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Reminiscences of an Extreme Century

Intergenerational differences in time heuristics: Dutch people's collective memories of the 20th century

Peter Ester, Henk Vinken and Isabelle Diepstraten

ABSTRACT. The new millennium has inspired social observers to contemplate the events that shaped the 20th century. Little is known about how the general public and generations within it interpret the landmark events of this century. If generation theory is correct one may hypothesize that different generations remember and interpret distinct events. Generations share different collective memories and, consequently, intergenerational differences are expected in the time heuristics that generations apply. This hypothesis is tested with the Dutch CentERdata Millennium Survey ($N = 1391$). It is observed that though generations recall similar events, they interpret these events in distinct ways, based on their formative experiences. **KEY WORDS** • generations • the Netherlands • social and personal events • time heuristics • the 20th century

1. Generations, formative events, and time heuristics

In his much-applauded masterpiece ‘*Speak, Memory*’, Vladimir Nabokov (1967), undisputedly one of the greatest novelists of the 20th century, brilliantly describes how self-awareness, personal biography, and societal turbulence during one’s formative years are interrelated. Living in exile marked his youth, deeply influenced his later life, shaped his individual destiny, and imprinted the biographical accounts of his childhood and adolescence. Major experiences during Nabokov’s formative years fueled his autobiographical reminiscences,

experiences which not only dominated the progress of his individual life course but in turn also molded his later memories of the past. *'Speak, Memory'* illustrates a more general sociological notion, namely that individuals' current 'time heuristics' are substantially influenced by significant happenings during formative years.

The coming of the new millennium has sparked a truly unremitting flow of *fin de siècle* accounts of the balance between the pros and cons of the 20th century, along with, of course, speculations about what the 21st century will bring. It has inspired many scientists, social observers, cultural trend watchers, journalists, and artists to look back at the major events that have shaped the 20th century. From every perspective it has to be concluded that the 20th century was a century of extremes: dramatic world wars, genocide, upheaval, poverty, class conflicts, pollution, 'the most murderous century on record' according to historian Eric Hobsbawm (1995: 13), but also a century – particularly in the West – of economic progress, technological and medical advancement, the formation of democratic welfare states, educational attainment, and a general liberalization of lifestyles. Cultural and scientific elites have clearly looked upon the 20th century with very mixed feelings, but what about the public at large? How do ordinary citizens perceive and evaluate the major events that characterized the past century? How do they interpret the impact of these events on their personal lives? What do they see as the most influential positive and negative achievements? Who were the historical persons who, again the public thinks, made the differences in the 20th century? Did they serve as leading role models for the public at large? These are challenging questions that fall back on people's time heuristics, i.e. the ways in which people frame their interpretations of the past, their perceptions of the present, and their expectations of the future on both an individual and a collective level.¹ We hypothesize that time heuristics at these two levels are highly interrelated. An essential cornerstone of generation theory is that major societal events that took place during the formative period of distinct generations do have a lasting 'Nabokovian' impact on their life course and worldviews, which sets them apart from other generations.

Generations differ because they grew up in different social, cultural, political, and economic circumstances that markedly and distinctively influence their basic values, attitudes, beliefs, and life chances. Karl Mannheim was the first generation theorist who consistently related intergenerational differences to unique features of generations' formative years (Mannheim, 1928/1929). In his classic contribution to generation theory Mannheim states that a generation consists of individuals born in the same period and sociocultural space who are exposed to a shared range of historical events.² They share a feeling of co-generational membership with their contemporaries based on the recognition of a common destiny of their *Schicksalsgemeinschaft*. A generation refers to individuals born in the same historical period, who share similar youth experiences

in their formative years, who subjectively identify with their generation, and have an elementary sense of a joint history and of being different from other generations (cf. Diepstraten et al., 1998, 1999a; Van den Broek, 1996). It is important to emphasize that in this Mannheimian perspective, generations are more than mere numerical birth cohorts, for generations are united by a shared sense of belonging to that specific generation, i.e. they identify with their generation because they feel they share a common history. A generation is a social construction rather than a biological concept (Dilthey, 1875).

If the recognition of a shared biography unites generation members, this implies that generations differ in the way they define and select major historical events. Linking this important theoretical notion to the century behind us this would first of all assume that different generations will point at different historical events in the 20th century that were of crucial importance. Events that are likely to have a decisive and lasting influence, according to this theory, usually occur during the formative years of a generation. More specifically this would imply that members of the same generation will recall the same historic landmarks that make up their shared sense of having a common biography and which distinguishes them from earlier or later generations. As a result, different generations share different collective memories and, consequently, intergenerational differences will occur in the time heuristics that generations apply in analyzing major events. Members of distinct generations, according to this argument, recall different historical events that had a decisive influence on the 20th century.

One of the first studies that made this innovative link between the concept of generation, personal and collective biographies, and generational time heuristics was by Schuman and Scott (1989). Their research, based upon a US sample, found that Americans belonging to different generations depicted distinct national and world changes that were especially important during the past 50 years. The authors concluded that 'age is clearly the most general predictor of memories for events and changes over the past 50 years, and the graphing of the age relations provides strong evidence than in all or almost all such cases, age represents cohort effects, which in turn have their origins in adolescence and early adulthood' (Schuman and Scott, 1989: 371). Thus, there is some evidence that significant societal events during the formative period unite members of the same generation and create a shared collective memory because of shared personal biographies. But we know little about the variation in the significance that different generations attach to the watershed events of the 20th century. What is at stake is not only – as in the Schuman and Scott tradition – *which* events but particularly *why* these events are being mentioned by different generations. Which factors influence the identification of 'most significant' events? It may be that generations choose the same events but for totally different reasons, e.g. based on primary personal experience or on a commonly

acknowledged agenda of events. All generations are likely to mention the Second World War as an event that painfully characterized the 20th century but the motivation to do so will differ with the actual experience with this war. In order to advance the study of intergenerational differences in time heuristics we need to more fully understand the motivational and interpretative choice justifications underlying these differences. What are the choice justifications proposed by different generations for naming events that shaped the 20th century? How do generations differ in their time heuristics and how is this related to basic features of their formative years? Do generations hold a unique time consciousness in looking at the past? Are there systematic differences in this respect between older and younger generations? Do distinct generations applaud different public figures who have influenced the direction of the 20th century? These are fascinating questions that inspired us to do a large-scale study on intergenerational differences in time heuristics in Dutch society on the threshold of the new millennium.

2. The CentERdata Millennium Survey

Our research design combines quantitative with qualitative measures. In the second half of May 1999 we collected data from a sample of almost 1400 respondents drawn from the larger Telepanel of CentERdata, a survey research institute affiliated with Tilburg University.³ The Telepanel sample consists of 2000 Dutch households, representative on all key demographic variables. Respondents have a computer and modem at home and are interviewed on a weekly basis on a wide variety of subjects.⁴ Respondents are sent a questionnaire by modem, they fill in their answers on the computer screen, and return the completed questionnaire to CentERdata by modem. Data are then almost immediately available for further analyses. Our sample ($N = 1391$) aged 16 years or older is representative for the Dutch population with regard to key-demographics such as age, sex, education, and income.⁵ The advantages of computer-assisted interviewing based on a telepanel are its rapidity of data collection, large possibilities for consistency controls, reliability of trend change measures, relatively low non-response rate, and the 'anonymity' of online 'interviews' possibly producing more reliable data – where respondents may be more likely to give answers that may be 'socially undesirable'. The most important themes that are addressed in the CentERdata Millennium Survey include: time consciousness (time horizons with respect to past and future); attitudes about the past and the future of Dutch society and of respondents' earlier and future lives, and personal expectations of the future; judgements about the 20th century (including the main societal and personal events, most influential people at world, Dutch society, and personal levels); and expectations about the

21st century (optimism/pessimism, with respect to Dutch society and respondents' personal lives, motives for societal and personal optimism or pessimism, fantasies about the 21st century, and predictions for the future).⁶ This article primarily analyzes responses to the questions relating to the 20th century. In addition to prestructured questions, at several moments in the questionnaire we invited respondents to reflect freely on a number of issues central to our basic theme.⁷ The respondents' avid use of this opportunity provides meaningful qualitative insights (cf. Hicks, 2000). Besides the quantitative measures presented in this article, these qualitative insights will be a main source of detailed interpretative analysis.⁸

In order to detect possible intergenerational differences, one prewar/war generation is distinguished (born before 1945), and two postwar generations (born between 1945 and 1964, and born after 1964, respectively). This distinction is made in view of the finding by Schuman and Scott (1989) that direct personal exposure to the Second World War evokes intergenerational differences in time heuristics, a finding that is eminently relevant for Dutch society as well (cf. De Graaf, 1988). From a historical viewpoint, distinguishing between (pre-)war and postwar generations is a highly salient and sensitive feature of Dutch society (Becker, 1990).

The structure of this article is that section 3 reports on time consciousness in Dutch society; section 4 analyzes Dutch citizens' memories of the past; section 5 surveys the role attributed to the 'grand' men and women of the 20th century – also from a generational perspective. Finally, section 6 draws the main conclusions and puts these in perspective.

3. Time Heuristics: Horizons and Evaluations

Time is an increasingly popular theme in sociology. Garhammer (1999: 17) suggests that '[m]any sociologists and also other social science disciplines lately have discovered time as a central dimension of social action, that is rediscovered after studies by Durkheim (1912) on "social time", by Simmel (1987) on the "rhythm of life" and by Elias (1939) on the civilization of time discipline'. Popular 'diagnoses of our times' also ponder heavily on the time dimension with a prominent role of the contemporary loss of time consciousness and the current rise of historical ignorance. Contemporary society is believed to lack a notion and appreciation of history, especially among its young people, according to the complaints of many social observers (e.g. Bloom, 1988). According to these commentators, the past as a pivotal concept has lost its meaning. The past is 'a closed chapter'. The fragmentation of time and the meaninglessness of time are core elements of postmodern thinking. Today only the 'here-and-now' counts which in itself is a result, according to postmodernists, of our own

construction and not something that reflects reality. Perspectives of the past and prospects of the future have lost their guiding function. What remains is innovation in the 'here-and-now'. 'New', 'flexible', and 'dynamic' are the keywords. This postmodern time consciousness is thought to contradict the time consciousness of other periods. Time divisions are no longer uniform or dependent on collective rhythms, but more differentiated, spread-out, and objects of individual choice (Adam, 1995; Breedveld, 1999; Elchardus, 1982, 1996; Nowotny, 1994). Basic hopes for 'better times' are transferred from the future to the present, thus detaching the present from linear time. Problems have to be dealt with now and the future loses its attractiveness in this sense. Beliefs in progress are replaced by an insatiable need for innovation, a need for times that are not better per se but are different, and by a need to divide public 'collective' time from one's private 'own' time, a desire to create a niche to escape time pressure, to be in control, to have 'free' time to pursue one's own private goals.

Can we provide any evidence of this 'postmodern' attitude towards time? The CentERdata Millennium Survey taps Dutch people's time consciousness in its quantitative aspects – through measurement of the length of their time horizon – and in its qualitative aspects – people's evaluation of the past, present, and future. Here we look at the meaning attributed to the past. We differentiate between a collective versus a personal time horizon and between the meaning of the past in a social and a personal sense. Table 1 summarizes the responses.

The postmodern idea that the 'here-and-now' dominates time consciousness has no empirical basis in our data. Less than 10% report that they do not reflect on societal or personal history. The largest group looks back over a period that coincides with their own life up to the present. This period is especially prominent when looking at people's own personal history (chosen by 73% of respondents), but when concerning society's past this choice drops to only one-third with half of the Dutch having a 'memory' that extends further than their own lifetime, and a quarter of all Dutch people having a backwards perspective of 100 years or more before their own birth.

When looking at the collective past, people seem more capable of exceeding their own lifetime. What is striking is that this conclusion applies especially to the youngest cohort.⁹ When we focus on the differences between the three cohorts, the largest group of the middle and eldest cohorts looks back as far as their own life, whereas the largest group of the youngest cohort draws upon 'the period of one or two generations before me' and thus looks beyond their own lifetime. We did not find generational differences in the length of personal time horizons. All generations consider the entire period of their own lives, rather than just the most recent parts of this period.

Looking at the meaning of the past (see Table 2), Dutch people tend not to be really progressive thinkers. Only about a third thinks the past was worse, but about the same proportion believes that the past was similar to the present.

TABLE 1
Past time horizon with respect to society and subjects' personal life ($N = 1391$)

The past	Netherlands and the world (%)	Personal life (%)
The year past	2	3
The last 2–5 years	3	6
The last 10 years	5	12
The period of my life up to now	30	73
The period of 1 or 2 generations before me	26	—
A hundred years or more before my birth	24	—
Never thought about this	9	7

TABLE 2
The valuation of the past at societal and personal levels ($N = 1391$)

The past	Netherlands and the world (%)	Personal life (%)
The past was similar to the present	32	39
In the past it was better	17	14
In the past it was worse	35	35
Never thought about this	16	13

Nostalgic views of a 'better' past are the least applicable: less than a fifth believes that the past was better. This finding applies to evaluations of both societal and personal history. Generations differ in their vision of past society, however.¹⁰ The eldest cohort contains the most progressive thinkers, with most people older than 55 years thinking that society in the past was worse than today's society. Most people in the middle cohort believe that society now is similar to that of the past. Those younger than 35 years are strongly divided: the numbers of young people perceiving the past as similar or worse are equal. No generational differences are found regarding the personal past.

In other parts of the CentERdata Millennium Survey we observed that the past has substantial meaning to people and not only in a quantitative sense (Diepstraten et al., 1999b). When asked what the concept of history means, the majority of Dutch people responded: 'something that shows how our time evolved'. History is a concept that clarifies our existence. The second largest group perceived history as something that is interesting in itself. These results reflect the two most common positions of professional historians (Beliën and Van Setten, 1996). Personal history has a comparable meaning to people, but in a reversed order, where for most people it is a 'memory to be cherished', and for a smaller group it is something that 'helps to understand their present life'. In

neither of the two valuations of history, societal or personal, do the three generations take up different positions (see Diepstraten et al., 1999b: 132).

Contrary to postmodern thought we can conclude that the time consciousness of (Dutch) people is not restricted to the present. For most people the time horizon is bound to their own lifespan when they apply time heuristics on both societal and personal pasts. Maybe more remarkable is that the youngest group has the most expanded time horizon when we consider their age. Thus although it is popular to attribute a lack of time consciousness and historical ignorance to 'today's youth' (see Diepstraten et al., 1999b, for an overview), our results show that young people take up the exact opposite position, that their time consciousness is highly developed and that they consider a period that extends far before their own lifetime. Further, they are the least likely to judge society's past as a worse period while, in contrast, this is how elderly people look at society's history (thus displaying their belief in progress), while along with the middle-aged, some young people share the perspective that the past was similar to the present. Both collective and personal history have, therefore, a meaningful integrative function for people (Hicks, 2000). Dutch people, both young and old, still think that history helps to clarify our current existence. In this way history functions as a source from which they derive a sense of identity. History gives meaning to today's society and their personal lives. Modern time consciousness is definitely not timeless, restricted to present-day orientations, nor is history meaningless to Dutch people. But it remains to be established whether they have vivid recollections of the past, to what events they refer when they think of history, what events are 'merely' part of their collective memory and what events really have affected them personally, and how different generations are in these respects. These issues are the focal concerns of the next section.

4. Memories of the Past

The issue of historical memory of generations is closely linked to basic sociological ideas on generation formation. The 'founding father' of sociological generation theory, Karl Mannheim (1928/1929), emphasized that generations emerge when they become aware of their distinctive imprint from the major historical events, social, cultural, or political of nature, that marked the youth period or 'formative years' of these generations (cf. Diepstraten et al., 1998, 1999a, for an extensive discussion on these arguments). The nucleus of this idea is that the experience and consciousness of demarcating historical events separate one generation from another, previous or later, and have unique and lasting effects throughout the life course of members of these generations – on their personal outlooks, basic values, political attitudes, lifestyles, and the like. Research is still advancing regarding the supposed attitudinal consequences of

generation formation (see e.g. Van den Broek, 1996, for sophisticated but unsuccessful attempts to find predicted generational cleavages in political values in the Netherlands). Research into the basic assumption of Mannheim's theory – that generations emerge when cognizant of marked historical events – is rather limited (see again Diepstraten et al., 1999a, for evidence). An exception is the work of the US social scientists Howard Schuman and Jacqueline Scott (1989). With 1985 data they surveyed about 1400 US citizens to test their hypothesis that people of all ages will tend to report historical events and changes from their youth. Memorable events from the formative years (roughly between 15 and 25 years of age) are not only attributed most influence by divergent generation members, but the memories of these events will, so Schuman and Scott hypothesize in line with Mannheim, also have a powerful effect on the interpretation of events experienced later in the life course.

In a focal part of the CentERdata Millennium Survey we followed (and enriched) the approach of Schuman and Scott. We first asked our Dutch respondents to select up to two world or national events or changes from the past 70 years that are especially important to them.¹¹ Similarly to Schuman and Scott, we wished to include both specific time-bound occurrences (e.g. the Second World War, the first man on the moon) and more broader, general social and cultural shifts or changes (e.g. the cultural revolution of the 1960s, economic advancements). Second, we asked people to mention events or changes they think have influenced their personal lives or those of their families.¹² In both cases, open-ended questions were used. For this analysis we aggregated the responses into a set of detailed categories. Of course, categorization is an act of conceptualization. Schuman and Scott (1989: 364) note that even with seemingly well-demarcated events, such as the Second World War, sensitive judgement was highly necessary in creating the corresponding 'World War II' category. This was also the case with our Dutch data. Most people mention the exact words 'World War II' or 'Second World War', but there are numerous people who recall many different particular events that are vivid parts of the historical reality of this war ('The German invasion', 'D-day Normandy', 'Oppression and persecution 1940–1945', 'Liberation Day', etc.). Even more careful evaluations were, of course, necessary for coding less time-bound events. For this reason we chose to expand rather than to limit the number of event categories.¹³ After tabulating the reports of the first and second events that respondents mentioned, we arrived at a top 10 list of historically and personally influential occurrences.¹⁴ The results on the societal and personal level are reported in Table 3.

An overwhelming majority (77%) of Dutch people (aged 16 years or older) who mentioned one or two events identified 'World War II' as the most influential event (starting with the German invasion in the Netherlands on 10 May 1940, and ending with German capitulation in the Netherlands on 5 May 1945). The Second World War is definitely seen as the most important world and

TABLE 3

Top 10 most important events influencing society and personal life in the 20th century

Major societal events mentioned (%)	Major personal events mentioned (%)
1. World War II 77	1. World War II 57
2. Fall of Berlin Wall 15	2. Postwar economic affluence 6
3. Advancements in ICT 12	3. Advancements in mobility 5
4. First man on the moon 6	4. Advancements in ICT 5
5. Other wars/wars in general 5	5. Medical advancements 5
6. Nuclear energy/arms race 4	6. Educational advancements 5
7. World War I 4	7. Depillarization/secularization 5
8. Abolition of apartheid 3	8. Independence Indonesia 5
9. 1953 flood disaster 3	9. Other wars/wars in general 4
10. Television 3	10. Construction of the welfare state 4

Note: Each entry represents a sum of the dichotomy of those mentioning the event as the first or second most important event divided by the total ($n = 1303$ for societal events and $n = 549$ for personal events) mentioning any event

national event of the 20th century. Lagging far behind, the second most important event (15%) is the 'fall of the Berlin Wall' (9 November 1989). The third most likely response identifies an element of the 20th century that is not that clearly time-bound: 'advancements in information and communication technology' (ICT) mentioned by 12%. The Second World War, the fall of the Berlin Wall, and ICT advancements are clearly viewed as the most significant developments of the 20th century. Only two other events have support of at least 5% of the sample: the first man on the moon (21 July 1969) and 'other wars/wars in general'. There is one Dutch event among the most commonly identified events or changes: the 1953 flood disaster (recalled by 3% of the population). In this disaster, dikes broke as a result of an exceptionally strong storm and a spring tide on the night of 31 January/1 February 1953 (for this reason it is also called the 'February Disaster'), flooding large parts of the Dutch countryside below sea level in the south-west and killing almost 2000 people. This prompted a large-scale water engineering and building program (started in the same month of February 1953 and lasting until the late 1990s), aimed at protecting the country from similar disasters.

Almost all respondents (94% of all 1391 respondents) were able to mention at least one world or national event.¹⁵ A first look at generational differences (with the aforementioned three age groups of <35, 35–54, and 55+ years) shows that, in contrast to the results of Schuman and Scott (1989), there is no sign of significant generation distinctions. Equal proportions of the youngest, the middle-aged, or oldest generations mention the 10 most popular choices of important world and national events. In accordance with generation theory one

might have expected that, for instance, the Second World War would be an event that older generations mention more often than younger generations do. Conversely, as regards the 'fall of the Berlin Wall' and 'advancements in ICT' (as well as 'abolition of apartheid' and 'television') one would hypothesize that these events would be typical formative experiences of younger generations. The same may be said about 'first man on the moon' responses, this was expected theoretically to be a high-impact event for the middle-aged generation. But these relationships do not seem to hold. In the study done by Schuman and Scott (1989), stressing the vital importance of the Second World War is clearly related to age (the younger, the less mentioned), while the 'computer' and 'moonlanding' are not (neither is 'space exploration' as an encompassing category). Further, mentions of 'advancements in communications and transportation' are, surprisingly, most likely made by older, not younger, generations.¹⁶ For Dutch people, in contrast to the American public, the reported categories seem to refer to events that have influenced all generations to an equal extent.

The events identified do not, in other words, seem to relate to cohort effects, but instead seem to point towards period effects: the events identified have reoriented the lives of members of any late 20th-century generation. This alternative interpretation, that high-impact events such as the Second World War interfere with events or changes that took place later, suggests that perhaps the Second World War is a real period effect, changing the outlooks, values, and attitudes of all generations after it (and their interpretation of subsequent events). The other events or changes might well be influenced by cohort effects, but the Second World War overshadows all following postwar events, it dominates collective memory to such an extent that people tend not to reflect wholeheartedly on events that took place during their own formative years, but to first refer to this vivid collective memory. Regardless of this truly theoretical alternative (there is, of course, no simple way to test this alternative interpretation), it seems that as far as the recollection of world and national events goes, there are no generational cleavages to be found in the Netherlands.

Table 3 also reports the 10 most commonly identified national or worldwide events to which people attribute a strong influence on their personal lives or on those of their families. The non-response rate for this question is surprisingly high: 62% of all respondents indicated that they could not think of any national or world events with such an impact. Again, for the majority of people who do mention at least one occurrence that was influential on their private lives, the Second World War is the single most important event. Only relatively small proportions of Dutch people report other watershed events or developments. Remarkably, the other events mentioned are nearly all non-time bound occurrences. A notable exception is the characteristically Dutch response (by 5% of those who recall any privately influential event) of 'the independence of Indonesia'.¹⁷ The independence of Indonesia is a time-bound event, but still

cannot be pinned down to one particular date. The fierce fight for the independence of the former Dutch colony started as an aftermath of the Second World War, after the Japanese occupiers left the country, heightened until its climax in 1947 and 1948 with two major Dutch military actions, culminated in sovereign rule in 1949, and was prolonged by conflicts on significant parts of Indonesia involving the Netherlands or members of its former military force in the 1950s and even early 1960s (e.g. the transfer of New Guinea to Indonesia in 1963). At the end of the 1940s many young Dutch men joined the military forces to fight in Indonesia (in 1947 and 1948 about 100,000 Dutch troops participated in the military actions). One might expect, therefore, that those who report this event as influential would be members of the older generation (55+ years). However, looking closer at generational differences, there are no significant and sufficiently powerful associations between the likelihood of mentioning this event (or any other occurrence or change, for that matter) and the three generations. This striking result profoundly challenges the basic assumption of generation theory. When asked directly what events or changes affect the lives of people, which is the very focal assumption of generation theory, people who are born and socialized in different times and lived under distinct historical circumstances are not particularly inclined or are not the only ones to highlight particular events or changes as potent formative experiences.

In our CentERdata Millennium Survey we asked people to explain their choice of events. This explanation can provide more meaningful insights on the issue of generational differentiation. Although the selection of events does not differentiate generationally, it might very well be found that the interpretation of the impact or influence of the events does. Perhaps, also as Schuman and Scott (1989) suggest, the reading of similar events is distinct for those who personally underwent these events during their adolescence and early adulthood than for those who did not have this 'fresh' encounter and know and learned of the events secondhand, from books, parents, school, and other media.

A qualitative response analysis of the open-ended motivational questions suggests that older generations mostly report on the Second World War as a very drastic turning point in their personal lives. They explain their choice with impressive, but rather straightforward analyses, mostly restricted to day-to-day experiences. The younger generations, those who have not experienced the war, but 'remember' it secondhand, are somewhat more likely to see the Second World War from a broader perspective and underline the (political) value and attitudinal impact. In order to verify this preliminary result more quantitatively, we coded the responses in meaningful categories, a laborious task given the sometimes lengthy and very personal accounts that respondents presented. Next, we statistically tested the existence of generationally distinct interpretations. We concentrated on the events that have a large share of support, i.e. at the societal level 'World War II', the 'fall of the Berlin wall', and 'advance-

TABLE 4
Most mentioned events influencing society and personal life in the 20th century

Motivations top 3 societal events (%)	Motivation no. 1 personal event (%)
World War II (<i>n</i> = 986)	World War II (<i>n</i> = 269)
1. World impact 22	1. Family experiences (vague) 21
2. Value of freedom 13	2. Social and political attitudes 17
3. Shows man is evil 11	3. Personal experiences (vague) 14
4. <i>Nie Wieder</i> 9	4. Lives lost 9
5. World order 9	5. Captivity/into hiding 7
6. Lives lost/destruction 8	6. Economic/career impact 5
7. War experience 6	7. Strengthened solidarity 5
8. Reconstruction 6	8. Still lingers on (vague) 4
9. Don't know/no answer 8	9. Disturbed family life 4
	10. Negative values (fear, distrust, etc.) 3
Fall of the Berlin Wall (<i>n</i> = 194)	11. Put things into perspective 2
1. World impact 30	12. Way of perceiving world (vague) 1
2. End of Cold War 21	13. Miscellaneous 1
3. Value of freedom 19	14. Don't know/no answer 6
4. Other 16	
5. Don't know/no answer 9	
Advancements in ICT (<i>n</i> = 150)	
1. World access/global village 43	
2. Quality of life/labor 19	
3. Change (vague) 17	
4. Other 12	
5. Don't know/no answer 9	

ments in ICT', and at the personal level, again, 'World War II'. Table 4 shows the overall results.

Table 4 lists the most common explanation given by people who think that the Second World War was the most significant event on a societal level.¹⁸ The 'world impact' of this war is the main reason for Dutch people mentioning the Second World War. This general heading encapsulates numerous, rather indefinite, abstract replies such as 'turned the world upside down', 'impact on the lives of millions', 'cut deep wounds', 'lasting worldwide impact, economically and psychologically', 'determined world history', 'had consequences for the whole world', 'stamped history', 'is the number one worldwide watershed with two worlds before and after'. Other important motivations relate to the 'value of freedom' (freedom of expression, peace, democracy, liberation of dictatorship, a turn in thinking, a new 'elan'), fundamental assessments that the war 'shows man is evil' ('shows what people are capable of', 'danger of mass

psychosis', and the negative effects of collective insecurity, social threat, racism, nationalism, and the like), and values summarized with *Nie Wieder*, which is a combination of 'let's not forget' slogans, cautious calls to note signals that might lead to similar events, and a high receptiveness for the lessons of this past (no more war, but negotiation). Others signify that the Second World War changed the 'world order' (e.g. stimulated the founding of the United Nations, divided the world into East–West), they emphasize the 'lives lost and destruction' due to the Second World War, or recount their direct 'war experiences'. Among this latter argument one can find perceptive and hard accounts of life in wartime. Those who served as soldiers, witnessed the persecution of Jews, experienced the bombings of cities in the Netherlands and Germany, and survived internment and prison, all vividly describe their day-to-day experiences in detail. Others in this category simply mention that they underwent it actively, survived many hardships, and will always remember. It is no surprise that these types of answers are significantly more often given by Dutch people over the age of 55. In fact, 'war experiences' is the only category with significant and strong generational differences.¹⁹ The youngest generation (34 years or younger) is significantly more represented by 'shows man is evil', *Nie Wieder*, and 'don't know/no answer'. Generational distinctions are not very marked, however, with perhaps the exception of *Nie Wieder*.²⁰ The 'world order' argument is supported significantly more by the 35 to 54-year-old generation, but, again, the association with generations and support for this choice is relatively weak.²¹ There are no significant cohort differences in the 'world impact', 'value of freedom', and 'reconstruction' (the end of the Second World War signaling the start of rebuilding the Netherlands and Europe as a whole) categories.

There is, to conclude, some evidence that generations hold distinct interpretations of the societal importance of the Second World War. Mentioning the war as an event with a formative impact is not restricted per se to those whose youth period included real war experiences, but the interpretation of the formative impact is related to distinct formative experiences. Those who lived through an event in real life stay close to the day-to-day meaning of the event (in the case of the Second World War, survival and perseverance). There is some (but less strong) evidence that those who recall the same event from collective memory are more likely to derive its importance from their formative and abstract value-based orientation (e.g. the war as a warning to resolve conflict not by war, but by negotiation and tolerance). This conclusion would fit in perfectly with influential analyses of postwar cultural shifts changing the value contours of western societies, such as those noted by political scientist Ronald Inglehart (1990, 1997) on the shift from materialist values (physical safety, social security, and law and order) to postmaterialist values (participation, democracy, and self-fulfillment). All in all, generational differences in interpretations are strongest at the most concrete level, at the level of day-to-day experiences. The vaguer the

interpretations or the more they refer to abstract consequences, the less vivid generational distinctions are.

We can similarly interpret the results with regard to the two other main societal 'events' – the fall of the Berlin Wall and the advancements in ICT – before proceeding with the personal interpretation of Dutch people's number one choice: the Second World War (see right column of Table 4). The fall of the Berlin Wall, like the Second World War, is an event that can be more precisely placed in time and space (9 November 1989, Berlin). Advancements in ICT is, of course, a process without a specific beginning or end in time. The most mentioned arguments for the Berlin Wall choice are first of all its vague 'world impact' value, then the more specific 'end of the Cold War', followed by the more abstract 'value of freedom'. In the first and last cases no significant strong generational distinctions can be found. Responses in the 'world impact' category refer to the 'historical importance' of the fall of the Berlin Wall, the 'break-through', the 'turnaround', the 'new beginning', all rather multi-interpretable abstract illustrations of the impact of this event. In the 'value of freedom' classification we find emphases from 'freedom' and 'democratic possibilities' for people in the East to 'victory over' and 'failure of' the 'communist system' and 'totalitarian rule'. The 'end of the Cold War' points to the 'end of East–West oppositions', 'detente', the 'end of separation', 'isolation', 'stability in world relationships', and, importantly, the 'end of the threat of the Third World War'. People from the middle generation, aged 35–54 years, are overrepresented among those who explain their choice for the fall of the Berlin Wall with a specific reference to the 'end of the Cold War'.²² The concrete fearsome threats of the Cold War ('the bomb') have dominated most years of the formative period of many members of this generation. The fall of the Berlin Wall is not the number one choice of this generation (the Second World War is their number one choice and generations hardly differ in their choices for any societal event), but when they choose it, they closely follow the lines of generational reasoning in their interpretation of the societal importance of this event. This is not the case with interpretations of the advancements in ICT, which is not a clearly 'datable' event. The most common interpretation of this development is about the compression of worldwide time and space: the world becoming 'smaller', the 'world in my living room', 'more worldwide contacts', etc. Another more vague category, 'change', includes answers such as 'radical shift', 'shapes life in the future', and 'influences society'. There are no significant generational distinctions at the two ICT interpretations 'world access/global village' and 'change'. There are, however, generational differences with respect to the interpretation 'quality of life/labor', with keywords such as 'makes life easier', 'improves quality of life', 'increases possibilities for diffusion of information', 'positively influences labor market', helps to create 'interesting jobs', 'less heavy, physical labor', and 'higher wages'. The 55+ generation especially favors this 'quality of

life' interpretation which, in reference to Schuman and Scott's clarification of a similar finding in the USA concerning transportation and communication technologies (1989: 367), can be explained by older Dutch people's witnessing of the extraordinary changes that accompanied ICT.²³ In addition one might hypothesize that the older cohorts are those with an eye for the 'cultural lag' (see Ogburn, 1950). Technology changes practices in institutions such as labor life at a fast pace, but the non-material world of interpretations, norms, and values lags behind the practical possibilities that technology provides. The experienced lag between practice and culture might very well be greatest for those who have been socialized in a totally different world, in both practice and culture terms. For younger cohorts ICT might well be such a part of their cultural world that they are not capable of making a comparison with life in the pre-ICT world. This is what generation theory would predict, too. Older cohorts, having experienced a low ICT-profile life and labor world with fewer efficient ways of communication and more low-paid, physically strenuous jobs in their formative years, note the changes ICT brings to these worlds. The older cohorts, in other words, interpret these (again rather concrete) changes directly from their own and very distinct formative experiences. The formative years of younger generations are not colored by such discontinuous circumstances. For younger generations the life and labor impact of ICT is, in conclusion, self-evident.

Finally, in this section we quantitatively consider the motivations to mention the Second World War as the most important event for people's personal lives and those of their families (see also Table 4, right column).²⁴ Two weighty but vague interpretations show distinct generational positions: 'family experiences' and 'personal experiences'.²⁵ The vague category of 'family experiences' points to 'second-hand' motivations. People, particularly young people, are motivated to choose the Second World War as the most important personal and family event because members of their family experienced hardships during this war. No further elucidation on the exact impact of this fact is provided. The same results are found regarding the other vague category of 'personal experiences', the choice of the older generation in particular. Older people mention that the war was horrible and that they experienced terrible and threatening things, but do not give any further detail about the exact consequences of these experiences. Other people do, for instance when pinpointing the effects of the Second World War had on their social and political attitudes. They argue that they learned the value of basics such as having food and that they still have difficulties with throwing things away or people claiming that they are hungry when what they really mean is that they have an appetite. Others say it influenced their upbringing in anti-war attitudes, in attitudes of tolerance and respect, in critical attitudes towards any political system, and taught them to value peace, democracy, and freedom and to renounce dictatorship and power in general. The self-assessed social and political impact of the Second World War is found

more strongly in the youngest generations (25% support against 21% in the middle and 12% in the oldest generation), but to our surprise, considering the abovementioned expectations, the cohort differences are not significant at the 5% level.²⁶ What is significantly distinctive is the interpretation of the experiences at a concrete day-to-day level, a result we observed earlier.

5. 'No More Heroes, Anymore'

In this section we deal with another important topical issue of 20th-century historical and autobiographical memories: the 'grand' men and women of the 20th century. We asked our respondents to name at least one public person to whom they attribute particular influence and authority in the world in the last century. We also asked them to name at least one Dutch person with such an influence in the Netherlands, and finally to name one famous personality of the 20th century who influenced their outlook on life positively and functioned as a source of inspiration. Table 5 reports these findings: the 10 most commonly mentioned influential people.

Who are the most influential 20th-century public figures at world level? The first column in Table 5 shows Nelson Mandela is identified by the largest proportion of Dutch people (11% of all respondents), followed by Adolf Hitler, Winston Churchill, John F. Kennedy, and Martin Luther King. Mandela is the only person of this top five who, at the global level, played an important public role in the 1990s. The other four have functioned in public before and during the Second World War or in its Cold War aftermath in the 1960s. Another remarkable fact is that all world influential figures mentioned are born many years before the Second World War, with Gorbachev being the youngest (born 1931) and Gandhi the oldest (born 1869; of the first nine persons mentioned five are born in the 19th century: Hitler, Churchill, Gandhi, Roosevelt, and Einstein). Albert Einstein is the only figure of non-political stature among the nine most important people. Three of the other eight political leaders directed the course of the Second World War; two symbolize the 1960s of political renewal and civil right movements; Gandhi and Mandela reflect the struggle in the non-western world against oppression and injustice; Gorbachev, of course, is the key figure triggering the fall of communist rule in Europe and together with Mandela the one whose influence was at its pinnacle in the late 1980s and early 1990s.

One might expect that each generation has its own world-level 'heroes'. Indeed, there are some significant cohort distinctions, but none of these is of such a level that we can draw strong conclusions. Mandela is most popular among the youngest generation (17% against 9% for the middle-aged and 7% for the oldest generation), as is Churchill among the oldest (15% against 4% and 7% among the youngest and middle-aged), and Kennedy among the oldest two

TABLE 5
Top 10 of influential people at world, Dutch society, and personal levels ($N = 1391$)

World	(%)	Dutch	(%)	Personal 'heroes'	(%)
1. Nelson Mandela	11	1. PM Willem Drees	27	1. Nelson Mandela	4
2. Adolf Hitler	9	2. Queen Wilhelmina	12	2. (Pop)musicians	4
3. Winston Churchill	8	3. Queen Juliana	5	3. M. Luther King	4
4. John F. Kennedy	8	4. PM Joop den Uyl	4	4. Gandhi	3
5. M. Luther King	7	5. Queen Beatrix	3	5. Religious leaders	2
6. Gandhi	5	6. PM Ruud Lubbers	2	6. Dutch politicians	2
7. Franklin D. Roosevelt	4	7. PM Wim Kok	2	7. Artists/TV-celebrities	2
8. Albert Einstein	3	8. MP Troelstra	2	8. Novelists	2
9. Mikhail Gorbachev	2	9. Anthony Fokker	1	9. Foreign politicians	2
10. Various Dutch VIPs	2	10. Anton Philips	1	10. John F. Kennedy	2
11. Others	19	11. Others	15	11. Others	11
12. None	—	12. None	—	12. None	30
13. Don't know/no answer	21	13. Don't know/no answer	22	13. Don't know/no answer	27
14. Not applicable	1	14. Not applicable	5	14. Not applicable	6

cohorts (each 10% with only 3% among the youngest). However, these divergent popularities result only in a weak relationship between cohort membership and world leader identification (all Cramer's V well below .20). In conclusion, many people are able to identify a significant public figure (75–85%), but they are not more likely to choose a world leader who was prominent during their formative years.

With regard to Dutch historical leaders we also had some difficulties finding interesting generational cleavages. The second column of Table 5 shows that popular Dutch persons are either prime ministers or members of the Dutch royal family. The fame of Prime Minister Drees, a social democrat leading several administrations between the years 1948 and 1958 and by far the most awe-inspiring welfare state icon of the Dutch postwar reconstruction years, is related to the introduction of many postwar welfare arrangements (his nickname was 'Father Drees'). In particular the introduction during his premiership of the AOW, a state pension at 65 years, contributed to his popularity, even leading to still-used proverbs such as 'drawing from Drees', used by people aged 65 years or older who are seemingly uncomfortable with receiving a state pension. Another remarkably popular choice is for Queen Wilhelmina who ruled the country from 1890 until 1948, and after fleeing the country at the outbreak of the Second World War became a symbol of Dutch resistance living in exile in London. Her daughter, Queen Juliana (queen of the Netherlands from 1948 to 1980), comes in third with a 5% vote. The other Dutch public figures have relatively limited reputation (below 5%). Numbers 9 and 10 are both industrial figures who founded a large-scale industrial company with a high score on the national pride dimension: respectively Anthony Fokker of the aircraft construction company Fokker (started in 1919 and bankrupt in the 1990s; he became popular as a pre-First World War stunt flyer, a supplier of fighter planes for the German army in that war, and inventor of the synchronized gun placed on planes in that war, thus considerably enhancing the fighting power of the German airforce); and Anton Philips, producer of the light bulb, leading to the full-range electronics multinational Philips.

The oldest cohort has, as might have been expected, a strong preference for Prime Minister Drees (with 39% of its members mentioning him, against 13% of the youngest and 33% of the middle-aged cohorts).²⁷ The youngest cohort is most likely to be found in the 'don't know/no answer' category (with 19% choosing this 'answer' against 15% of the middle-aged and the oldest cohorts).²⁸ No other relevant generational distinctions could be found.

We may conclude that Dutch people do not have much difficulty in mentioning a Dutch public person with substantial influence (more than 70% have an appropriate answer); only among the youngest generation is the proportion of 'don't know' answers larger than the number-one choice of the Dutch public at large, Prime Minister Drees, the 'founding father' of the Dutch welfare state.

Drees is especially popular among those whose formative years are situated before the build-up of the welfare state, who have experienced periods in which state intervention in terms of welfare was far from obvious. Younger generations are clearly less able to identify with any public Dutch figure, let alone someone who dominated their formative years. The identification of Dutch celebrities seems to reflect a cohort effect, so the central conclusion runs, implying that those leaders who symbolize major events (in this case the construction of the welfare state) that affect formative years (in this case that of the oldest cohorts) are also recognized and remembered in such a way.

Table 5 also depicts famous personalities whom Dutch people perceive as influential on their personal outlook on life and who function as a source of inspiration in this sense. In short, the results show that about a third of the Dutch people cannot come up with a substantive answer (have no answer or an answer that is not applicable, e.g. mention of a family member). Another 30% claim to have no personal hero at all. This leaves us with 40% of the Dutch who do identify a personal hero. By contrast, when judging world or national figures, around 75–80% of Dutch people are able to come up with a name and none of the Dutch says explicitly that there is no world or national influential person. The 40% with a personal hero report a wide range of different celebrities. This range is so large that no single person can boast to have support of more than 4% of all Dutch people. Mandela, (pop) musicians in general, and Martin Luther King reach the 4% boundary; no other person or category of persons rates more than 4% cross-individual importance. This result is relevant in itself: today people are hardly able to identify inspirational celebrities, and if they are, the persons they choose have little meaning for other people. In contemporary society there is apparently hardly one single 'hero' who functions as such for a substantial proportion of people. Generational cleavages in these choices are, moreover, hard to find and even frequently absent. The choice for Mandela, Martin Luther King, Gandhi, foreign politicians, and for 'no hero' is not favorite among any specific cohort. The choice for (pop) musicians, such as Madonna, U2, Kurt Cobain, and the popular Dutch crooner Marco Borsato, is something found relatively often among young people (aged 34 or younger), and the relationship between this choice and cohort membership is significant, but not very strong.²⁹ The same holds for the few young people mentioning Dutch politicians. Older cohorts are significantly more likely to choose these politicians, but again the relationship with cohort membership is relatively weak here too.³⁰

Framed in this way, one can conclude that the three generations do not identify with one single person who influenced their personal lives. Mannheim (1928/1929) suggested that within a certain generation, held together by its shared consciousness of a common history and destiny, distinct 'generation units' function. These units consist of groups of high-profile individuals and their devotee circles, which mark and interpret the shared experiences of their

generation (see again Diepstraten et al., 1998, 1999a). The quest for one single identification figure towering above all others within one generation is empirically not very successful. The small minorities that share one single category of personal heroes do not react according to theoretical expectations. We would have expected the oldest generation to emphasize heroes echoing the sound of pre-1950 Dutch society which features risk and hard lives, the middle-aged generation to mirror their preoccupation with the public struggle for self-determination and equal rights in their favorite choice of activist Nelson Mandela, and the members of the youngest generation to model themselves on icons that function neatly within the boundaries of popular culture. None of these expectations could be firmly corroborated in our survey, though there is some evidence for young people's choice of vanguards of popular culture.

6. Conclusions: Generational Past Time Heuristics

According to classic Mannheimian generational theory, people who share the experience of major historical events in the formative years of their adolescence and pre-adulthood are likely to form a distinct generation, a generation that can be isolated from others on the basis of their outlooks, attitudes, values, and lifestyles. The pivotal element in generation theory is consciousness. Only the consciousness of a shared history, the vivid awareness of having experienced shared historical events in one's formative years that others have not experienced during their youth period, triggers the prime sense of belonging to a generation, materialized in the distinctive cultural contours of such a generation, and underpins the conception of its shared destiny. The assessment of what we called time heuristic is, therefore, a theoretical necessity when identifying generational distinctions and its main correlates. This perspective frames the CentERdata Millennium Survey, our 1999 study among a representative sample of the Dutch population ($N = 1391$).

In our survey we first addressed the issue of time consciousness. There is no marked evidence that current time perceptions have evolved towards a post-modern state. Dutch people have not lost the basic sense of the past and are by no means 'stuck in the present'. Their time horizons are articulated and clear-cut, and 'the past' is still a well-understood concept. Only small minorities claim not to look back. Most Dutch people look back on their own and society's past with a scope that coincides with their own lifetime. Still, regarding society's past almost half of them look back further, and this is especially true for the youngest generation. There is no reason to give way to popular observations that today's youth is particularly insensible of history and only interested in the 'here-and-now', at least not in the Netherlands. In referring to the past both older and younger Dutch people neither seem to cling to beliefs of progress

(a worse past), nor do they predominantly indulge in nostalgia (a better past). Collective and personal history seem to have a meaningful integrative function for Dutch people in which history proves to be a weighty and valuable source for one's identity attainment.

In the second and third parts of this article we addressed the historical events, changes, and people of the 20th century who have functioned as milestones for the course of history in the world and the Netherlands and in Dutch people's personal lives. We assessed what key events and changes and which figures subsequent Dutch generations recall and why they attribute an important role to these events, changes, and figures. A massive number of Dutch people, old, middle-aged, or young, selected the Second World War as the single most important historical event of the 20th century, in terms of both societal impact and personal influence. Lagging far behind come two other events or changes regarded as highly influential on society's history: the fall of the Berlin Wall and advancements in information and communication technology (ICT). Except for the Second World War, Dutch people hardly care to mention any other event that has affected their personal lives. Together, Dutch people find it much easier to assess events with authoritative societal outcomes than to identify occurrences with a strong influence on their personal lives. None of the events or changes mentioned at either level – societal or personal – is typically raised by one or the other generation. These results corroborate the idea that the impact of the Second World War can be interpreted not as a cohort, but as a period effect. It has changed the outlooks, attitudes, values, and lifestyles of all generation members, of those who have experienced it first-hand, of those who learned from it from family history, and of those who recall it from collective memory, from school, from books, or from other media. The recollections of events do not differ among Dutch generations, but the interpretation and attribution of significance of these events do. Looking at the Second World War we find that older generations, who have a personal memory of this war, sketch painful and impressive, but still straightforward, concrete, day-to-day experiences to make out a case for the historical importance of the Second World War. They frame the Second World War in terms of survival, perseverance, and the absence of liberty. There is no evidence that those who recall the Second World War from collective memory, younger generations who lack the personal experience, perceive its importance from their formative experiences; however, they interpret the war with abstract values that governed their own formative years (pointing at the value of negotiation, of tolerance, of equal rights). The middle-aged generation stands out with its own typical interpretation of the fall of the Berlin Wall. For them it signaled the end of the Cold War and the concrete threats connected to this war. The interpretation of ICT advancements is generationally specific only in terms of ICT's contribution to improving the quality of life and labor, a concrete daily life interpretation of specifically the older cohorts.

Interpretations of concrete day-to-day history, sudden events and gradual changes that strongly affect daily life, are clearly more fundamentally generational than the interpretations of more abstract history, events and changes with less concrete and more distant effects, for instance in the political realm. As such, interpretation of historical events and changes is more generationally delineated than the recollection of events and changes itself.

We hardly come across generational differences when we shift the scope to influential historical persons. Large majorities of Dutch people are able to mention a person with an impact on the history of the world and the history of the Netherlands. Only a minority succeeds in mentioning a celebrity that influenced their personal life. The identification of hero-status persons, especially those who function at the world level and at the personal level, does not vividly follow the path of formative experiences. It is not true that Churchill, Kennedy, and Mandela are the world leaders with iconic power for respectively the oldest, middle-aged, and youngest generations. The evidence that young people, when they are asked to single out someone who influences their personal lives, are less supportive of politicians and more inclined towards today's icons of popular culture is relatively weak. Generational cleavages concerning personally influential idols are weak in general. There is one exception found when we consider influential people at the national level: the Dutch postwar reconstruction and early welfare state era Prime Minister Drees is the clear favorite of the older generations in particular, a choice clearly related to the formative experiences of this generation.

At first glance, one could conclude that cohort or generation effects hardly play any significant role in time heuristics, thus contradicting our main hypothesis. Generations, old or young, born under divergent historical firmaments, recall the same events with prime formative importance for society as a whole. Moreover, people, again of any generation, have great difficulty identifying events or changes with powerful influence on their personal biographies. Looking in more detail, however, reveals that in particular the *interpretation* of events is distinct across generations. Generations do recall the same pivotal events and changes, but they interpret the importance of *some* historical occurrences or societal and cultural changes in correspondence with their own and distinct formative experiences. Most probably interactions (things said and not said) between different (genealogical and sociological) generations underlie this phenomenon (see Rosenthal, 2000, for an excellent example). Severe life course events experienced by one generation have strong cross-generational impacts especially on the consciousness and identity of these generations in a wider than family context. The key events, such as the Second World War, are themes for every generation and help define what every generation is and how it relates to society.

The time heuristics of generations relate to specific historical events only. We

found that generationally distinct interpretations are strongest for historical events with strong day-to-day impacts and that in these interpretations fundamental security, economic, social or physical, is a basic theme. The older generation refers more to pre-war and wartime hardships and insecurities when looking at the Dutch history of the 20th century, and the middle-aged generation frames this history more in terms of the vivid threats of the Cold War. Advancements in ICT are valued for their daily impact on labor life, especially by the older generation. The only generationally specific choice from the collection of historical celebrities that was found for this article, the one for Prime Minister Drees – perhaps the most sober and down-to-earth person of all Dutch icons of the 20th century – illustrates Dutch people's predilection for people who work for the benefit of the welfare state and thus for basic economic and social security.

In conclusion then we can see that, first, time heuristics are most explicit at reflections on the impact of events in society's past and on icons symbolizing that past. Second, these heuristics are most clearly related to events that have a vivid and tangible effect on the daily lives of generations. Third, the use of time heuristics on the past century in the Netherlands is still very strongly framed in terms of security. One of the challenges for the future is to verify these three findings for generations in a cross-cultural setting including different sets of societies, each with its own particular history as well as common historical biographies. Another is to assess the role of intergenerational interaction that concerns time heuristics and its impact on the formation of generation consciousness. Learning about this role is essential for further understanding of how time heuristics affect generation consciousness. In interaction both time heuristics and consciousness are constructed.

Notes

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1. The study of heuristics in human judgement is a well-established tradition within the discipline of psychology. The theoretical and empirical studies by Tversky and Kahneman were particularly important in establishing this tradition. They see the function of heuristics as reducing 'the complex tasks of assessing probabilities and predicting values to simpler judgmental operations' (Tversky and Kahneman, 1974: 1124). One of the key heuristics is the so-called 'availability heuristic' which signifies that under conditions of uncertainty people tend to judge social phenomena based on experience-rooted available information. Here is a link to generation theory. Generations with different formative experiences may display different heuristics to the same historical events. There are also strong ties with the concepts of 'historical consciousness' and 'collective memory' and its major elements (see Olick and Robbins, 1998 for an excellent overview). We put the emphasis on the rules of thumb, the cognitive shortcuts or the framing principles that people use to evaluate personal and collective history (past, present, and future). This motivates the introduction of the concept of time heuristics. In this article we concentrate on the past century. We are aware that 'time heuristics' of the past are strongly connected to other, present, and future-oriented heuristics.
2. More specifically Mannheim makes a distinction between generation location (*Generationslagerung*), generation as an actuality (*Generationszusammenhang*), and generation unit (*Generationseinheit*).
3. This study was commissioned by Dutch Associated Press (GPD), and we thank them for their financial support. We also thank Dick van de Peyl of GPD for his support and crucial input. We greatly acknowledge the Telepanel organization for their professional attitude and advanced data collection methods.
4. See Blankert et al. (1998) for detailed information about the Telepanel organization. The respondents are not a specific group of computer aficionados: they range from the lower to the higher educated, they receive a computer from CentER and are instructed in the use of this computer and the interviewing program if necessary. The households in the Telepanel are a representative sample of households in the Netherlands.
5. See Diepstraten et al. (1999) for full details on the sampling method, data collection, and the complete questionnaire.
6. The actual number of issues addressed in the CentERdata Millennium Survey is much greater. But the selection presented here directly corresponds to the main research question of this article. See Diepstraten et al. (1999b) for a complete overview.
7. Space was limited, though, to one computer screen per issue.
8. We would like to thank Ludo van Dun, research associate at Globus, Institute for Globalization and Sustainable Development at Tilburg University, for his detailed and time-consuming analysis of these qualitative data.
9. At $p < .001$ and Cramer's $V = .25$.
10. At $p < .001$ and Cramer's $V = .20$.
11. Schuman and Scott (1989: 363) asked the same question, but limited respondents' perspective to the last 50 years. The US data are from 1985, thus the perspective is on events from the 1935–85 period. Schuman and Scott (1989: 362) report that they cover events from the 1930–85 period. We tapped our data in spring 1999 and deliberately took 70 years in order to have a comparable period of roughly 1930–99. Despite these explicit time boundaries some people mention events from the 20th

- century that occurred before 1930 (e.g. the First World War). We only coded events from before the 20th century (and non-historical, purely personal events, such as marriage, birth or death of family members, etc.) as non-applicable. A total of 1% of all respondents entered an event that was coded as non-applicable (regarding events influencing both society and personal life).
12. Schuman and Scott (1989) do not report on this question, although it was part of their survey data, according to the documentation of the data from the Inter-University Consortium for Political and Social Research (ICPSR) at the Institute for Social Research (ISR), University of Michigan, Ann Arbor, USA.
 13. For example, 'Post-war reconstruction', mostly referring to the late 1940- and 1950-years of rebuilding the Dutch nation on the ruins of the war, 'Construction of the welfare state', which started from the mid-1950s onwards with the implementation of several social security acts (e.g. state pensions) in the Netherlands, and 'Post-war economic affluence', are all regarded as different categories; on a less detailed level of coding one might sum these responses in one overarching category.
 14. Similar to Schuman and Scott the categorized events, whether the first and second mention, have the following codes: 1 = mentioned, 0 = not mentioned. The positive codes are summed. The 77% of people mentioning the Second World War are therefore people entering this event either as a first or as a second mention. Subsequently 33% did not mention the Second World War. The percentages are not mutually exclusive, after all, those who gave two different responses appear in two different categories, and thus the percentages do not add up to 100%.
 15. $n = 87$ missing, $n = 68$ don't know/no answer, $n = 12$ none, and $n = 9$ not applicable.
 16. Schuman and Scott (1989) use a different method of analysis than is used in this article. They use logistic analysis on the dichotomized event categories with age (in six categories), sex, education, and race as predictors. Here we use table analysis of the same dichotomized items and age in three categories. Except for the differences due to effects of controlling for other variables, there is basically no difference between both approaches (on some occasions Schuman and Scott do also exclude the non-age variables). Note that we also found significant age–event associations ($p < .05$), but none of these associations could be valued as strong enough for acceptance (Cramer's V or $\eta^2 < .20$). Schuman and Scott (1989) do not report data on the strength of the age–event associations that they regard significant.
 17. Another typically Dutch one is 'depillarization and secularization': Dutch society was until the early 1960s strongly divided into highly organized confessional and ideological 'pillars' that cut across social strata; the decay of these pillars – depillarization – began in the early 1960s.
 18. For 'World War II' as the most important event at the societal level only the mentions of $n = 50$ or more are reported in Table 4.
 19. $p < .001$ and Cramer's $V = .29$ (including 'don't know/no answer', excluding 'not applicable').
 20. Respectively $p < .01$, $< .001$, and $< .05$, and Cramer's $V = .10$, $.18$, and $.09$ (including 'don't know/no answer', excluding 'not applicable'), showing that *Nie wieder* is the most significant *and* strong difference between generations of these three.
 21. $p < .01$ and Cramer's $V = .11$ (including 'don't know/no answer', excluding 'not applicable').
 22. $p < .001$ and Cramer's $V = .29$ (including 'don't know/no answer', excluding 'not applicable').

23. $p < .05$ and Cramer's $V = .20$ (including 'don't know/no answer', excluding 'not applicable').
24. Interpretations of other events are not discussed here due to the low number of cases.
25. $p < .001$ in all both cases with Cramer's V respectively of .42 and .29 (including 'don't know/no answer', excluding 'not applicable').
26. With $p = .07452$ they are the 10% level. The Cramer's $V = .14$ which is too low to be considered worthwhile.
27. $p < .001$ and Cramer's $V = .24$ (including 'don't know/no answer', excluding 'not applicable').
28. $p < .001$ and Cramer's $V = .20$ (including 'don't know/no answer', excluding 'not applicable').
29. $p < .001$ and Cramer's $V = .16$ (including 'don't know/no answer', excluding 'not applicable').
30. $p < .01$ and Cramer's $V = .16$ (including 'don't know/no answer', excluding 'not applicable').

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