should not be someone else's problem" (Ariyoshi 1984, 185).

## Conclusion: Maturity of life as chance and destination

"Growing old should not be someone else's problem"<br>(Ariyoshi 1984, 185)

We cannot repeat the quintessence of Ariyoshi's novel often enough, because many people have not yet realized that it has something to do with everyone of us. "In the middle of our lives/death is all around us" was true three hundred years ago. Our forefathers had to act accordingly, and they did so with remarkable success. As a consequence of the constant threat emanating from the troika of "Plague, Hunger and War" they did not place any EGO whatsoever, not even their own, at the center of their worlds and the "Weltanschauung". More lasting values were placed in this position, for example the unimpaired prestige of a farm. They spent their uncertain earthly existences, however long or short, in the service of such values, playing the role for which they were intended. Despite the greatly varying lengths of their individual life spans they were able, in this way, to maintain stability over generations which provided a framework within which to anchor their uncertain existences. Even when the individual life spans never, or only seldom, ran their full length, the rapid turnover of lives did not interfere with this system. By the same token this system did not cause the maximization of the number of years lived to become the goal and an early death was not the catastrophe.

In the meantime, however, there has been a fundamental change. "In the middle of our lives/death is all around us" is just no longer a reflection of reality. Hardly anyone of us dies, as did our forefathers, at some time along the way. For the first time in history all of us have a lifetime and most of us become older than just retirement age. As a rule, almost all of us go on living after we have stopped working, or after the children have left the house. Yet some of us apparently have no idea what to do with the years we have won. For such people they are just additional years, too many times they are just wasted. In all these cases the danger is
present that growing old will become indeed someone else's problem - quite to the contrary of Ariyoshi's exhortation.

Maturity of life today belongs to a standard life span just like the phases of childhood, youth and the "best years". It has become a matter of course, at least in a biophysiological sense. Our generations belong to the first that have been granted this chance: maturity of life as a chance and destination, as everybody's chance and destination! But with that we are also the first who have to consciously come to terms with this situation, if the chance is not to pass us by unused. Just as the increased length and certainty of life is primarily an increase in its length and certainty for young people and not so much for old ones - the old people of today are just young people of yesterday who have survived in greater numbers -, hence, it is primarily the task of the young and/or their teachers to start planning consciously for this recently acquired full-size life span early in life, to plan a lifelong career. The saying "We don't learn for school but learn for life" is truer today than ever. Life today is, however, no longer confined, as our schools and the saying too often communicate, just to our professional lives or our lives as housewives and mothers. The subsequent phase of maturity and completion consists of ten, twenty or thirty years for most of us today. Will we be prepared for that? I am not of the opinion, considering the ever more rapid obsolescence of concrete skills and knowledge, that ten-year-old school children or twenty-year-old students should learn down to the minute detail what they should do as sixty-five-, seventy- or eighty-year-olds. But we can very well instill them at a very early age with the basic insight which Ariyoshi's heroine only painfully recognizes in the face of the many years wasted by Shigezō: "Father led such a wretched life! What did he live for all his life? He never showed any interest in a hobby. He hadn't made friends with his neighbours, or gone to the theatre or worked on bonsai. ...Akiko resolved to keep both her mind and body active. She would cultivate various interests to keep her busy in her old age. Growing old should not be someone else's problem" (Ariyoshi 1984, 184-185).

It is essential that we develop interests in our youths which we maintain our whole lives long and which grow and mature with us so that they can bear fruit at the end of our lives. Our world is so rich, our cultures are so abundantly manifold, that a lifetime, no matter how long, will never leave us enough time to come to an understanding of all of them. But the longer our lives last, the more mosaic stones we can gather and place side by side the clearer the picture will become and the more mature our reflection will be. A solid frame of reference is and will remain a pre-requisite. And this frame, this foundation must be established in our youth.

If I might introduce one more point into these final considerations, I would like to emphasize the fact that I am not interested here in judging or moralizing, but rather only in recognizing some basic facts and in delineating their consequences. - With the increased certainty of our life spans the old strategies for maintaining stability that were formerly necessary for our survival began to crumble, became obsolete and were abandoned. In the course of this process the individual began more and more to losen the bonds placed upon him by the communities which formerly provided him with support and to free himself of their tight restraints. It is quite improbable that this emancipated individual will ever return to those "bad old communities" of his own accord, no matter how much some among us complain about interpersonal relationships becoming much cooler. The statistics tell a different story, and it seems more realistic to me to recognize this impartially, than to try to force outdated "Gemeinschaft" forms upon us again in a reactionary and nostalgic manner. The trend is towards more and not fewer singles. One could pointedly conclude from the findings that human beings are obviously not a priori the social beings for which they have so long been held. He was only forced to be one by adverse conditions - "Plague, Hunger and War" over centuries. When these causes of compulsion no longer exist and he is materially able, then he obviously makes use of the chance to go through life alone more often. I do not mean to imply that this growing number of singles is
only interested in egotistical self-realization or that they have lost sight of the rest of humanity. On the contrary: single people also have to assume responsibility for others. And if they no longer have familial, they still have social obligations. Many of them are very conscious of this fact, today as well as in the past. After all, life-long voluntary celibacy is not a modern invention, but has a long occidental tradition. What is new, however, is the fact that today many of us go through life alone, and that going through life alone has, in principle, become a realistic possibility for every one of us, particularly and for the first time in history for every woman.

Singles are also responsible for themselves, this includes the days and years after their retirement, i.e. when they are growing old. They should not assume that someone will always take care of them. Yet even if the consistent pursuit of a well planned life-long career keeps being alone at an advanced age from becoming loneliness, the gap between our ecological and our physiological life expectancies, which still exists, may still lead us to inevitable dependency in our old age. This is the unfortunate situation in which we find ourselves momentarily and which we have to surmount.

I am well aware of the fact that I have formulated my theses rather exclusively from the standpoint of historical demography. I find it indubitable that yet other factors, besides the transition from the old to the new mortality pattern and the increasing certainty and standardization of our life spans, have contributed to our finding ourselves today on the way towards being a society of singles. One thinks, in this context, of the family's continually being unburdened with relation to the functions it fulfills, if indeed not losing all of its functions, as a result of this ever more of them being delegated to superordinate institutions (cult, legal, protective, economic, cultural and socialization functions), or that an ever larger middle-class is, today, able to take advantage of all sorts of services and products. Even in case of illness we are no longer dependent upon the family.

Even if we have talked with great warmth about our forefathers and how well they may have solved their formidable problems, that
does not mean that I would nostalgically like to return to the times in which they lived. "Lord preserve us from Plague, Hunger and War!" echoes much too loudly in my ears for me to want to change places with them - not even in consideration of our momentarily so unfortunate form of dying! What I do, however, admire about them is how steadfastly they approached and solved their problems. If there is anything to be learned from this, then it is that we should look current problems in the eye, recognize on-going developments and draw our conclusions from them. We now have biologically long lives; we should now take care that in every individual case they also become fulfilled ones. It is, otherwise, a shame about our additional years, a shame about our long and certain life spans.

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This lecture is dedicated to the many prominent European ethnologists who time and again, during the past ten years, have provided me with fresh food for thought, thereby helping me to better understand the findings of my own research in historical demography.

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