

A Forgotten Key Concept?

Time in Teaching and Learning History

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ABSTRACT

The aim of this paper is to explore a theory of teaching and learning history based on the concept of time. After a short introduction about time as a crucial concept to history (1), I review some literature on teaching and learning history to see how time plays a role in surveys of key concepts of historical reasoning (2). Then an attempt is made to arrive at a definition of time (3) and historical time (4). The concept of historical time is defined by means of six key characteristics, which are then applied to (aims of) teaching and learning history (5). The next two sections review the literature on learning about time and historical time: psychological research (6) and educational research (7). The six characteristics of historical time and the corresponding aims of teaching and learning history which are developed in sections 4 and 5, provide a new research agenda for educators involved in teaching and learning history. In section 8, some preliminary attempts are reported in empirical research into two parts of this research agenda: the use of a 'we'- or a 'they'-perspective when dealing with other periods than our own, and the way students orient in time using dates, events and numbered years, or associative contexts.

1 Time and history

History cannot be defined as a certain body of knowledge, considering the hugely diverse areas of which it is made up and the wide range of topics that are being studied by historians; neither can it be defined by its methods of research, which are equally diverse and usually shared with other

social sciences; nor does history offer a certain theory that can explain changes over time - says Ludmilla Jordanova, Chair in Modern History at King's College, London.¹ So what is typical of history? '*History is the systematic study of the past, and at its heart is time*'.² Anything studied by a historian has to do with the passage of time. Time is the only element that distinguishes history from other disciplines studying human society and culture. It seems reasonable to suppose, then, that time dominates theory of history and teaching and learning history as a pivotal concept. Yet this is not at all the case: time doesn't play a prominent role, neither in theory of history, nor in teaching and learning history. Occasionally the lack of interest in time in theory of history has been brought to the fore.³ But a narrativist philosopher of history like Frank Ankersmit also thinks that it is the task of the historian to annihilate the role of time as much as possible. Events which have occurred successively in time are subsumed by the historian into one simultaneous comprehensive image, which means that the dimension of 'lived time' in fact disappears and merges into a narrative substance which the reader can consider at one particular moment. Hayden White has a similar point of view: '*histories gain part of their explanatory effect by their success in making stories out of mere chronicles*'.⁴ In stead of writing a chronicle that just follows the chronological order of events, the historian has to compose a narrative which is beyond temporal sequence. The pivotal position of time in history doesn't necessarily imply a type of discipline which is dominated by chronology. Historical time is more than chronology. What exactly we mean when we talk about 'historical time', will be explored in section 4 of this paper.

2 Time and the teaching of history

Studies in teaching and learning history are inconsistent in the amount of attention paid to the concept of time. Time is by no means the point of departure that is usually chosen in texts about 'historical thinking' or 'historical reasoning'. In their theoretical framework for historical reasoning, meant to describe and study historical reasoning in secondary education in terms of its constituting activities, Van Drie and Van Boxtel do not explicitly mention reasoning in terms of time.⁵ The key elements in their framework are: asking historical questions, using sources, contextualization, argumentation, using substantive concepts, and using meta-concepts. Positioning phenomena in time belongs to 'contextualization': understanding actions of people in a wider context of beliefs and values,

¹ Jordanova, L. (2000), *History in Practice*. London: Arnold, p. 27-28.

² Jordanova 2000: p. 114.

³ Ankersmit, F. (1989), 'Over geschiedenis en tijd' [About history and time], *Groniek* 103/104, 11-26: p. 12.
Grever, M. (2001), *De encenering van de tijd* [The emplotment of time], Inaugural address Rotterdam, p. 1-2.
Dussen, J.W. van der (2001), 'De tijd in perspectief' [Time in perspective], in: Grever, M., Jansen, H., *De ongreijpbare tijd* [Intangible Time], Hilversum: Verloren 2001 p. 17-33: p. 17.

⁴ White, H. (1985), 'The Historical Text as Literary Artifact', in: Hayden White, *Tropics of Discourse. Essays in Cultural Criticism*, Baltimore / London: Johns Hopkins University Press 1985 (orig. 1978), p. 81-100: p. 83.

⁵ Drie, J.P. van, Boxtel, C.A.M. van (2008), 'Historical Reasoning: Towards a Framework for Analyzing Students' Reasoning about the Past', *Educational Psychology Review* 20 nr. 2, p. 87-110.

acknowledging the fact that there are differences between the mindsets of the past and the present. Time plays a role also in the use of substantive concepts, because their meaning may vary over time. A survey by Peter Seixas does not mention time as an explicit category either, but more of his six key elements of historical reasoning are time-related than in the case of Van Drie and Van Boxtel.⁶ He distinguishes 'significance', in which time plays a role, because it is the significance of phenomena in the past from the point of view of the present. Two other categories are 'continuity and change' and 'progress and decline' which describe developments over time. The category 'difference: empathy and moral judgement' is time related because of the difference in values between past times and present times and the consequences of this difference for pronouncing judgements about the past. Less time related are Seixas's categories 'historical agency' and 'epistemology and evidence'.⁷ A survey by Peter Lee mentions six 'key second order concepts that give shape to the discipline of history': time, change, empathy, cause, evidence, and accounts.⁸ So here we have time as an explicit key concept. Change and empathy are time-related in approximately the same manner as described by Seixas. Speaking about the concept of time, Lee argues that the way in which time is used in history is often counterintuitive, different from the way we use time in daily life. Another problem indicated by Lee is the fact that chronology and periods often deviate: e.g. the nineteenth century may be held to have closed not exactly in 1900, but with the First World War. Naming time as one of his six key concepts doesn't mean that he gives time a pivotal position among the matters we have to deal with when teaching and learning history. At first sight, this does seem to be the case in a survey of historical meta-concepts by Margarita Limón.⁹ She adds time to her long list of meta-concepts which also includes evidence, cause, explanation, empathy, space, change, source, fact, description and narration. Time and space are put in the margin of a diagram describing history on four different levels: history as chronicle (which deals with facts and events), history as narration (a subjective analysis which deals with facts, but also with causes), history as explanation (dealing with change and causation on a rational level), and history as empathy (dealing with how people felt, thought and behaved in the past). Time and space in the margin of the diagram seem to dominate all of these, but it is unclear how time plays its essential role and how this role differs from the one played by the concept of space - which in the case of history obviously is a very different one.

⁶ Seixas, P. (1996), 'Conceptualizing the Growth of Historical Understanding' in: Olson, D.R. & Torrance, N., *The Handbook of Education and Human Development. New Models of Learning, Teaching and Schooling*. Oxford, Cambridge MA: Blackwell, p. 765-783.

⁷ Almost the same categories are discussed at large by Stéphane Lévesque (2008), *Thinking Historically. Educating Students for the Twenty-First Century*. Toronto / Buffalo / London: University of Toronto Press. His categories are: historical significance, continuity and change, progress and decline, evidence and historical empathy.

⁸ Lee, P.J. (2005), 'Putting Principles into Practice: Understanding History', in: Donovan, M.S., & Bransford, J.D. (eds.), *How Students Learn History in the Classroom*, Washington D.C.: National Academies Press, p. 29-78.

⁹ Limón, M. (2002), 'Conceptual Change in History', in: Limón, M. & Mason, L., *Reconsidering Conceptual Change. Issues in Theory and Practice*. Dordrecht: Kluwer Academic. p. 259-292.

Historical reasoning in teaching and learning history has often been interpreted as a research method which concentrates on composing accounts about the past, based on historical evidence; concepts such as multiperspectivity, empathy, representativity and reliability play an important role in this context. This research method, however, is not specific to history: all social sciences share this method and these concepts. The use of evidence in itself is not specific to history, but the use of a certain type of evidence, viz. evidence from a different period than our own. Bridging the time gap is therefore essential to the interpretation of such evidence. Something similar goes for making up historical explanations. Dealing with historical causation is a topic which plays an important role in theory of history¹⁰ as well as in research about teaching and learning history.¹¹ The temporal aspect of it, however, is usually not given explicit attention. In explaining historical developments and phenomena, one has to consider beliefs, values and interests which were important in a certain period in the past - usually very different from beliefs, values and interests in the present. An understanding of this difference is essential to any historical explanation. Another specifically historical aspect of causation is that explanations can only be given with hindsight and that they never have any predictive value. History shows that there is often a discrepancy between what was meant to happen and what actually happened. Unintended consequences can only be distinguished with hindsight. This affects the way in which we can or cannot judge about the past in a crucial way.

Considering all this, time is indeed essential to anything we deal with when 'doing history'. Enough reason to devote a special study to this subject in the field of teaching and learning history. Could it be true that thinking in terms of historical time is the element of historical reasoning which makes it difficult to learn history? Before we can explore this question, we must know a bit more about the properties of 'time' and 'historical time'.

3 What is time ?

At first sight, time seems to be a simple and self evident matter, nothing to contemplate for too long. But the self-evidence of time appears to be deceptive once one starts considering the topic seriously. The apparent simplicity and elusiveness of the concept of time has been expressed by St. Augustine in a much quoted phrase, which has almost become a classic: *'What then is time? If no one*

¹⁰ For example Dray, W.H. (1957), *Laws and Explanations in History*, Oxford: Oxford University Press. Carr, E.H. (1961), *What is History?* Harmondsworth: Penguin (pp. 87-108). Lloyd, C. (1986), *Explanations in Social History*. Oxford: Blackwell.

¹¹ For example Jacott, L., López-Manjón, A., & Carretero, M. (1998), 'Generating explanations in history.' In: J. F. Voss, & M. Carretero (eds.) *Learning and reasoning in history. International review of history education (Vol. 2)*. London: Woburn, p. 294–306. See also the surveys by Lee and Limón discussed before.

*asks me, I know; but if I wish to explain it to someone who asks me this question, I don't know.*¹² Does time actually exist? The past is no more, the future is not yet, and what is the 'now'? The now has become past already as soon as one has finished pronouncing the word. How can something exist, that is not? These are some of the questions over which philosophers have racked their brains for centuries. St. Augustine concluded that the extension of time is a distension of the mind (*distentio animi*) which means that time exists in the shape of memories of the past, expectations of the future and visions of the present.¹³ This description makes time into something subjective, something which depends on the way in which it is conceived by human beings. More than that: if time is a distension of the human mind, this means that time would not exist if there were no humans to perceive it. That contradicts strong intuitions implying that there would be a passage of time, even if we were not there to take notice of it. So, apart from the subjectivating trend in thinking about time, philosophy also knows an objectivating trend, which argues that there is a homogeneous, uniform passage of time which steadily goes on, no matter whether or how it is perceived or experienced by anyone. Thus, Isaac Newton stated that there is an 'absolute time', unrelated to any movement or change - not even the movement of celestial bodies - but as 'an emanent effect of God'.¹⁴ This homogeneous, uniform and steadily progressing time was of course a crucial element in the newtonian laws of nature. Yet, Newton could not prove its existence: he postulated an absolute time as an axiom, a fundament for his reasoning, which proved to have great explanatory power and validity, until Einstein came in to argue that time is not so absolute after all; according to him, time depends on the speed of movement.

After the Industrial Revolution western societies have introduced an objective, regularly progressing time - such as postulated by Newton - into their world views. In this representation of reality, time is considered as an '*an abstract, uniform, measurable dimension that stretches indefinitely into the past and the future.*'¹⁵ This perception, however, does not tally with human experience of time. Time is anything but uniform in our perception: sometimes it seems to fly, sometimes it seems as if it stands still, as if there will never be an end to a relatively short time span. And this is not the only way in which a regular and steadily flowing time contradicts the world of our experiences. Although no day has the same length as another - sunset and sunrise occurring at different times every day - we still maintain that every one has 24 hours and we stick to a daily rhythm that is decided by this way of reckoning. The linear conception of time resulting from the newtonian basic assumption is considerably less natural and self evident than a cyclic conception. Anything temporal given to us by nature has cyclic characteristics: the sun rising every day, the returning phases of the moon, the eternal

¹² St. Augustine, *Confessions*, Book 11, 14:17. 'Quid est ergo tempus? Si nemo ex me quaerat, scio; si quaerenti explicare velim, nescio.'

¹³ St. Augustine, *Confessions*, Book 11, 20:26.

¹⁴ Turetzky, Ph. (1998), *Time*. London / New York: Routledge, p. 72.

¹⁵ Friedman, W.J. (1990), *About Time. Inventing the Fourth Dimension*. Cambridge (MA) / London: MIT Press, p. 103.

succession of seasons. In our daily lives too, however disciplined these may be by the clock, the calendar and ideas about a linear sequence of times, the cyclic element is surprisingly important: returning events are much more important to us than things that happen only once. We know our daily routines and we have even organized our days into weeks which have a constant similar pattern. The same holds true for the years: what comes back every year is more important to the organization of our lives than what is unique. Every year we have summer holidays, every year we celebrate Christmas. We know how to deal with these, because we have experienced them before. Unique information from a linear image of time, on the other hand, rarely has any practical use. Considering all this, it is not surprising that psychological research has shown that human memory is ill disposed to remembering unique events from a linear representation of time, but very apt at remembering information from a cyclic pattern.¹⁶ We have to use our agendas not to forget non-recurrent events, but we do not need any aids to remember cyclic patterns. Likewise, we need clocks to know the time and calendars to know the right date. Counting years and putting them on an endless line is not a consequence of nature. Objective clock time and linear calendar time are artificial creations which have to be imposed on our minds, so to speak, because our minds are not well equipped for them. But we have disciplined ourselves. We have adapted to a logical, but unnatural system. That's why in winter we get up when it is still night, while in summer we stay in bed for hours when the day has long started.

4 What is historical time?

The period of the Industrial Revolution not only introduced abstract and uniform time dimensions in our daily lives, it also created modern historical consciousness. The tremendous acceleration of the pace of historical developments caused by the Democratic and Industrial Revolutions made the world of the past, also the recent past, quickly unrecognisable and strange; it caused a growing distance between the present and the past.¹⁷ The increasing tension between what Reinhard Koselleck has called the 'space of experience' (*Erfahrungsraum*) and the 'horizon of expectation' (*Erwartungshorizont*) determined modern historical consciousness: in the traditional world of craftsmen and farmers, the space of experience was usually equal to anything within the horizon of expectation; there was no breach between past and future, the past was there in the present in a natural way - and therefore, paradoxically, the past needed no special attention. In this kind of world, experience from the past was self-evidently valuable for the present as well as for the expectations of the future. But the modern world showed that patterns of expectations had to be

¹⁶ Friedman, W.J. (1993), 'Memory for the Time of Past Events', *Psychological Bulletin* 113 (1), 44-66: p. 60.

¹⁷ Koselleck, R. (2004), *Futures Past. On the Semantics of Historical Time*. New York / Chichester: Columbia University Press (trans. by K. Tribe of *Vergangene Zukunft. Zur Semantik geschichtlicher Zeiten*, 1979), p. 31-42.

changed radically.¹⁸ The past and the present had been torn apart in a dramatic way: from now on, different times would be different indeed. Historical consciousness can originate only in conditions that question the relationship between the past and the present and produce a sense of discontinuity. This kind of feeling developed in western societies in connection with scientific, technical and industrial developments.¹⁹ Ankersmit characterizes the breach with the past that has occurred in the western world as a 'traumatic experience'.²⁰ Western man was forced to enter into a new world, but at the same time he was aware of a world which was no longer his. This consciousness became part of his new identity: he knew he had to become what he was no longer.²¹ Thus, western humankind began to relate to a series of 'different times' which were put on a long line of 'historical development'. We have grown used to this kind of consciousness. We call it 'historical thinking' and we connect it with a certain consciousness of time: historical time. For the educator of history it is good to know how artificial this kind of consciousness probably is: an unnatural way of thinking, which is possibly not so easy to learn.

The changes in western societies resulting from the acceleration around 1800 created a greater distance towards more traditional cultures. These cultures may have preserved more of a 'natural' and therefore easy to learn conception of time. So it might be a good idea for the educator to take notice of anthropological research among cultures like the Saltaux Indians east of Lake Winnipeg in Canada, the Nuer in Ethiopia, the Mursi in South Sudan and the Ainu on the peninsula of Sakhalin.²² Generally speaking these cultures distinguish two kinds of time: ecological time, and structural or social time. Ecological time is concerned with the change of seasons and the activities in hunting, food gathering, fishing and agriculture connected with the seasons. Structural or social time results from the fact that people are living in a community consisting of different generations. It marks births, marriages and deaths and other important events in a human life. Ecological time has a cyclic structure, social time a linear one. But the ages of human beings are seldom remembered in exact numbers; age is more a matter of quality than of quantity: periods in human lives are distinguished, like childhood, adolescence before marriage, adult married life, and old age. Memory goes back in time as far as oral tradition can reach, usually no more than four or five generations, with a maximum of around 150 years. Time outside these human dimensions is considered mythical: a *primaeva* age when the gods

¹⁸ Koselleck 2004: p. 264-268.

¹⁹ Carr, D. (1986), *Time, Narrative and History*. Bloomington / Indianapolis: Indiana University Press, p. 179-181.

²⁰ Ankersmit F.R. (2007), *De sublieme historische ervaring*, Groningen: Historische Uitgeverij, p. 357, 387. Dutch version of: *Sublime Historical Experience*, Stanford CA: Stanford University Press, 2005. References are to the Dutch edition.

²¹ Ankersmit 2007, p. 350, 367, 375, 387, 406.

²² Hallowell, I. (1937), 'Temporal Orientation in Western Civilization and in a Pre-Literate', *American Anthropologist* 39 (4), p. 647-670. Evans-Pritchard, E.E. (1939), 'Nuer Time-Reckoning', *Africa: Journal of the International African Institute* 12 (2), p. 189-216. Ohnuki-Tierney, E. (1973), 'Sakhalin Ainu Time Reckoning', *Man*, New Series 8 (2), p. 285-299. Turton, D., Ruggles, C. (1978), 'Agreeing to Disagree: The Measurement of Duration in a Southwestern Ethiopian Community', *Current Anthropology* 19 (3), p. 585-600.

were still around, when the world was created - actually this is not what we would consider 'time'. Traditional societies do not know a historical time: the image of a long line of successive stages, all different from each other.

So what are the characteristics of a historical consciousness of time? From the thesis of a fundamental breach between past and present, as it was postulated by thinkers like Koselleck and Ankersmit, we can derive three aspects of a historical consciousness of time:

1 The distinction which is made between different eras and the habit of historians to ascribe certain unique characteristics to certain periods: the phenomenon of *periodization*.

2 The feeling that certain phenomena belong to one period only and that it is a basic mistake to confuse elements which belong to one period with elements which belong to another one. Historians are particularly interested in unique states of affairs which can be found in one period only. Avoiding anachronisms has become one of their foremost objectives: according to the famous Dutch historian Huizinga half of the activities of historians consists of avoiding anachronisms.²³ So the feeling of *anachronism* is our second characteristic of historical time.

3 If periods in the past are to be considered as independent entities, they cannot be only interpreted in view of the present. They are not only a 'previous history' of what came after, but they also represent a reality in their own right. This historical reality consists not only of elements which have had important consequences, but also of elements that did not lead to anything in the present. The past includes options for futures that have never developed. History makes clear that many things depend on coincidence and could easily have developed in a different way than has actually occurred. This is the third characteristic of a historical consciousness of time: the feeling of *contingency*.

Historical time has to do with perceptions of human beings. In that respect it is subjective; taken as a human idea, there is not even an essential difference with the social and mythical time in traditional cultures. History consists of accounts about past times which do not correspond with the actual passage of time, not even with what 'actually happened'. A chronicle-like enumeration of 'everything that ever happened' - if at all conceivable - would result into bad, chaotic and incomprehensible history. To write history, one has to select, compose and interpret. More than that: history which relies strongly on dates and chronology is flawed. If the only connection between events is that they happened in the same year, or in successive years, this actually means that there is no connection at all. This is what Ankersmit means when he says, following Louis Mink, that 'lived time' has to be annihilated by the historian, adding the remark that the best generally praised masterpieces of twentieth century historiography contain very few dates. Approvingly, he quotes Mink's thesis that

²³ Huizinga, J. (1948), 'L'état bourguignon, ses rapports avec la France, et les origines d'une nationalité néerlandaise', in: *Verzamelde Werken* vol. II, Haarlem: Tjeenk Willink, p. 161-215, quote 167-168.

'time is not the essence of historical narratives'.²⁴ So historical time is subjective; it exists only in our minds, as St. Augustine observed about time in general.

Yet there is of course an essential difference between historical time and ecological, mythical and social times. Historical time also has its objective side. Chronology may not be decisive for the shape of an historical narrative, it cannot be ignored either. Objective calendar time is always a standard which has to be met by an historical account, and if there are discrepancies, the account has to be adjusted. A fundamental study into these aspects of historical time are the three volumes of *Time and Narrative (Temps et Récit)* by the French philosopher Paul Ricoeur. He states that the historical narrative bridges the gap between objectivating and subjectivating trends in thinking about time: '*Time becomes human to the extent that it is articulated through a narrative mode, and narrative attains its full meaning when it becomes a condition of temporal existence.*'²⁵ Historical time is not cyclic, like ecological and daily times, but undeniably linear. A basic difference with social time is its dimension: it stretches out over hundreds and hundreds of years.

The relation between objectivating and subjectivating trends in thinking about time is characterized, says Ricoeur, by the utilizing of three 'reflexive instruments': the calendar, the succession of generations and traces and documents. These three bridge the gap between 'lived time' and 'objective time', thus resulting in 'historical time'.²⁶ Each of these three instruments has an objective side, implying that they exist regardless of what people think of them or do with them. Each also has a subjective side, because people use them in their representations of time. The calendar for example is more or less objective as long as it is empty, not filled with any historical event, but just mentioning the years, months and dates. As soon as we start filling it up with events, it becomes more subjective.

Ricoeur's three reflexive instruments can provide a second triad of characteristics of historical time:

4 The instrument of the *calendar* points to the necessity of dealing with *chronology*, years, dates, and succession of events.

5 The instrument of *generations* has to do with the fact that human societies consist of people with different ages living together. Older people have lived in 'another time' that younger people have not witnessed, yet younger and older people can have a group feeling, a feeling of 'we' and 'us'. But

²⁴ Ankersmit 1989: p. 22-23. Reference to L.O. Mink, *Historical Understanding* (1987), p. 30.

²⁵ Ricoeur, P. (1984), *Time and Narrative Vol. I*, Chicago / London: University of Chicago Press. (trans. by K. McLaughlin and D. Pellauer of: *Temps et Récit I*, Paris: Éditions du Seuil 1983), p. 52.

²⁶ Ricoeur, P. (1988), *Time and Narrative Vol. III*, Chicago / London: University of Chicago Press. (trans. by K. McLaughlin and D. Pellauer of: *Temps et Récit III*, Paris: Éditions du Seuil 1986), p. 104.

people belonging to a historical past are also essentially different: they are not ‘us’, but ‘them’. Making the distinction between ‘us’ and ‘them’ has to do with a historical consciousness of time. 6 The instrument of *traces and documents* bridges the gap between different times, because they existed in the past and still exist in the present. The difficulty is how to interpret them correctly, because the world of thoughts and feelings in which they originated, no longer exists.

5 Historical time and teaching and learning history

From philosophical thinking about historical time we have derived six key concepts that characterize a historical consciousness of time. We can now try to apply these to the teaching of history. Thus we can create a theory of history education based on the concept of time. The consequences of this are not completely new and revolutionary. Partially they represent things which history teachers normally do in their daily teaching. Partially, however, they can also make visible which elements of learning history may present difficulties to students, where we should put accents in our teaching, and which elements we perhaps overlook easily.

- From the concept of the *calendar* follows as a teaching objective: Students should have some knowledge about chronology, eras, time lines, and dating systems. That is not really such a new thing, but perhaps it should not be regarded as something insignificant that can be dealt with at the beginning of a history course and taken for granted in the remaining history lessons.
- From the concept of *periodization* follows not only the objective that students learn how to distinguish between different periods and learn the characteristics of periods by heart, but also that they develop a ‘sense of period’ and learn to orient in historical time. Orienting in historical time is not so easy at all. One needs ‘orientation knowledge’²⁷, frame of reference knowledge, a form of historical knowledge that does not automatically result from a chronological treatment of a long succession of historical periods.
- From the concept of *anachronism* follows the objective of learning to regard periods in the past as independent, not only as prehistory of the present. This implies that one avoids presentism when talking about the past and tries to judge the past with its own yardsticks. It might be a good habit in this respect to avoid the words ‘already’ and ‘not yet’ in history lessons. If we say that something in the past was ‘already’ the case, we use today’s yardsticks, perhaps without being aware of it. A comparison of the Roman world with the present often leads to the conclusion that the Romans already had many things that belong to the modern world, such as central heating, public toilets and shopping

²⁷ Wilschut, A. (2009), ‘Canonical Standards or Orientational Frames of Reference? The Cultural and the Educational Approach to the Debate About Standards in History Teaching’, in: Symcox, L. & Wilschut, A. (eds.), *National History Standards. The Problem of the Canon and the Future of Teaching History*. Charlotte (NC): Information Age Publishers. P. 117-140.

malls. Thus one uses the past as a justification for the present. If this is being done consistently, this could imply the danger that nothing new can be learned from history any more: history only confirms that the world is good as it is today, and that humans in the past were only pitiful creatures who lacked the things they actually should have had.

- From the concept of *contingency* follows the objective that students learn about unintended consequences of human acting. The fact that these continuously occur in history can be easily explained by the way humans often tend to strive for contradictory goals. The result in such cases is inevitably that one of the parties does not accomplish what it intended to do and is thus being confronted with unintended consequences. Something like that is the case in all wars, because all parties want to win a war, but of course there are also always losers. An interplay of motives of distinctive kind can lead to a result intended by nobody. This can only be concluded from hindsight. Time difference is therefore essential in dealing with unintended consequences: the intention belongs to one certain point in time, and the consequence belongs to another point, a later moment. In order to be able to really understand humans in the past, students must learn to do something extraordinarily difficult, i.e. forget about their knowledge of 'what happened afterwards'. Psychological research has shown that it is very difficult not to take into account knowledge that one has, and about which can be assumed that someone else does not have it at his disposal. This phenomenon, which could be an essential tool in understanding learning difficulties in history education, is called 'epistemic egocentrism'²⁸.

- Talking about the concept of *generations* we have seen that a we-feeling can exist between people belonging to different age groups, i.e. people who have (partly) lived in different times. In certain cases there seems to be an inclination to extend this 'we-feeling' to an unlimited period in certain. People can talk about 'we Germans', 'we Europeans', or even 'we humans', no matter how long ago the periods that they are dealing with. A historical consciousness of time, however, does not accentuate the similarities between us and people of the past, but the differences. Human beings from previous epochs were above all different from us, they were hardly those with whom we could develop an authentic 'we-feeling' if we were to meet them in real life. It should therefore perhaps be an objective of history teaching that the 'we-feeling' we share with older generations cannot be extended indefinitely into the past. In some cases a feeling of foreignness ('the past is a foreign country') seems to be something that has to be learned. Unjustified 'we-feelings' seem to occur easily, especially when people talk about the history of their own group, their family, their city, their nation. In such cases students do not have to learn empathy to bridge the time gap, but a feeling of historical distance to perceive the time gap.

²⁸ Royzman, E.B., Cassidy, K.W., Baron, J. (2003), ' "I Know, You Know". Epistemic Egocentrism in Children and Adults', *Review of General Psychology* 7 (1), 38-65.

- From the concept of *traces and documents* follows the objective of learning to regard today's world as consisting of remnants from different times. The concept of the 'unsimultaneity of the simultaneous' (*Ungleichzeitigkeit des Gleichzeitigen*), first developed by the German art historian Wilhelm Pinder in the 19th century²⁹, refers to the consciousness of the temporal layers in all realities, the present one as well as previous ones. For every object, condition, conception or opinion, the question should be asked: when did it originate, which epochs have affected it? Thus 'depth' develops in a reality which at first sight seemed to be only one-dimensional.

Thus we have drawn some outlines of a theory of history education based on the concept of time. The educational question which follows, is whether it is difficult to acquire a historical time consciousness based on the above mentioned six key concepts and which are the learning problems involved in it. This opens a new field of research for history educators. As far as we can conclude from what has been discussed up to now, learning a historical consciousness of time confronts students with a few modes of thinking about time which are unnatural and artificial:

- the long linear succession of 'other times' in stead of the more natural cyclic thinking and thinking in terms of social time.
- the distance to essentially alien periods: people in history are 'they', not 'us' - while a natural attitude towards the past often seems to be imply the inclination to concentrate on 'one's own' history: family, local or national. In these contexts people often tend to think in terms of 'us' and 'ours'.
- the laws of chronology, which are mathematical instead of intuitive, and do not adapt well to the ways in which people usually experience time.
- based on anthropological insights, we could start wondering whether cyclic daily time and social time could be more natural and easier for students in western schools than historical time. Is the time of their parents and grandparents a different category to them than time from history books, and if so, how can these two be made to correspond to each other?

Not much is known about how these problems in dealing with historical time can be overcome, because the learning of historical time has not been systematically researched. In the next sections, some results of research executed by psychologists and history educators are summarized.

6 Psychological research

From psychological research we can gather that people hardly ever use mathematical chronology in their autobiographical memory. We remember certain contexts, representations, images,

²⁹ Pinder, W. (1926), *Das Problem der Generationen in der Kunstgeschichte Europas*. Berlin: Frankfurter Verlags-Anstalt.

but hardly ever any dates or numbered years.³⁰ The type of these memories is like: 'it must have been before we moved into this house', or: 'I still remember the colour of the dress I was wearing'. William Friedman refers to 'islands of time' existing in our memory as a kind of pictures, loose fragments, which do not necessarily fit into one coherent temporal system.³¹ The information has not been stored with the aim to remember time, but with the aim to remember a context. The loose islands of time may possibly become coordinated in a logical time system, if such a system is imposed on our thoughts. But usually we need a lot of aids, like agendas, calendars, documents, etc., to be able to make a correct reconstruction. The idea that something like a conception of a long lasting linear time exists in human beings by nature, is a 'chronological illusion', says Friedman.³² Our memories are not equipped for such information, but rather for more practical cyclic information that we need daily. All of this applies to our autobiographical memory. Psychological research does not answer the question whether the same or similar modes of thinking apply to remembering historical information.

7 Research in teaching historical time to primary school students

When we review the research that has been done into teaching and learning of (historical) time, we can conclude that almost all of it has been carried out among children of primary school age. Usually, no distinction has been made between learning to deal with time in general (such as clock and calendar time) and matters coming under history education proper (like chronology and dates). A classic example of this kind of research is the inquiry made by Oakden and Sturt in 1922³³, often quoted, imitated and refined in later years.³⁴ They asked questions and gave some assignments, about clock time and calendar time to the younger children, and about historical chronology to the older ones. Their presupposition was that learning about clock time and calendar time precedes learning about historical time. Another notion that can be gathered from this research is that the ability to handle time (clock, calendar and historical time) was considered to be fully matured at approximately the end of primary school. Harner, for example, says that the use of temporal expressions among adolescents and adults has not been researched because it is assumed that they have fully mastered

³⁰ Friedman, W.J. (2008), 'Developmental Perspectives on the Psychology of Time', in: Grondin, S. (ed.), *The Psychology of Time*, Bingley: Emerald, p. 345-366.

³¹ Friedman, W.J. (1992), 'Children's Time Memory: The Development of a Differentiated Past', *Cognitive Development* 7, 171-187: p. 172. Friedman W.J. (2008), 'Developmental Perspectives on the Psychology of Time', in: Grondin, S. (ed.), *Psychology of Time*. Bingley: Emerald. p. 345-366: p. 352.

³² Friedman 1993: p. 60.

³³ Oakden, E.C. & Sturt, M. (1922), 'The Development of the Knowledge of Time in Children', *British Journal of Psychology* 12, 309-336.

³⁴ Friedman, K.C. (1944), 'Time Concepts of Elementary-School Children', *The Elementary School Journal* 44 (6), p. 337-342. Bradley, N.C. (1948), 'The Growth of the Knowledge of Time in Children of School-Age', *British Journal of Psychology* 38, p. 67-78. Jahoda, G. (1963), 'Children's Concepts of Time and History', *Educational Review* 15 (2), p. 87-104.

them.³⁵ A commonly drawn conclusion was that full mastery of conventional chronology was a requirement to be able to learn any history at all: first daily time words, then the clock, then the calendar, then chronology, and finally history.³⁶ This conclusion could be explained partly by the fact that no attempt was made to confront younger children with history at all, assuming that this would be a futile undertaking. Learning an unruly mathematical chronology is a job of considerable difficulty for younger children. This explains why there was a lot of pessimism about the possibility of teaching history in primary schools at all. A possible difference between mathematical chronology and other aspects of historical time was not taken into account in this research.

During the nineteen nineties Keith Barton and Linda Levstik dissociated themselves emphatically from the earlier research into the development of time consciousness in children. There is no empirical research which proves that there is any connection between the learning of clock time and calendar time and the ability to learn history, they said.³⁷ Time is a cultural construction of a multifaceted nature and there seems to be no reason why different aspects of it cannot be learned independently from each other: '*We see no reason to think that a child must be able to name the months of the year before he or she can recognize that a picture of colonial America is older than one from the 1950s*'.³⁸ The existing research departed from an adult world of chronologies, data and knowledge of historical periods and famous persons, and then demonstrated what children could not yet do with these. Instead, Barton and Levstik wanted to research what children *could* do, so they did not want to take the adult world as their point of departure.³⁹ Their research was based on nine pictures from daily life in the United States: one from the eighteenth century, three from the nineteenth century, two from the twentieth century before the Second World War and three from the twentieth century after the Second World War.⁴⁰ By using pictures they avoided the problem of language which had often thwarted earlier research. Knowledge of historical facts and dates did not affect their research set up either.

In private interviews, they confronted primary school children of different ages, including the youngest ones, with the pictures. First they gave them two pictures that had to be classified as 'short time ago' or 'long time ago', and after that they gave them the other pictures one by one, which had to be put either before, or between or after the other ones. They asked children to make groups of pictures they thought belonged together. They made the children think aloud about their decisions. It

³⁵ Harner (1982), 'Talking About the Past and the Future', in: Friedman, W.J. (ed.), *The Developmental Psychology of Time*. New York / London: Academic. p. 141-169: p. 146.

³⁶ Oakden & Sturt 1922: p. 311.

³⁷ Barton, K.C. & Levstik, L.S. (1996), "'Back When God Was Around and Everything": Elementary Children's Understanding of Historical Time', *American Educational Research Journal* 33 (2), 419-454: p. 420.

³⁸ Barton & Levstik 1996: p. 422.

³⁹ Barton & Levstik 1996: p. 424.

⁴⁰ Pictures in appendix A, Barton & Levstik 1996: p. 447-451.

appeared that all children, including the very youngest ones, could make distinctions between long time ago and short time ago. The number of groups they distinguished increased with age: the youngest classified the pictures into just two or three groups, naming them with labels such as '*real old*', '*just old*' or '*close to now*'. The distances in time inside the groups of nineteenth century, pre-war twentieth century and post-war twentieth century pictures were often misjudged or overlooked. The higher grades made more distinct groups and also tried to use some dates, which could, however, be wrong by hundreds of years. More frequently, associative time labels were used, such as 'time of the cowboys', or 'war time'. Children from grade 5 and 6 also used historical information, which is not surprising considering the fact that these students study history at school in the United States. Conventional chronology was gradually used more accurately by these children, albeit far from perfectly. Barton and Levstik concluded that children have the ability to discern changes in time starting from a very young age, and that they commonly use material, visual aspects to do this: horse and wagon came before cars, or primitive cloths came before more sophisticated ones ('this must be long ago, because these people walk around in rags'). The advice Barton and Levstik formulated based on this research was that education should concentrate on the development of the feeling for past and present which children do have, rather than assume that children cannot understand history because they do not have the right understanding of the conventional time system.⁴¹

In subsequent studies Barton has done similar research among American and Northern-Irish children, this time using pictures also from times longer ago than the last two hundred years.⁴² These studies produced similar results, though Northern-Irish children appeared to have rather different ideas about change and progress in history than their American counterparts. After these subsequent studies Barton analyzed the strategies which children applied when asked to classify pictures into periods. He distinguished four types of strategies:

- Knowledge of material objects, people and events (the design of cars, cloths, armours, something looking like 'war time').
- Experience from their own environment, for example: my father learned how to drive in a car like this, and he has this age, so this must be from this time (estimates of this type were made with feelings of considerable certainty).
- Progress and development: bigger and higher buildings must be more recent. Better cloths, more recent. In general: anything which is more like now, must be closer to now.

⁴¹ Barton & Levstik 1996: p. 442.

⁴² Barton, K.C. (2001), 'A Sociocultural Perspective on Children's Understanding of Historical Change: Comparative Findings from Northern Ireland and the United States', *American Educational Research Journal* 38 (4), 881-913. Barton, K.C. (2002), "'Oh, That's a Tricky Piece!': Children, Mediated Action and the Tools of Historical Time', *The Elementary School Journal* 103 (2), 161-185.

- Anchoring and adjustment. If some picture was defined as 'now' or 'close to now' other pictures were dated by subtracting certain fixed quantities of years, such as ten or a hundred. This could lead to 'disastrous results', for instance an estimate of the Mesolithic age as 120 years ago.⁴³

The fact that material and visual aspects appeared to play such an essential role is probably due for a great deal to the set up of this research. The children were not given any other than visual information, and the pictures only presented material aspects of daily life. No comparison was made with information from a story, for instance. Therefore, Barton's conclusions and advices may be going a bit too far. Research by Patricia Hoodless has shown that information from stories can also elicit temporal reasoning in children.⁴⁴

When we confront the results of Barton's studies with the psychological and anthropological research discussed earlier, it is striking that the second strategy which applied information from 'social time' resulted into the greatest feelings of security among the children, while the fourth one, leaning on mathematical chronology, resulted into disasters. This is in agreement with the artificial character of mathematical chronology, to which human memory appeared to be unapt in psychological research. The first strategy mentioned by Barton seems to be in agreement with Friedman's notion of 'islands of time': associations are used to categorize things in certain contexts. The third strategy, which concentrates on the present, may have to do with what psychological research calls '*temporal decentering*': choosing a point of reference which is different from one's own position in time.⁴⁵ This appears to be a difficult activity; the most natural inclination of people is to choose their own position in time as a point of reference and observe and judge everything from there. The children using the third strategy use their own time as a standard and classify anything that is (considerably) different as a (long) time ago.

The strategies applied by children during Barton's research belonged to at least three separated categories: distinguishing sequence, grouping pictures and estimating distances in time. These were independent of each other: pictures could be grouped correctly, but sequenced incorrectly, or sequenced correctly with a misjudged distance in time.⁴⁶ The mathematical chronological system was rarely given priority; year data were not used to be able to determine sequence, but pictorial information was first used to make decisions; a possible calculation of the year or time distance came after that. The results of Barton's studies seem to be in agreement with the results of psychological

⁴³ Barton 2002: p. 171-174.

⁴⁴ Hoodless, P.A. (2002), 'An investigation into children's developing awareness of time and chronology in story', *Journal of Curriculum Studies* 34 (2), p. 173-200.

⁴⁵ McCormack, T. & Hoerl, C. (2008), 'Temporal Decentering and the Development of Temporal Concepts', *Language Learning* 58 (suppl. 1) p. 89-113.

⁴⁶ Barton 2002: p. 174.

research about time islands and associations, and the difficulties connected with the use of mathematical chronology. So perhaps these do not only apply to autobiographical memory, but also to learning about historical time. More research is needed for any more definite conclusions about this.

8 Exploring the research agenda: some results of empirical research

The six key concepts connected with a historical consciousness of time, such as described in section 5 above, have hardly been touched on by educational research, apart from the important work by Levstik and Barton discussed in section 7. So the six key concepts open up a new agenda for educational research in the field of history education. I have done some explorative empirical research into matters related to two of the six key concepts:

- research into the use of ‘we’ and ‘they’ when talking about national history;
- research into the use of mathematical chronology and associative concepts when developing orientation knowledge about a longer historical development.

Some preliminary results of these explorative research will be discussed in this section. I need more time and space to analyze the data in detail and report more extensively on definite results. This will have to wait until future publications.

8a Research into the use of ‘we’ and ‘they’ when talking about national history

The problem of the use of a ‘we’- or ‘they’-perspective is touched by VanSledright when he talks about a US primary school teacher who is confronted with a text about the expulsion of the Cherokees from east-Mississippi around 1830.⁴⁷ The teacher behaves in an emotional manner about the way ‘we’ had driven them out: *I keep saying ‘we’, because I guess it is my ancestors (...) it just makes me hate my heritage almost, you know.*⁴⁸ A few moments afterwards she realizes that she is dealing with another time than her own, but the story keeps frustrating her. She is showing empathy with the past, but is she also ‘thinking historically’? – asks VanSledright. Should she not have been more at a distance, less emotional, more balanced in her judgment? She could have started by regarding the Cherokees as well as the white population in the nineteenth century as ‘them’ and then study the perspectives of both groups.

⁴⁷ VanSledright, B.A. (2001), ‘From Empathetic Regard to Self-Understanding: Im/Positionality, Empathy and Historical Contextualization’, in: Davis Jr., O.L., Yeager, E.A., Foster, S.J. (eds.), *Historical Empathy and Perspective Taking in the Social Studies*, Lanham (etc.): Rowman & Littlefield, p. 51-68.

⁴⁸ VanSledright 2001: 52.

More common than the negative 'we'-perspective in the case of the Cherokees are examples of positive 'we'-perspectives connected with the narrative of freedom, democracy and progress in United States history. I quote from educational research that has been conducted with other aims than studying the use of the 'we' - and 'they'-perspectives. A ten year old tells about the first Thanksgiving: *'... when we all became possible, because we all came from over there... and that's basically how we started our nation.'*⁴⁹ And a nine year old about the American Revolution: *'before the Revolution we didn't have our rights, we weren't free.'* This 'we'-perspective is common among students as well as teachers in the United States, regardless of their origin, ethnicity of the time of their immigration into the US.⁵⁰ Partially this has to do with what the US are nowadays, for example in: without the Revolution *'we wouldn't have freedom'* or: *'we'd still be a part of England'*⁵¹. But it is also applied to historical periods without any connection with the present: *'We were getting taxed and we didn't have no say about it, and we wanted some representation over in parliament, in England...'* (a ten year old)⁵², *'We wanted our freedom, so people from Spain and places came over, and we could do anything we wanted to, like do our own religion'*⁵³, or, about taking part in the Second World War: *'We were basically just helping other countries.'*⁵⁴ It is unclear why and when students and teachers choose for a 'we'-perspective or a 'they'-perspective. Negative experiences or experiences of minorities seem to be a reason to use a 'they'-perspective. An African American student for example says that the Emancipation Proclamation *'helped toward freeing the slaves'*⁵⁵ (not 'us'), and the Great Depression is being described in terms of *'what people had to go through'*⁵⁶ (not: 'what we had to go through'). Those who protested against the Vietnam War were 'they': a student wishes to know *'why they were against the Vietnamese people'*⁵⁷, because she assumes that the war was (of course) started to help the Vietnamese people. But also the Boston Tea Party is being described from a 'they'-perspective: *'It was when the people threw tea into the river.'*⁵⁸

Research among British students of the ages 14 to 18 shows similar data about the use of 'we'- and 'they'-perspectives. The time distance seems to be irrelevant: *'When the Roman empire fell we were open to attacks from the barbaric Vikings and were raided frequently over the next few*

⁴⁹ Barton, K.C. & Levstik, L.S. (2008), "'It Wasn't a Good Part of History". National Identity and Students' Explanations of Historical Significance', in: Levstik, L.S., Barton, K.C. (eds.), *Researching History Education. Theory, Method and Context*, New York / London: Routledge, p. 240-272: 244.

⁵⁰ Barton & Levstik 2008: 244-245.

⁵¹ Barton & Levstik 2008: 245, 244.

⁵² McKeown, M.G., Beck, I.L. (1990), 'The Assessment and Characterization of Young Learners' Knowledge of a Topic in History', *American Educational Research Journal* 27 (4), 688-726: 703.

⁵³ McKeown & Beck 1990: 714.

⁵⁴ Barton & Levstik 2008: 250.

⁵⁵ Barton & Levstik 2008: 253.

⁵⁶ Barton & Levstik 2008: 256.

⁵⁷ Barton & Levstik 2008: 257.

⁵⁸ McKeown & Beck 1990: 703.

centuries.’⁵⁹ Britain too has its success stories which are easily connected with a ‘we’-perspective: ‘*We’re just one of the forefront, sort of leaders of democracy...*’ ‘*And then industrially, there was the Industrial Revolution, we’ve been continually at the forefront of that...*’⁶⁰ The island-feeling contributes in some cases to the ‘we’-perspective: ‘... *we’ve been on guard, from other countries and stuff...*’⁶¹ Great discoverers are seen as ‘they’, but the British Empire is seen as something that ‘we’ have lost.⁶² An interesting passage comes from a survey of British history by a 15 year old: ‘...*we was invaded by Normandy, a region of France and was defeated. The next major event was the Plague. Britain was hit hard and the population went from 10 million to 2 million...*’⁶³ (not: ‘we were hard hit and millions of us died’).

The data quoted above were not collected in view of a research into the use of ‘we’- and ‘they’-perspectives, but were used for other purposes. It is unclear when and why students and teachers use these perspectives. It seems clear, however, that students have not been taught to consciously make a distinction between these perspectives, and perhaps teachers are also not aware of the way they use them. This is a question I wanted to explore.

In September 2009 I researched a group of first year College Students in the Netherlands, who were about to start their education as a History Teacher. These students had just finished their high school education and their performance could therefore be regarded as a result of Dutch high school history teaching. There was no influence yet from their College education as a history teacher, because the research was done in the first week of their term. The group consisted of 126 students, 85 males and 41 females. Most of them were 17, 18, 19 or 20 years of age. Almost all (124 out of 126) considered Dutch history to be ‘important’. The students were presented with a form which contained five triads of sentences about five subjects in (Dutch) history. Each triad was about one topic: The Romans in the Netherlands, The Christianization of Europe, Rembrandt, the Industrial Revolution, and the German Occupation of the Netherlands. Subject 2 and 4 (Christianization and Industrial Revolution) were not about Dutch history exclusively and were included only as a diversionary tactic – not to make it too obvious what the object of the enquiry was. In the triads of sentences about the other three subjects, some were formulated from a ‘we’-perspective and some from a ‘they’-perspective. The students were asked to choose in each of the five cases which sentence according to

⁵⁹ Lee, P.J., Howson, J. (2009), "'Two out of Five did not Know That Henry had six Wives", History Education, Historical Literacy and Historical Consciousness', in: Symcox, L., Wilschut, A.. (eds.), *National History Standards. The Problem of the Canon and the Future of Teaching History*, Charlotte NC: Information Age Publishers, p. 211-261: 232.

⁶⁰ Lee & Howson 2009: 237.

⁶¹ Lee & Howson 2009: 237.

⁶² Lee & Howson 2009: 238.

⁶³ Lee & Howson 2009: 232.

them best described what happened in the past, and why they thought so. In the processing of the results, triad 2 and 4 were not included.

Table 1 shows a quantitative survey of the numbers of students who chose for a ‘we’- or a ‘they’-perspective in the cases of ‘Romans’, ‘Rembrandt’ and ‘German Occupation’.

[Table 1]

Number of respondents choosing a we-perspective or a they-perspective in sentences about three items from Dutch history.		
Romans		
In the first centuries of the Common Era the Romans controlled the south of our country.	47	We-perspective (option 1 or 3): 63 respondents (50%)
In the first centuries of the Common Era the south of the Netherlands was a part of the Roman Empire.	62	They-perspective (option 2): 62 respondents (49%) One respondent did not answer this question.
In the first centuries of the Common Era we were subjected by the Romans.	16	
Rembrandt		
Rembrandt is one of our most important painters from the Golden Age.	19	We-perspective (option 1 or 3): 86 respondents (68%)
Rembrandt is the most important Dutch painter from the Golden Age.	40	They-perspective (option 2): 40 respondents (32%)
In Rembrandt we had a great painter in our country in the 17th century.	67	
German Occupation		
During the Second World War we were at war with the Germans.	4	We-perspective (option 1 or 3): 21 respondents (17%)
During the Second World War the Netherlands was occupied by the Germans.	105	They-perspective (option 2): 105 respondents (83%)
During the Second World War Hitler tried to incorporate us in his Germanic Empire.	17	

More illustrative than the numbers of students choosing the diverse options of sentences are the reasons they gave for their choice. In the case of Rembrandt, many students objected to the use of ‘most important’ in the second sentence. This, they thought, was too subjective: what about the other

great painters? Out of the 67 respondents choosing the third option, 41 motivated their choice in this way: the last sentence was more neutral and more objective, and that's why they opted for that one.

In the case of the German Occupation, the motivations were also extremely interesting. Many students did not choose the first sentence, because in their view there had hardly been any war at all ('only a few days') and dismissed the third one because Hitler according to them did not 'try' to do something, but just did it. The second sentence described best what was in fact the case during the war. It is significant to note that out of 105 respondents opting for the second sentence, 31 motivated their choice in terms of a 'we'-perspective: *'Because we had hardly any chance to resist, we were just taken by surprise'*, *'We were not at war, we were occupied. We hardly waged any war at all'*, and other motivations of a similar kind. These 31 respondents, three of whom belonged to immigrant cultures, should in fact be added to the group choosing a 'we'-perspective.

Twenty respondents (16%) consistently chose for a 'they'-perspective in the case of all of the three subjects: three belonging to immigrant cultures and 17 natives (corresponding well with the total number of immigrants and natives in this group). Out of these twenty, six made it clear in their motivations that they were aware of the difference between 'we' and 'they' in the perspectives and motivated their choice in this way: *'We' and 'us' are relative concepts'* (motivation with Rembrandt and German Occupation), *'At that time there was no 'we' or 'us''* (Romans), *'We' and 'us' is unclear, but 'Netherlands' is clear'* (Romans) and the same respondent for Rembrandt: *'Dutch is more clear in stead of 'our', 'our country''* and for the German Occupation: *'Speaking about Netherlands is better than 'we''*. Four respondents out of this group of 20 motivated their choice in the case of the German Occupation from a 'we'-perspective and three others did the same in the case of the Romans, which means that they did not choose for a they-perspective consistently. Only six students motivated their choice for a 'they'-perspective consistently.

I conclude from these results that the great majority of the students taking part in this research either did not notice the difference between the 'we'- and 'they'-perspectives, or considered this difference less important than other differences between the sentences. I could have added an extra question after the completion of the form, asking students whether they had chosen for a 'we'- or 'they'-perspective consciously and consistently. Perhaps this can be done if I repeat this research with the next generation of students. In that way we could be more certain about the conclusion that I can now only present as a preliminary result: From the data presented here we can conclude that the great majority of students were probably not aware of a difference between 'we'- and 'they'-perspectives and about the desired use of such perspectives when talking about history. Most probably, students have not been taught to make this distinction in the history lessons on their high schools. We can surmise that their teachers are probably not aware of this distinction either.

8b Mathematical chronology and associative concepts in developing orientation knowledge about a longer historical development.

When we take into account the results of psychological research which has shown that mathematical chronology is essentially alien to our natural experience of time, it seems clear why many students hate remembering dates and why they often cannot use them in any satisfactory way. We can question the ways in which history education usually deals with chronology: starting with years BCE and CE, timelines and periods, and subsequently discussing eras in more detail. Dates and chronology seem to tally badly with the sense of time and period that students can develop in other ways. A chronological order of subject matter, which is often supposed to enhance a consciousness of historical time, might do the opposite. Research has shown that chronologically ordered curricula do not support the development of a consciousness of historical time.⁶⁴ This is not surprising, because they are probably based on a ‘chronological illusion’. If we apply Friedman’s insights about ‘islands of time’, it seems more fruitful to construct contexts via images, stories and associations, extend and refine these gradually, and finally fit them into a comprehensive chronological framework. Proposals to develop ‘frameworks of knowledge’, ‘big pictures of the past’ and ‘a sense of period’ could be productive to develop this type of history education.⁶⁵ Similar considerations have been the background to the introduction of a ten era system into Dutch history education.⁶⁶ Rather than being chronologically ordered periods, the Dutch eras are meant to be associative ‘islands of time’; for this reason, they have been given names like ‘era of monks and knights’ (= early Middle Ages), ‘era of discoverers and reformers’ (sixteenth century) and ‘era of citizens and steam engines’ (nineteenth century). Students can develop associative frameworks around these eras, study themes can cover several of them, compare situations in different eras, etc.

In order to measure the effect of the use of associative ‘islands of time’ like the Dutch ten eras, I have conducted some research among Dutch high school students of the age groups 13, 14 and 15

⁶⁴ Little, V. (1990), ‘A National Curriculum in History: A Very Contentious Issue.’ *British Journal of Educational Studies* 38 (4), p. 319-334: p. 321.

⁶⁵ Howson, J. (2007), ‘Is it the Tuarts and then the Studors or the other way round? The importance of developing a usable big picture of the past’, *Teaching History* 127: p. 40-47. Shemilt, D. (2009), ‘Drinking an Ocean and Pissing a Cupful. How Adolescents Make Sense of History’, in: Symcox, L. & Wilschut, A. (eds.), *National History Standards. The Problem of the Canon and the Future of Teaching History*, Charlotte NC: Information Age, p. 141-209: p. 160-169. Lee, P. & Howson, J. (2009), ‘Two out of Five did not Know That Henry VIII had Six Wives. History Education, Historical Literacy and Historical Consciousness’, in: Symcox & Wilschut 2009: p. 211-261: p. 241-250. Dawson, I. (2009), ‘What Time Does the Tune Start? From Thinking About “Sense of Period” to Modelling History at Key Stage 3’, *Teaching History* 135: p. 50-57.

⁶⁶ Wilschut, A. (2009), ‘Canonical Standards or Orientational Frames of Reference? The Cultural and the Educational Approach to the Debate About Standards in History Teaching’, in: Symcox, L. & Wilschut, A. (eds.), *National History Standards. The Problem of the Canon and the Future of Teaching History*, Charlotte NC: Information Age, p. 117-139: p. 131-139.

year olds. The group consisted of fourteen classes of high school students in four different high schools in the West and North of the Netherlands. Parallel classes were chosen to create two research sub-groups of similar composition, in order to be able to make a good comparison. Thus each sub-group consisted of seven classes in four schools, a total of about 150 students in each group.

To be able to measure the effect of the use of associative ‘islands of time’ when orienting in a longer historical development, I chose subject matter which would probably be unknown to all Dutch students. To be able to make a study unit which would be not too large, even if a development of several centuries was studied, I chose the history of the small island of Aruba, which is an Caribbean island belonging to the Kingdom of the Netherlands as an autonomous self governing region nowadays. For this history, I designed a study unit based on the use of year numbers, dates and numbered centuries, and a parallel study unit based on associative eras, similar to the ten eras used in the Dutch history curriculum nowadays. Group A of seven classes was taught in the ‘mathematical chronological way’, using this description of periods:

- fifteenth century
- sixteenth century
- seventeenth century
- eighteenth century
- nineteenth century
- twentieth century

Group B of seven classes was taught using associative eras, using this description of eras:

- Era of Indians (up to 1500)
- Era of the Useless Island (1500-1600)
- Era of Horses and Pirates (1600-1800)
- Era of Gold (1800-1900)
- Era of Oil (1900-1980)
- Era of Tourists (1980-now)

Group A was taught using key events and numbered years and centuries. The events were put in chronological order. Group B was taught using stories and images, and apart from the round numbers indicating the limits of the six eras, no dates or numbered years were used. Events were put into context rather than chronological order. But the subject matter in both study units was the same. To make sure that knowledge of Aruban history was indeed close to nil before the study unit was applied, a pre-test was done in the research groups. The study unit was led by a guest teacher who visited all of the fourteen classes, to exclude any influence of difference in the quality of the teachers. At the end of the study unit, each group was given the task of locating 25 events from Aruban history in time: ten events which were mentioned in the study unit (the chronological one as well as the associative one), and fifteen which were not mentioned, but could be located in time correctly by combining elements

of information and deriving at conclusions. Five of these could be associated directly with words used in the name of an era in study unit B, which could give these students an ‘advantage’. In two cases, however, this association was ‘wrong’. For instance: ‘The Dutchman Dirk van Uitgeest passes in his ship along the coast of Aruba, but because he sees Indians on horses, he dares not go ashore’. The ‘Indians’ in this event could be related to the Era of Indians, but this is wrong, because Indians did not have horses in that era. The horses could be related to the Era of Horses and Pirates, but that is also wrong, because in that period the Dutch were already masters of Aruba, so Dirk could have gone ashore. The right choice in this case is the Era of the Useless Island (or: sixteenth century in the case of Group A), the time of the Spanish domination of Aruba. (The Spanish called Aruba a Useless Island (*isla inutile*) because they could not find gold. That’s why they deported the whole population. Later in that period, Indians returned, who had horses).

So group B was not advantaged for the final test because of the names of their Eras, which were unknown to Group A. How did the students perform on the final test? On average, group A (chronological) made 14,8 mistakes in locating the 25 events in time correctly. Group B (associative) on average made 10,5 mistakes. This is significantly less than group A, which seems to indicate that indeed mathematical chronology is a less adequate tool for building a frame of reference in time than associative eras. More analysis of data still has to be executed to know exactly which type of events could be located more easily by one group or the other. A more fully processed result of this research will appear in later publications. If the results of this research continues to be positive, this would mean that the use of the ten eras in Dutch history education would be more evidence based.