This is an abridged version of the above title.

A. Teaching in Virtual and Real Time

Remember Plato’s Academy? Whereby wise men used to present their wisdom and wit—soon thereafter to be ‘attacked’ by other wise men, and so forth. Students were also there listening and learning, sometimes asking questions, or questioning, or both. The final product of their openness and friendly critique in their dialogues, conversations, and debates was the intellectual basis for the whole of Western Civilization. Here I have in mind also, influence of Plato’s philosophy on the Abrahamic religions: Judaism, Christianity, and Islam in the regions of Western World.

Plato’s Academy was a Small Open World.

They had specific times for meetings, usually in the mornings, but it was difficult to align the biological clocks of each of them. Sometimes, students nearly lapsed into sleep during the discussions; sometimes, wise ones were not really that wise—they were not in a mood to debate. Sometimes, both wise men and students, upon the adjournment of discussions, would have great ideas, but it was too late; they had to wait to initiate discussion until real time came the next morning.

^Plato (5th century B.C.), a Greek philosopher.
I see the Internet as having the potential to become a medium for Plato’s World Academy in the Open World, whereby the whole world—as wise men—can participate in the building of one integrated World Civilization. In addition to real-time communication between students and coaches, the Internet can provide virtual-time communications. Both students and coaches would be able to teach and learn, respectively, at times when they were in a good mood to do so, and both, students and coaches could be located anywhere in the world—you could have both worldwide students and coaches. What a convenience for students; they could have the best coaches worldwide without leaving their homes. Overall, online education is in advantage with respect to campus-type education in efficiency, quality of student-coach communication, and quality of knowledge—as virtual universities do not need to rely exclusively on coaches who are geographically close, as is in campus education, and who may not be the best. It seems to me that on-line education, with its aforementioned advantages, will be the predominant form of education in the future, particularly graduate type instruction.

B. Information Age

The Internet, as an information medium, has brought a new quality to the Information Age through the ease by which any information, correct or false, can be posted and made available to the public.

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Information Age—present times characterized by the enhanced capability of information technology: storage of colossal amounts of data and its fast distribution worldwide.
The desktop publishing of books, journals, and newsletters, is becoming ever less expensive, day-by-day. Accordingly, every person, or a group of persons, in the Open World can promote their views and opinions in good or bad faith equally quite easily. This can result in tons of false and malicious information being made available to the public. What to do about it? What if the Internet gets monopolized? The answer is in the hands of future generations, whose source of information will be mostly in on-line mode.

It could be argued that radio and TV are already monopolized in regards to the way that information is filtered by governing boards or by the providers of financial support. This is partially true in the States. But, just travel around the world and you will see how false information is served to the public in a variety of ‘smart’ ways. In many cases, especially in countries that are not of the Open World, information is so filtered that most of it is nothing but false information, or lies.

Some may say that the matter is not that serious, because the Internet is a source of ‘soft information,’ and should remain as such. I do not agree with this point of view. It is true that presently the Internet is a ‘soft information’ medium, but to leave it that way would be a shame and a waste, taking into account its intrinsic potential for being a ‘hard information’ medium, and the central vehicle for information and education in the ‘Information Age.’

It seems to me that the Internet is a perfect medium to make one’s inner and secret dreams come true: that we are, each of us, a special being in the Universe—which is true. And it should be promoted as such. You can have your own personal website and tell the whole world—I am here! I exist! You can go farther

C An Open World, I distinguish as composed of democratic countries worldwide, with the note that democracy is like a pregnancy—you either have a democracy, or you don’t.
and tell the world all about yourself, small and big things, and even about those secret things that you’ve been hiding from your immediate environment. It’s sometimes easier to tell the whole world—you don’t see their faces, then to divulge your secrets to those closest to you. For this purpose, the Internet should be cultivated.

In the Open World, in the not so distant future however, the situation will be characterized by an information-education network, whereby the majority of media will bring true information to the world. It will be accompanied, however, by a tiny minority who will bring false and malignant information. The latter is to be dealt with, of course, in a democratic way. How? Answer: Only the future can show the ways.

C. Faustian Bargain on the Internet

Any knowledge, opinion, or wisdom is now easily, through the Internet, presented to the world. On the other hand, anyone worldwide can access tons of information just by a click of their mouse; again, they will have access to both correct and false information due to ignorance or maliciousness, or both. The only good is knowledge and the only evil is ignorance, says Socrates\textsuperscript{D}.

How can one know what is good and what is evil on the Internet?

\textsuperscript{D}Socrates (5\textsuperscript{th} century B.C.), a Greek philosopher.
The situation has the characteristics of a Faustian bargain; the ease by which information can be presented is traded by the quality of that very information. This results in ‘Confusion on Internet,’ as to the quality of information, and, as such, should be treated as an ultimately serious matter.

On many websites, one can find tons of worthless material, or perhaps it is better to say ‘rubbish.’

Should it be made more difficult to post information on the Internet?

Absolutely not! That would lead to the opposite extreme: that all-knowing wizards, wherever they would be, control the Internet.

The better way: the ease should be cultivated, and posting of information made even easier.

However, there is a second, a complementary step: one must create mechanisms to enhance the accuracy of information on the Internet. How? The answer is in the future. Gradually, the Internet will become a medium of reliable information and education.

D. Active Ignorance and Indifference to It

There is nothing more frightening than active ignorance, warns Goethe.\textsuperscript{E}

\textsuperscript{E}Johann Wolfgang von Goethe (1749 – 1832), a German writer and naturalist.
The Internet is swamped by tons of web pages with false information due to pure ignorance. Relying on those pages would not be something we call enlightenment, or acquiring freedom through knowledge.

Here are two examples of active ignorance regarding Albert Einstein. I’ve chosen Einstein, because, these days, the physics community worldwide celebrates 2005 as the World Year of Physics 2005—100 hundred years since 1905, Einstein’s Miracle Year\(^F\) (*Annus Mirabilis*), when the, hitherto unknown, clerk in a Swiss patent office, working completely in solitude, published four scientific papers in the German scientific journal—*Annalen der Physik*— in the period of March to September 1905, among them his celebrated theory of relativity.

Recently, I had an annoying experience with one of my dear acquaintances; who had confidently and repeatedly stated, straight into my eyes, that Albert Einstein never married Mileva Marich. 

The truth is that Albert Einstein\(^G\) married Mileva Marich\(^H\) on January 6, 1903. I believe that my acquaintance has gotten false information from someone else he


\(^G\)Albert Einstein (1879 – 1955), an American physicist.

\(^H\)Mileva Marich (1875 - 1948), first wife of Albert Einstein.
trusted; that someone, in turn, heard this false information from someone else, and so forth. The false information has been transferred in a steady flow, appearing as an undisputed truth to the ones who received it later—quite a common phenomenon.

At first, I was happily indifferent about the opinion of my acquaintance. Later on, however, I realized how ugly, dangerous, and unfair it would have been for me to leave him in his state of happy ignorance. Subsequently, I convinced him that he was wrong.

Here is another example of active ignorance.

On one website dedicated to the great American inventor Nikola Tesla\(^1\), I noticed some inaccuracies—in particular, regarding the collaboration between Albert Einstein and his first wife, Mileva Marich (Marić) Einstein, in physics research, which in the last decade turned into a full blown controversy. The information regarding Mileva was false; that Mileva was an important collaborator in the development of Einstein’s theory of relativity. In fact, Mileva did not contribute to the development of the theory of relativity, as was shown in works of respectable researchers.

Any inaccuracies, inadvertently or purposely constructed, or both, should not be treated with ease in connection with the great achievers worldwide. Even if they appear on a website usually considered as a place of soft information; not to be bothered about.

I do believe that this ‘information’ on Tesla website was posted as a result of pure ignorance, and not knowingly.

\(^1\)Nikola Tesla (1856 – 1943), a Serb-born American inventor.
On the other hand, people who know should never yield to the ignorant ones—for any reason, be it politeness or thoughtfulness, or some other emotion.

E. Hoax On-Line

At the dawn of the twenty-first century, any person with very limited skills in the use of the computer can access a significant amount of quality information—with further ‘processing’ of the information, a person can acquire active knowledge. And all this can be done without leaving home. One can go further and get more information from the Internet and process it into knowledge.

I hereby, for the purpose of this chapter, define information as knowing of something; knowledge as knowing something, and active knowledge as knowing how to use knowing. Clearly from this sequence of definitions, it appears that there is such a thing as knowledge about knowledge, or on higher level—thinking about thinking. The latter is out of the scope of this chapter. The knowledge about knowledge, I define hereby, ad hoc, as organization-systematization of the information data and its presentation in a truthful, simplest and clearest way.

Let’s go back now to persons, self-educated by using the Internet. In their cumulative process of accumulation of knowledge, they will reach, sooner or later, a point whereby it will seem to them like drinking water from a hose. A lot of knowledge will be lost because they lack the skill to organize the information within the body of acquired knowledge. That’s the misery of so-called nonsystematic knowledge. People of genius, however, can do systematization on their own without coaching. The genius type person is also not within the scope of this chapter.
Knowledge about knowledge brings systematic knowledge to a regular John and Jane. This is the point whereby higher education on-line enters into Plato’s World Academy—the world of coaches. Instead of Plato himself, and other wise ones, students have an on-line coach, face-to-face, albeit sometimes not in a real-time. This is time-shifted or virtual-time coach-student communication.

Any type of higher education without actual on-line communication between student and a coach seems to me, a poor way of education. The coach must know, literally, the student, and vice versa. On-line education should never become en-masse impersonalized education. The opposite should be in place: in on-line mode, due to its efficiency and variety in communication possibilities, the quality of contact between a student and a coach should be enhanced. The ways to do this are many and they will naturally unfold in the course of time as experience has been accumulated.

There will be, however, educational entrepreneurs, or better to say anti-educational entrepreneurs, who will advise you not to get a systematic education, because, they will tell you, it’s just a waste of time. Instead of ‘wasting time,’ they will have prepared a hoax to get you to waste your money. Such entrepreneurs will offer you a diploma (of course, worthless) based on knowledge you have already accumulated in your life, and from the Internet, for that matter—for a very small amount of money, especially if the offer is made close to days of observance, religious or secular, when you’ll be offered a special diploma-discount. Typically at those days, you will receive tons of email offerings. In some cases, ‘in their honesty,’ they will advise you that the diploma you can earn is not an accredited one, but they will show you how to use it successfully. The future is not to fight those anti-educational entrepreneurs directly, but indirectly, by warning potential students about wasting their money.
Some educational entrepreneurs will offer you education through on-line institutions in a quite, orderly manner, but you will never be in contact with a coach. Instead, you will have access to material on the web, or you will be mailed books, or both. Subsequently, you will take exams, also on-line, without ever knowing your coach. Again, this seems to me, to be an example of a bad quality education. You’ve heard me right—education should be considered a product; like any other product it can be of good or bad quality. Accordingly, on-line institutions will be offering good- and bad-quality higher education. We have been seeing this in campus-style institutions for so long.

There are websites on the Internet purposefully constructed as a hoax source. Just to mention one scandalous and shameful website with the title, ‘Einstein: The Plagiarist of the Century.’ It is a fact that Einstein did not cite anybody in a reference section of his relativity paper. Now, hoax masters are ‘really angry’, and they want to make it right, of course with publicity. They know that with any kind of publicity, there is the chance for money gain. A hoax is always motivated by money gain.

F. Beware of Georgie-Boy

Here I address the problem of electronic vandalism within the networks of electronic learning.

Electronic vandals are persons with a pathological need to harm. I have in mind computer hacker-crackers, the hordes of electronic-vandals worldwide, who are destroying the computer systems of individuals and organizations alike.
I used to know one computer hacker-cracker from San Diego, a self-educated computer geek, high school dropout; that person, George, we called Georgie-Boy. I was surprised when he told me, in one of his vulnerable emotional states, his secret about his being a hacker. As he himself admitted, he was diagnosed as a paranoid schizophrenic, but operational. I am happily ignorant as to the science of paranoid schizophrenia, but the operational part of it I can explain, according to Georgie-Boy’s own confession. Working on his computer, day-and-night, for him, was nothing but a form of therapy—he could communicate with people worldwide without being forced to look into their eyes, which was a nightmare for him, as he had always hated direct contact with people. He used to send emails to people, known and unknown, offering them help in computer repair for a small compensation, to remedy the ‘awful state’ of their computers. Then he would analyze the responses. The unfavorable ones would be punished by his cracking their computers; the favorable ones would not be punished, at least for the time being, but that could change swiftly, depending on his mood. With un-responded emails, he did not do anything—quite interesting. Overall, having him have your email address was not a picnic at all. Immediately after his confession, I told him that he should stop it. He said he would. Subsequently, he moved back East. I never changed my email address, which he has.

I came to call all those invisible hacker-crackers, rubbish creators, hoax masters, and malicious, for the sheer fun of it, people, regardless of their gender and age, by one name—Georgie-Boy.

In the context of Plato’s World Academy, Georgie-Boy would be that malicious student, a dropout-to-be, who, for one reason or another, liked to do harm. And, as is natural that would bring a temporary joy to Georgie-Boy’s rodent life.
The Georgie-Boy phenomenon is peculiar for the Information Age. A regular dropout leaves the ‘academy’ without any intention or desire for any kind of contact thereafter. They may choose to live far from the academy, out of sight, out of heart. It’s different with Information Age dropouts; whenever they login on the Internet they are in the courtyard of ‘academy.’ They become claustrophobic and agitated. Information Age dropouts, age and gender of whom do not matter, retaliate; they want to inflict harm to the academy. They constitute the hordes of electronic-vandals, enemies of civilized Plato’s World Academy. Accordingly, special electronic security systems \(^{1}\) are to be designed to guard against them—something like an Electronic Great Wall of China.

**Plato’s World Academy—Education Pluralism?**

Future Universities of *Plato’s World Academy* will face the problem of pluralism in education. Will the university based on electronic learning systems with a worldwide reach promote one type of education, or diversify into many types to include the culture and tradition of a particular country?

It seems to me that both aspects should be taken into account. The methods of electronic learning, in a technical sense, should be uniform worldwide swiftly assimilating technological advancements. The curriculum, however, should depend on the infrastructure of the particular country—*In Rome as Romans*. This

\(^{1}\)I note that the vulnerability of any electronic system enhances exponentially with the enhancement of the traffic rate, which is typical for electronic universities.
is clearly contained in the blazon of the Stefan University: Wisdom to the World, Wisdom From the World.

Promoting just one curriculum worldwide would be a fatal error for a particular international electronic university. It would transform that very university into an intruder in the particular country; its own negation. In the course of time, this university would just go out of business, probably in ‘stoning’ by the locals. For it, time would be the worst enemy; worse than the hordes of electronic vandals.

Pluralism in international electronic education is the only way to sustain an international education system. This would eliminate the feeling of intrusion in different countries worldwide, and make an international university inclusive of the term national, through which the national heritage of the particular country would be emphasized.

An international electronic university ought to promote the heritage and the culture of a particular country, but from the international standpoint and in parallel to the national standpoint already in the process via the country’s internal educational system,

This would be the integration of the world via education, as opposed to presently ongoing globalization based on economic factors, without evading the individuality and uniqueness of each country’s history and culture. This is one, and only one, positive and durable way of integration in the Open World.

Pro Dewey
The electronic university ought to provide both vocational and non-vocational education worldwide. This is especially possible for the electronic university due to its nature; that can efficiently cut across geographical and historical borders worldwide. Each student, of any race, culture, and heritage, will acquire a vocation—be a specialist in at least one area, have a profession, and the corresponding title. The international electronic university, in addition, will provide its students with a strong feeling of their national identity within international pluralism (many-ness). This type of nationalism, and only this type, can be a positive force of a future integrated, if you don’t want to use globalized, world.

This education schema is appropriate only for the Open World, consisting of democracies worldwide. Dewey\textsuperscript{K} was very involved with philosophical studies in the coupling of democracy and education. An international electronic university is a new field for research using his methodology and others’.

It seems probable that the ‘electronic part’ will contain most of the surprises and problems to be dealt with; especially the role of ‘electronic education’ in the further development of existing democracies and the initiation of new ones. Education—a major driving force in the progress of the world; that’s a thing Dewey and Tolstoy\textsuperscript{L} could have only dreamed of in the beginning of the twentieth century. This I address in the following chapter.

\textsuperscript{K} John Dewey (1859 –1952), an American philosopher and educator.

\textsuperscript{L} Lev Nikolayevich Tolstoy (1828 – 1910), a Russian writer and educator.