

# TURN OF THE CENTURY: END OR BEGINNING?

Éva TÓTH

Department of Theory of Science and History of Engineering  
Technical University of Budapest  
H-1111 Budapest, Műegyetem rkp. 5-7. K. I. 52.  
Phone and Fax: 36/1 166-6629

Received: July 11, 1994

## Abstract

Turns of centuries have always been in the centre of interest and thus have become the milestones, the landmarks of history. At the turn of a century some tasks are finished and others are started — at least we like to think so. Fear also gathers around turns of centuries, fear from that fact that the time has come when we are reproached with our sins and faults and we have to expiate them. The next turn of the century cannot be the time of either impotent waiting or of the silly decisions of the self-important, power-hungry Man. The century behind us teaches us patience, responsibility.

*Keywords:* change, repetition, turn of the century, fear, symbol, responsibility.

## 1. On Changes in General

All individual happenings start and end and it is so even when these beginnings and ends do not represent clear limits, unambiguous distinctions. Happenings do not 'strive' for creating a sharp distinction, limits are sought by us, by humans with inexhaustible, ever blazing enthusiasm. It is for us that it is important how long a phenomenon lasts and when and why a new one starts. It is important for us so that we could recall the familiar phenomena, happenings when we want them in accordance with our own objectives. In the constant flow, continuity of happenings the emergence of a certain phenomenon or the disappearance of others is not significant in the whole complex and perhaps global system, not even from the point of view of universal existence but these emergencies and disappearances are rather frequent and none of them bears marked distinction — all this is natural in this way.

Yet, if changes are observed in human perspectives, there are some extremely significant ones which change our lives in an exceptional way, there are some which are shaped by ourselves in order to create new circumstances for us. We take part in this process individually with our individual capacities and knowledge but our activities fit in a system, it

is collective work and the final result is considered to be ours as well, it influences all of us and our children as well and it will also have individual consequences for us. The continual presence of a beginning and an end, a turning point is natural but at the same time it can be particular, individual for us, humans.

The series of events between the beginning and the end lend certain individuality to the phenomenon, it is its own, it has its own time. We wonder at the individuality, at the non-repeatable characteristics of certain natural phenomena, e. g. the wonderful rich colours of a flowery field, which exists in its shape then and there only once and at the same time wonder at the identical and regular 'repetition' and 'return', that the flowers of the beginning of summer bloom again on the same field and fruit-trees bear fruit anew and snow covers the fields again. Starting anew is rhythmically repeated in nature. Each phenomenon has its own rhythm, ourselves included. Relying on a natural rhythm as a basis we say that New Year has come and after several repetitions of it the turn of the century or the millennium comes along but this turning point is not capable to collect, involve all the moments of changing all phenomena, important for us.

Should we want to strictly apply the measurement of time formed by us, we would find that centuries and millennia take a short time, their lengths can be expressed in seconds. This second can be interpreted in many ways, as the coincidence of real end and beginning: as the sudden disappearance of a group of possibilities and the emergence of others, as the moment of getting rid of something and that of the revival of hope. This second can also be regarded as a symbol, as in the shorter or longer time interval containing this second several things happened, some really significant ones among them.

## 2. End of the Century: Punishment and Fear

What is the end of the century like if it is regarded not as a symbol but a real ending? an ending, which gives an account, gives rise to disquietude, fear but it can also mean getting rid of something, starting anew can be full of worries but can represent a gleam of hope as well.

What does it depend on whether I hope or fear? Rational explanations can be given, referring back to the past when it was decided what I could choose in the interval between despair and desire, but selection itself has many factors and irrational determinants as well. I am tied to the atmosphere of my environment with a lot of threads and my emotions get my thoughts under control when I look into a world that I cannot explore, into future. It is an interesting experience that fears appear in more con-

crete, more 'realistic' pictures than the desired future. This is what the authors of horror stories and several science-fiction writers and directors make their living on. Or let us think of Dali's paintings made as illustrations for Hell, the rich fantasy and colours and the expressiveness of which pinned us down in front of them as we walked comfortably in front of some scenes from Paradise. True, Dali was in an easier situation when he had to describe hell because even in Dante's Divine Comedy this scene was more successful than the other ones. In Cocteau's film entitled *Eternal Return*, written in 1943, the innkeeper complains that as long as the lad who had terrorised all the people in the village lived, the inn was full at nights. Since the death of the lad the inn has emptied as if people had gone there to fear — it looks they like being scared. Films have enormous possibilities to nurse, develop, enrich our imagination if we want to fear — and they do it. The technological development of the art of film has also entered in the service of this.

We not only like being scared but we 'cannot help it' either, because what happens when we want to picture the good to ourselves? If we remain on the ground of the general, human freedom, happiness, justice will be wonderful as long as we speak of it only in theory. But would we like to live in Plato's State or Campanella's Sun City, in Szathmári's Kazohinia, More's Utopia or in any other 'realised' happy world controlled by morals or science? Would we like to or be able to live in a world where the long desired equality has been reached, where in order to achieve this the desire to be more than or different from others should be eliminated either chemically (LEM: *Return*) or by order (MADÁCH: *The Tragedy of Man* Scene 12, ORWELL: 1984, etc.)? Would we need an equality which leads into uniformity while striving for perfect realisation? How close utopia and anti-utopia are to each other, there is some difference from the point of view of historical momentum but this moment passes quickly and what remains is coincidence. Adam asks Lucifer in the phalanstery of Scene 12: 'What country is this, what nation that we have come to?' Lucifer in his answer says among others: 'Now the whole world is our wide homeland: For common goals all people are companions. And above the nice and quiet order, Science stands and joys.' (MADÁCH, 1962) And it turns out that here everything has stiffened, there is no movement, no difference, which would bring the environment in motion and there is no happiness. Common happiness does not exist, happiness is too individual, it is cut for me, it dies in uniformity.

How did we get acquainted with fear, horrors? This is the result of our detachment from Nature. As long as we lived as natural beings, death was not shocking, it was natural as it is natural in Nature even today. But nowadays Man has a special relation with Nature. He can live only

in Nature, he gets all the conditions of life from it. He rests in Nature, its harmony, beauty, cleanness, complexity calms him. But Nature is his eternal enemy as well, which he himself has chosen. Man always wants to prove that he is also a very significant element, what is more a dominant element of the system. He wants to prove it to himself, as who else would be interested? In his heart of hearts, however, he is convinced that he can never control Nature, nevertheless he provokes it trying to assert his real or imaginary interests. This enormous harmonious system, Nature does not confront Man but protects itself by restoring its own order with enormous efforts if it gets hurt somewhere, whatever the reason for this may be. There may be some inequality in its own motion but Man may hurt it as well, the answer is shocking and terrifying. In this moment the only thing Man can do is escape and this is degrading, it fills Man for all his life with the feeling of fear, pictures of what could and should be feared.

The less we know of the principles, of the laws of Nature, the more unexpected are the sweeping tragedies, floods, explosions, winds and storms rushing towards us from that direction. Nature may 'punish' us either because it has had enough of Man's interference into its own processes or because somebody believes that Man deserves punishment because of his behaviour so far and sends natural disasters to him especially because he fears them most as he has already got convinced that he cannot control happenings these times. God also sends natural disasters onto Earth, diseases, floods, fires and earthquakes. What a wonderful effect qualms of conscience have in interpreting explaining these events!

Man thus tries to acquire more and more of Nature and of society for himself (the concrete content is determined by given social conditions). Nature on the other hand 'punishes' — the formula is simple and has worked for centuries. Man thus, feeling that punishment is inescapable, tries to find or work out when it will come. Apparently it comes when something is over as we know that at the end of our life we will 'give an account' of our deeds, make an inventory or some may expect that the summary of our deeds will be listed either here on Earth or elsewhere. When something is over we may look back to evaluate what has happened and we will have a chance to understand the happenings when they have ended, passed because then we can expect no more change. At the end of the century we can expect that having looked back on what has happened so far we will be judged as someone who deserves punishment.

There are several descriptions of fears with which Man waited for the accounts at the turn of a century or a millennium and of people who were so much scared that they did not live to see the moment they had feared so much. There were some who wasted all their property because they were certain that punishment would come (or found it justified), others were

urged by the coming accounts to perform 'good' deeds. In punishment there is the possibility of starting something anew, of starting something new. The endlessly flowing series of events is divided into units, to days, weeks, months, years, decades, centuries, millennia. Although starting a 'new life' is always possible, we like doing so on a Monday, on New Year's Day, at the beginning of the century. A beginning liberates us from fears and we do nothing else but hope as we have not done anything yet, we can do everything right. We promise that we will do so. An end, the end of a century means liberation as well, liberation from qualms of conscience, we believe that we can leave our past behind.

The turning point of life is when everything that is fearful disappears from the future and there it fills up with things full of hope, the emotionally rich moment becomes more realistic, real if it is connected to actually existing turning points, even if we ourselves have defined these turning points in the constant flow of events, for the sake of our convenience. The future is wrapped in mist and through its veil it appears as mythical obscurity. Its myth can be increased by defining a turning point. Of the turning point itself one can say that it is not simply connected to the turns of time but its appearance can be calculated in a special way at a special level of relations known for only few. And indeed, if there are turning points in reality without our thinking about them why should not there be one at the turn of a century or a millennium waited for by everybody?

### 3. Turn of the Century as a Symbol

But we can think of the second of the turn of the century as something that separates centuries symbolically from each other: in fact the processes, events conceal the effects in a multiple way but there are phenomena which are characteristic for the previous period, others will influence the forthcoming ones and the turning point will narrow down symbolically to the last second of the present century and the first second of the following one.

What was the previous turning of the century like as a symbol? Today we look back on it as a period in which everything changed starting from science through technology, social views to fashion. In physics the crisis of the normal science came, like this: 'Discovery commences with the awareness of anomaly, i. e., with the recognition that nature has somehow violated the paradigm-induced expectations that govern normal science.' (KUHN, 1970, pp. 52 - 53). A new paradigm started to shape. 'The new paradigm, or a sufficient hint to permit later articulation, emerges all at once, sometimes in the middle of the night, in the mind of a man deeply immersed in crisis.' (ibidem, pp. 89 - 90). The new findings of physics

created the possibility of exploiting and using the source of energy so characteristic for this century but of very questionable value, nuclear energy. 'Nuclear energy — in spite of temporary standstills — has been developing at enormous speed. This cannot and must not be stopped. In all probability we have to learn to live together with it, to reduce its danger, to exploit to the utmost all its possibilities.' (Az atomeregetika... 1981.) We have spent a century on this attempt still we have not managed to subdue this energy so that it could become a natural part of our life but have not managed to oust it out from our life either.

The automobile was born, 'the machine that had changed the world'. Ford's first car that he had built himself set out in Detroit in 1896 and in 1901 in the same town Ford won a race in a car that went at a speed of 70 kms. In 1906 in France, Ferenc Szisz, a Hungarian won the Grand Prix in a racing car of Renault. At the turn of the century several important events took place, significant from the point of view of the development of monitoring. Beyond all doubt these events have brought about a real revolution, have changed our environment with the necessary roads, parking lots, factories, garages, petrol stations and with the sight of small and huge cars; they have changed our way of live, objectives, views, ideas and health. They have taught us mass and non-series production, business organization, production control, co-operation. At the turn of the century works on anarchism were published one after the other and as a consequence movements emerged that later became well known. Anarchism was an answer to the organizational experience, successes and failure of all the 19th century. And the tossing about of the 20th century between the theories and practices of democracy and dictatorship is an answer to anarchism.

The most wonderful works of art in painting, music and literature were born in a striving for the harmony of body and soul. The striving — which has not been achieved ever since — was expressed then, that only nature can represent harmony for Man, there are not any feelings, knowledge, facts more wonderful than the unity of Man and Nature. These events just gathered around the second of the turn of the century but strictly did not happen then. The turn of the century gathered around itself as a symbol the events of the 20- or 30-year period before and after, thus ensuring that they continue and gather around the following turn of the century unnoticed.

#### 4. Is the Next Turn of the Century Promising?

In the second half of the century the great contradictions which will apparently be left as a bequest for the next century have become more and more

evident. Despite our fears the conflict between us and Nature has risen to a critical level. Based on our knowledge acquired so far and considered as accurate this relationship can turn into a tragedy. Our deteriorated relationship with Nature lies heavily as an enormous shadow on other serious problems as well such as famine, poverty, diseases, problems in raw material and energy supply. There is an ever deepening conflict between the two parts of the world, namely the developed and undeveloped countries and economies, which hinders the political settlement of certain problems. There are great changes in the role of politics, it is becoming democratized as it is becoming a part of more and more social phenomena (it appears in the evaluation of science and technology, it is becoming an element of environment protection, etc.) while there are also strivings which indicate the advancement of dictatorship.

The great wonder of this turn of the century, the rapid development of the century, the rapid development of means that ensure the acceleration of information flow and protect and provide the quality and quantity of information can also be a carrier of great changes. Computers arranged in networks will escort us to the next century with their chips capable for storing a great amount of information and nobody can stop them. Quantitative growth — the value regarded as the most significant one of this century — has led to enormous disproportions. Let us mention only one example: huge amounts of money are spent on developing chips but less and less is spent on education — and we could go on. Can these problems lead us to waiting desperately until Nature or God or somebody sorts everything out and makes it possible for us to start a new life? Perhaps we should not wait until some kind of punishment, some kind of tragedy, some kind of disaster caused by ourselves such as acid rain, ozone hole, desertification etc. awakes us to the fact that we should start everything anew.

At the end of this century Man knows much more about himself and his environment than ever before. And here 'more' does not mean quantitative increase only. There is enormous and shocking experience behind us. Based on this our responsibility for each other and for the whole of the universe should get another meaning. We have to ask the question whether there is any difference between progress and progress, whether we should weigh, assess the possible effects before starting any scientific or technological, or possibly social or environmental transformation. Man must be great to be able to overcome the troubles caused by himself, by his 'sins' but not as he thought in the last century, i. e. with his will. He can only achieve results if he recognizes that he belongs to Nature, if he maintains an 'honest' relationship with it. He can be free and can respect himself only if he respects Nature and its is in this case that he need not

live in constant fear, terror, with qualms of conscience, that he need not experience the humiliating feeling of 'punishment' and real tragedies. He need not beg for pardon, peacefulness only if he had lived in a way that he does not need mercy, that there is nothing to forgive.

Towards the end of the century we must know that whatever tool we invent hoping that it will solve everything, will return our peace and will prove us that none is more wonderful than Man, we will not be able to get rid of its disadvantages. Tools are neither good or bad in themselves, they are both, but it depends on people, and not solely on our knowledge but our morality, sense of responsibility, intelligence, which side of theirs will come to light. Having discussed our possibilities and assessed the inevitable and necessary changes let us shape the end of this century consciously in the existing frameworks! Let us look for the concept of future, whose chance to be realized is great because it is possible and desirable.

On the other hand, in connection with our own activities and our relation to Nature the decision is in our hands and we have to maintain the possibility of and chance for a new start so that we could decide that everything will be different in the future and that we will be more cautious, more careful, more attentive, more true and more free than before. And why could we not choose the turn of the century or any other point of time as the starting point? So that we could also say together with the time-travelling professor of *Bradbur's theatre*: 'We have won, men, ours is the forests, cure the seas, the rivers and resettle the dolphins. We will light the Earth from the space, will colonize the Moon and will land on the Mars near the Red Canyon. We have done it, brothers, we have done it, a bright future is waiting for us — so it is worth living!'<sup>1</sup>

### References

- KUHN, Th. S. (1970): *The Structure of Scientific Revolutions*. (The University of Chicago Press, Chicago 60637. pp. 52-53 and 89-90).
- MADÁCH, I. (1962): *The Tragedy of Man* (See in Hungarian: *Az ember tragédiája*. Magyar Helikon Publishing House, Budapest, p. 147).
- The present situation and problems of nuclear energetic (1981) (See in Hungarian: *Az atomenergetika jelenlegi helyzete és problémái*, Published by: Országos Atomenergia Bizottság — Hungarian Atomic Energy Commission — Budapest, p. 4.).

---

<sup>1</sup>Quotation from the film: *Bradbur's theatre*