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The Integrata Foundation: An Approach between Liberation and Alienation through Information Technology

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For more details go to the end of article. The concept of the Integrata Foundation for the Humane Use of Information Technology is expressed by its name. The humane use of information technology would pursue a course of action between the societal decoupling (liberation) and alienation caused by information technology, a tool that, in particular, should be used to attain additional benefits for society, i.e. more quality of life for every individual person and mankind as such. The objective of the Integrata Foundation is to contribute to this epochal social process of restoration for the benefit of mankind within the meaning of democratic humanism.

Foreword

This paper focuses on the humane use of information technology. The Integrata Foundation believes this technology, which is gaining a foothold in more and more areas of life, should be a tool for improving living conditions and proposes that this attribute be adopted in the decisions taken by the responsible persons in government, business and society. Humanization should take priority over rationalization and functionalization. What do we precisely mean by humane use of information technology? Naturally it concerns man; however, not so much as an individual as a citizen in today’s society. The state in its function as a democratically legitimized body binds the individual to society and provides the necessary infrastructure; accordingly it also plays an important part regarding the use of

information technology. Consequently, we are addressing first and foremost responsible citizens in a democratic society as well as all persons who want to shape their lives and future in an information society. Bearing this in mind, we are concentrating on information technology. It played a decisive part in developing the concept of our foundation and also encompasses communication technology which, in our understanding, comprises the methods and processes used for transmitting and exchanging information; and we attribute particular importance to this aspect. Nonetheless, a significant point is that we do not want to primarily concentrate on the engineering, the machines and devices, nor on the networks and services provided by telecommunication, but above all on the methods and processes used to apply them, i.e. the technology, which includes the engineering and organization, and all types of application systems and programs. This includes both the programs that are being used in millions of computers and in billions of test points and, hence, exert an influence on us as well as the myriad programs broadcast by television and other media. In this connection, the question as to what use these programs have keeps coming up. As citizens we demand that this technology provide additional benefits to society. We are well aware of the additional economic benefits gained throughout 200 years of technical development: the enormous reduction in working hours and simultaneous increase in buying power made possible by the use of technology. In future, too, technology will have to ensure such development so as to secure an adequate standard of living for all people, or to create this for about two billion people. This is undoubtedly the most important task facing the world. Yet “man shall not live on bread alone”, as the prophets state in the Bible. We realize that not only material need has to be healed but ever more agonizing spiritual shallowness needs to be overcome. This is where information technology can serve its greatest purpose – the second most important task in our world so to say. It is here that we expect additional social benefits! What has information technology brought us in this respect up to now?

1. Decoupling through information technology Information and communication technology is an encompassing innovation bearing extensive consequences for individuals, business and society. We can say with certainty that industrial society was transformed into an information society within the span of several decades. This is particularly true for the wealthy western countries and so called threshold countries. The developing countries will follow. This innovation process will transform them, too, sooner or later. Poor countries will turn into blooming areas of a humane world community, the people there will no longer suffer need and hardship, and they will mature into self-confident individuals. In the course of theoretical observation this development could be viewed as liberation from many of the evils in today's world. Reality, however, presents a very different picture. When information technologies are set in the fore of consideration, it would be better to use the sociological term of decoupling. This refers to a process, in which the bonds between a system and its inner and outer surroundings are loosened, thereby increasing its scope of independence and autonomy. One needs to distinguish between different forms of decoupling (see also W. Heilmann: *Telemedien und Soziale Prozesse, Thesen zur Informations-gesellschaft*, inaugural lecture on 7 December 1999, University of Karlsruhe). 1.1 Through spatial decoupling, made possible in many jobs by information technology, tele-work, for example, has become standard in the meantime. Although it originally referred to a modern form of “work at home”, practically any type of office work now is a teleprocess between people and machines.

Through myriad combinations and types of functions of machines and processes, people working in neighboring offices mainly communicate by means of information technology and people located far away from one another work together as though they were in the same office. Distance no longer is an organizational obstacle: technology has become ubiquitous.

1.2 The ensuing independence of a certain place is augmented by the chronological decoupling made possible by teleprocesses, i.e. periods of time and points of time have gained greater independence. Studies have shown that people can divide their time more freely between work and leisure time. Moreover, the asynchronous functioning of many services and devices allow worldwide communication to be relatively independent of the time zones in which offices working together are located. In other words, one can affirm that information technology has helped modern man gain a certain sovereignty of place and time. In this respect, we have become more free.

1.3 A third dimension of decentralization, which bears considerably more liberation, is attained by the disciplinary decoupling that is connected to teleprocesses. Although an employee who works at his computer at home or while traveling most likely is not doing this without some type of monitoring, he is relatively independent of his boss. Thus, the high degree of self-determination which people have achieved in their free time is transferred to working and business life. This disciplinary decoupling is supported by a series of significant developments on the labor market: part time work and sabbaticals lessen the need for being present and new contractual relationships, such as freelance work, are transforming the old employment contracts into agreements between two legally equal parties.

1.4 This statement does not say much about the economic or social status of the contracting partners; however, from a sociological point of view this is a considerably more far reaching process of decoupling. Social decoupling, which we understand to refer to a loosening of the social ties between people and their social environment, goes far beyond anything that was possible in former times. Together with the spatial, chronological and disciplinary dimensions of decentralization mentioned above, man is gaining a previously unknown degree of independence and freedom through social decoupling. Does this mean that information technology brings liberation after all? Reality is nowhere close to that. Hence, Frank Schirrmacher, on the cover of his book "Payback", actually poses the question: "Why are we forced to do what we don't want to do in the age of information?"

2. Alienation through information technology As a matter of fact, the independence and freedom of the individual is not only guaranteed but also threatened by information technology: • We are flooded with information. • We suffer cell phone terror. • We are bombarded by emails. • We are the victims of large scale government surveillance. • We are being robbed and cheated through computer crime. • There is a need for education despite unprecedented educational opportunities. • Advertising lies and dulls the minds of consumers... If one takes these headlines seriously, one could gain the impression that man is in the process of sacrificing the ideal of a humane society to a powerful technology.

Who is to blame for this plight? The technology as such is neutral and can be put to good or bad use! Business practices should be scrutinized because they are mandated by people who should know better. And what about the government? The government is suffering shock from terrorism. Here, too, people carry responsibility. So, again it is ourselves we have to look to! But we – people as such – refuse to take any blame or, even worse, do not even notice any of this: even though it is we who write the programs that torture and manipulate us. "The most scary thing of all is man," says the film expert Marcus Stiegler about the new fascination with horror in movies, comics and computer games. Do we still have sufficient control over our everyday lives? Or are we too dependent on the media, whose products blow us around like strong winds? In other words, information technology does not have only positive effects on our society, but also very alarming ones as well. As is true of any tool, computers, the internet and the media also have repercussions on the users; and, moreover, the

more intensive the influence becomes, the more stronger the repercussion. From a certain point on, the mastery of man is reversed into servitude; a continuously accelerating process of alienation starts to take over. **“Alienation”** – as defined in German Wikipedia dated 13 December 2009 “is the socially advanced, irreversible process of the appropriation of nature as well as its material and spiritual transformation to culture, including the institutions, which seem heteronomous as soon as they dominate man and oppose man’s individual and collective wishes.”

2.1 Examples from everyday life Some examples of information technology in everyday life will be given to substantiate and exemplify that alienation begins at the workplace, where we are told by a workflow or project management system what needs to be done. Many prefer this to being ordered around by a human boss. The consequences of this kind of organizational structure will soon become evident, i.e. because of the daily repetition we will have to repeatedly capture and process monitoring and control signals from more and more systems. Such impulses shape us the same way as the TV shows we watch every evening. Hence, Mathias Eckold, in the AULA show broadcast by WDR2 on 14 September 2008, which had the title “You will become what you watch...”, concludes: “We feel the power of the media even if we consider the ‘entertainment shows too stupid’, the ‘sports coverage too extensive’, the ‘news too hungry for scandals’, and the ‘crime films too bloodthirsty’ ... we are strongly influenced by them.” The power of the media will also be felt if one avoids TV and surfs in the Internet instead to gain information or education. The powerful search machines offer almost anything that man desires – also a remarkable and high quality selection of education, art and science. Not everyone immediately finds what he is looking for or needs, but the systems are becoming better and more influential. Nonetheless, an increasingly critical awareness is growing in the general public. Hence the computer pioneer and professor of computer science, Dr. Maurer, criticizes Google “because it is expanding its opinion forming power and gaining a monopoly by means of acquisitions”. It is offering information that more and more people are accepting uncritically, believing it to be true.

The ranking of the contributions is particularly problematic, especially when it is influenced by certain methods. The collection and evaluation of personal data is utterly unacceptable. The possibilities of misuse are obvious. In many other instances the general public is not yet aware of what has actually happened as a result of electronic media. This is so because the concrete manifestations of information and communication technology, which the citizens of our western, democratic world encounter every day, are changing our reality and, hence, also our view of reality. The reality experienced by our fathers was different from the “medial reality” known to our children. We are moving further and further away from the old world and are increasingly moving into the sphere of influence of all kinds of programs. Computers or information and communication technology affect our behavior, thinking and feeling so strongly that we find it hard to remain aware of our humanness, much less develop it further. We simply do not have time for this, and in the process, we are losing our sense of what is appropriate for us as humans and citizens. Through external control, commercial manipulation and exposure to a constant stream of media programs, we are becoming a program-controlled society in which individuals are more or less controlled by programs. And many are actually starting to think and act digitally. That’s the problem!

2.2 What the future holds in store “No, that’s not true!” many of us will say. “We are still the ones making the decisions and the computer is a stupid mathematical slave.” Norbert Hering, who spoke “about the limits of understanding between the brain and processor” at MEDICA MEDIA a couple of years ago (2002), affirms that the principle “Man in control” is still true. We would like to add: And that is how it should be! Only if this is true can we speak

about humane use of information technology. Nevertheless – and we need to raise this question – aren't there situations in which man would benefit significantly if the computer made decisions on the spot and without further inquiry, for example whenever security is concerned or utmost precision and very fast reactions are called for or in medicine? These kinds of situations will occur, but also some which would serve us less. "Cyber warfare", the dilemma of modern warfare, probably is the worst thing that comes to mind in this respect. In this scenario not only a computer but a whole arsenal of digital tools and devices as well as complex information and communication networks would act for us. What worries us most of all, however, is the unbelievably fast interlinking of digital information systems in the Internet. At first it was only an attempt at improving the exchange of knowledge between scientists. This experiment was more successful than anticipated. Now the Internet consists of thousands of networks with millions of hubs (computers) that administer billions of websites. And this convolute is growing incessantly. It is preparing to gather the entire knowledge gained by mankind and to make it available for further use. Will we need to confront a giant brain similar to that described by Heinrich Hauser in his science fiction novel more than 50 years ago? At any rate, it is doubtful whether it could be destroyed with the help of such simple creatures as ravenous ants.

Right now the system is still going through children's diseases: one has to search for a while to find the information that generates knowledge (in man). Nonetheless, this – as such not intelligent – meta brain is acquiring a body, which will be veritably omnipresent in a not so distant future. By this we mean the innumerable embedded systems that will soon be component parts of the objects we use in our daily lives, leading a more or less inconspicuous and informal life there. In connection with semantic systems, they will meter and report states, they will identify and communicate with us, and they will denounce us – not only to other people, but above all to machines and within the system network. Evidently a new species is developing, a species that at best may be indifferent towards life, but definitely not friendly: the digital species. Do we still have a chance of maintaining control of a centrally controlled computer network that computes, tests, makes decisions, reproduces itself and learns at the speed of light? Or will the digital principle triumph over the analog principle of life in the end? In other words, our considerations are not limited to the computer per se but concern the age old philosophical question as to man, his being and position in the world. In our times man's position as creation's crowning glory is being relativized. Man, the analog being, is facing the tool created by him; a tool that embodies possibilities far exceeding those of a "sorcerer's apprentice".

The digital omnipresence and productivity of this tool are becoming a global challenge. Will mankind be overcome by a malignant disease or simply be swept aside without protest? Will people remain masters of their life or will they be degraded to servants of digital control and surveillance systems, will they become strangers who do not see and much less understand, or want to understand, the whole? In this unavoidable dispute between man and computer, the Integrata Foundation takes the side of man. We do not want the hard-won freedom gained from natural and government forces in the course of many centuries to be lost to a tool. We want to live in a self-determined humane world in future.

2.3 Possible courses of action Yet who should, who can counteract this development with even a bare chance of success? The ethical moral standards are so high that no government institution can meet them. This can be expected even less from a commercial system; and religious institutions are out of the question for all the people who do not believe in God. Nonetheless, we would like to refer to the Global Ethic Declaration, initiated by the German theologian Hans Küng in 1993. According to German Wikipedia (18 September 2008), 6,500

persons from 125 regions and religious traditions participated. They agreed on four guiding principles, calling for a culture of nonviolence, solidarity, tolerance and equal rights. Whereas one cannot but agree with these principles, they are far too elementary for the problems arising from information technology. Other people and associations, also such without any religious affiliation, are asking whether what is happening to us isn't outside our power and decide – on the basis of fundamental considerations – to let it happen. After all, they assert, the use of modern technology, particularly in the field of information and communication, brings undisputable benefits not only to the commercial sector and government but also to every individual and all humankind. This opinion mainly is held by computer scientists and programmers, who deal with the instruments of information technology all the time. Internet professionals firmly believe that they have control over the medium, or they are so fascinated by it that they do not consider their dependence a problem but merely a bad habit. You can't expect to be helped if you don't see the problem. In contrast, the critical statement made recently by Frank Schirrmacher is very helpful. On the cover of his book, he points out that “a way out of the calculability of life and the threatening end of free will cannot be traced back to a refusal of technology but rather to a new way of thinking that reawakens man's awareness of his strengths: creativity, tolerance and the ability to master unpredictable occurrences.” Nonetheless, it is doubtful whether the solution of our epochal socio-technical problem can be solved through an individual new way of thinking alone. The ideas and philosophy of the Transhumanists, by contrast, are too different from all that has been said. “Transhumanism” (Latin “trans” = beyond; Latin “humanus” = human) is a philosophical school of thought and active movement that advocates changing the human species through the use of technological methods. Its goal is to generally expand the limits of human possibility and, thus, improve the human condition in many different respects.

“Relevant technologies in this connection are, amongst others: nano-technology, genetic and bio-technology, biogerontology, cryonic and other biostasis technologies, cognitive sciences, information technology, artificial intelligence and uploading consciousness into digital memories (German Wikipedia dated 17 December 2009). Even though Transhumanism pursues a similar goal as the Integrata Foundation, namely improving the human condition, and information technology definitely is one of the technologies with whose help this goal is pursued, we would like to point out that our focus is fundamentally different: the Transhumanists want to directly change man as a living being and, thus, improve his conditions of life. We, however, want to use technology to change the conditions of life and, thus, improve the life of man. We hope that this will also make people better. Obviously, the cultural and civilizational circumstances and values created by human activities are landmarks of an upwards development. Even the most dreadful destruction caused by wars and epidemics could not reverse this process – if one chooses a sufficiently long period of observation. Despite inconceivable human catastrophes and continuing significant differences between different regions of the world, we can assert that world culture today is better in terms of humaneness than any previous cultures known to us. However, civilization and culture did not develop linearly, there were bounds and surges.

The more significant the innovation was (hand axe, plow, machine, computer), the greater the alienation from former conditions and the greater also the impulse for the spirit of mankind to create a new culture. Thus, alienation also can be a step towards more instead of less humaneness, and it is in this sense that we expect the alienation caused by information technology to lead to an epochal step forward for all world cultures. In the current phase of development we are still in the midst of generating IT innovations. But obvious faulty functions and defects of the system, which lead to disappointment, frustration and rejection among users are manifesting themselves. Thus, from the aspect of social politics, it is

important that more and more critical voices pointing out the critical developments speak up. Yet, we must not only criticize technology, even if this already would be a form of social criticism. We must go beyond that stage and develop solutions to guide the developments in the correct and desired direction. This calls for tremendous efforts. Cultures that simply accepted results of alienation declined, were assimilated or simply perished. Since Arnold Toynbee's "Challenge and Response", we know that only those societies that face challenges and find solutions will give birth to a new civilization, a new culture.

The search for valid rules for dealing with alienation caused by information technology is primarily the responsibility of scientists, sociologists, psychologists, computer scientists and all those who in one way or another are professional users of information technology. Yet, what is being discussed in this paper is not only a concern of researchers. Since we are all more or less intensive users of information technology, this concerns all of us and we should all make a contribution. Followers won't help us on, we need social politicians who will devise solutions now. The forces in society have to decide and act now. And we need practical examples for this as well as scientifically founded, pragmatic knowledge, we need the courage to make judgements and – as demanded by Popper – the courage to stand up for them. Bearing this in mind, our demand for a humane use of information technology is a call to everyone to participate in social synthesis. Efforts limited to individuals or small, widely dispersed groups are doomed to fail because of the comprehensive character of the threat of alienation. If we want the process of humanization to continue, we have to work together and act for the benefit of a democratic humanism.

3. Humane use of information technology The Integrata Foundation, in the spirit of such democratic humanism, campaigns for using information technology not only for rationalizing and functionalizing processes of life and work, but also for improving the quality of life of as many people as possible in all regions of the world. In this sense, it is first and foremost "socially" oriented, and technically oriented to a lesser extent. The necessary social synthesis means that we must act. We should all act like Jiu Jitsu fighters, who absorb the strength of their opponent, bind it with their own strength and then force the opponent to his knees. Information technology must be willfully used as a tool, with which the world can be made more humane, both on a large and small scale. Our concrete goal can be summarized as follows:

3.1 More quality of life through information technology! The call for more quality of life forms the core of the foundation's purpose. It is to be achieved by systematically using the possibilities offered by information technology. This task is primarily the responsibility of professionals working in the many fields of application as well as computer scientists and programmers, in other words anyone who organizes the use of information technology. Basically, they derive their specific tasks from their professions, which may be in businesses, scientific institutions or social organizations. Thus, we have a diverse and colorful setting, in which the pursuit of more quality of life isn't coming into its own. Consequently, this situation is to be shifted towards a more humane form of information technology. For this reason it is necessary to highlight the fields of application which characterize the conditions of life in our society and, accordingly, to determine where it would be best to initiate improvements. The question as to a definition of humane is not posed in an absolute but only in a relative sense, as an alternative. This pragmatic way of proceeding is very old, perhaps as old as mankind itself. We looked for alternatives for our time and, using the highly complex term of "quality of life" as a framework, drew up the following list of ten issues, which we believe could and need to be improved at the present time. Thus, the ten issues devolve into ten criteria of quality of life: 1. Conserving and restoring physical and spiritual health.

2. Preserving inner and outer security, while protecting the freedom and dignity of man.
3. Creating and safeguarding freedom of movement and humane traffic conditions to ensure personal encounters.
4. Rebuilding the trust between communication partners by appropriate information and free communication.
5. Opening up the access to education and job training based on an individual's abilities and, at the same time, also ensuring the ideological neutrality of educational institutions and entertainment.
6. Creating employment opportunities and possibilities to earn a living which are tailored to people and available in sufficient number and quality so as to promote common welfare and prosperity for everyone.
7. Developing information technology further so that it can be used as a helpful leadership by people of people in business and society.
8. Promoting the participation of citizens in public opinion making and forming the community in such a way that freedom, order and justice are equally balanced.
9. Protecting nature and the environment against overexploitation and destruction and promoting natural processes for the benefit of future generations. 10. Overcoming the lack of meaning and time of modern man and finding a dignified form of life with leisure for culture and religion.

3.2 The HumaniThesia portal

The HumaniThesia portal, which is still under construction, will be dedicated to research and presentation of the whole scope of topics related to the humane use of information technology. It will be open to users without any charge as soon as an internal pilot project has been completed. The central focus of the portal will be the ten criteria of quality of life. A forum will be set up for each cluster of topics, where the respective criterion can be discussed. The discussions will be open to all participants, amongst these also the Integrata Foundation. Depending on the intensity and productiveness of the discussions, interim results will be formulated and stored as such in the "Arguments" block of the portal by an editor (see Figure below)

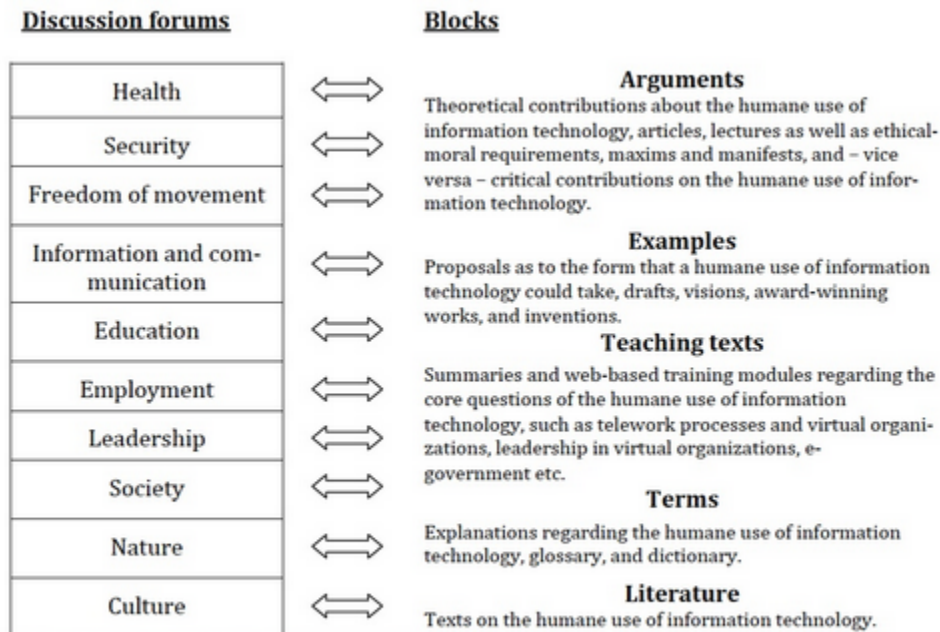


Figure: Schematic diagram of the HumaniThesia portal

In addition, the “Arguments” block will provide relevant articles, contributions, manuscripts of lectures and other publications or links to such sources of information, and it will be built up like a reference work. It will also contain ethical moral assessments, maxims, manifests and – vice-versa – critical contributions about the humane use of information technology. We ascribe special importance to the “Examples” block, which will include practical proposals for improving the conditions of life with information technology as well as visions and concepts, projects, application examples and other relevant works, such as screenplays and TV spots that look into the subject critically. The “Teaching Texts and Compendia” make up a third block of information that will be made available to the public. These are teaching materials and web-based training modules on the core questions regarding the humane use of information technology. A glossary explaining the terms used in the portal, in particular the technical terms used by the Integrata Foundation, and a list of relevant literature will round off the portal. (Please see also: W. Heilmann. “HumaniThesia. Konzept eines Internet-Portals zur humanen Nutzung der Informationstechnologie.” www.humanithesia.org.) It is hoped that the HumaniThesia portal will become a center for discussing and implementing trend-setting examples of the humane use of information technology in the near future. The best proposals will be awarded the Wolfgang Heilmann Prize, which already has been granted ten times.

3.3 The Wolfgang Heilmann Prize Every year the Integrata Foundation awards the Wolfgang Heilmann Prize, named for the founder, to outstanding work that describes how modern control technology can be implemented to generate humane forms of work and employment, that significantly contributes to improving the conditions of life and promises to lead to a better quality of life. Pragmatic factors are at the foreground of the foundation’s considerations, i.e. it honors works that put forth conceptual proposals over and beyond the progress of knowledge. Such works can take the form of scientific contributions, project descriptions and other texts as well as screenplays. However, grand schemes are given lower ratings than concrete projects or best practice presentations, because the latter are more likely to change our world, even if only in small details. It goes without saying that far reaching and concrete concepts are particularly prize worthy. Since the establishment of the Integrata Foundation in 1999, the following topics have been announced and honored with prizes. For

more detailed information about the prizewinners and their work, please go to www.integrata-stiftung.de/Preis. 1999: Tele-Services: Telecooperation, electronic commerce 2000: Tele-Learning: Job training and further training in a networked world 2001: Knowledge management as a contribution to the humane use of information technology 2002: Tele-Medicine: The humane use of information technology in medicine 2003: Tele-Management: Management in virtual organizations 2004/5: De-congestion of traffic through telematics and tele-cooperation 2005/6: More humane use of communication technology 2006/7: Security, information and media competence 2007/8: Citizen centered applications of information and communication technologies 2009/10: More quality of life through information technology

The prize is endowed with Euro 10,000.00 and can be divided among up to three prize winners. A jury made up of experts from science, business and society chooses the winner. Decisions taken by the jury are final and cannot be contested. The members of the jury sit on the panel voluntarily. Up until now, the prize worthy works were found after publication of a corresponding announcement. After the HumaniThesia portal is launched, the proposals submitted there will be included in the selection process. This means that every outstanding proposal published in the portal during a year has a chance of receiving the prize. In this way, we hope to offer an incentive to people, above all young people, and to win them over for the ideas promulgated by the foundation. The conflict between man and computer as well as the spiritual struggle for a more humane world must be borne by all social forces together. This will only prove successful in the long run if every new generation puts forth its ideas. It remains to be hoped that very many people from all areas of life, young and old, will take part in the HumaniThesia portal and help guide the development of information technology in the right direction – for the wellbeing of every individual person and mankind as a species.

The goal of the foundation is not to conserve the ash but to pass on the fire of humanity.

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