Computers Should Be Uniters Not Dividers:  
A Vision of Computer-Enhanced  
Happy Future  

Alexander Titovets\textsuperscript{1}, Philip Mills, and Vladik Kreinovich\textsuperscript{2}  
\textsuperscript{1}El Paso, Texas, USA, titovetsart@gmail.com  
http://www.titovetsart.com  
\textsuperscript{2}University of Texas at El Paso, vladik@utep.edu

Abstract  
This manifesto provides a vision of how computers can be used to 
bring people together, to enhance people’s use of their natural creativ-
ity, and thus, make them happier.

Computers could be uniters but they are dividers. Computer net-
works connect people from all over the world. This should make people feel 
closer to each other – but instead, it divides.

In the past, when there were only a few TV channels, a few famous 
books, a few new movies, people had a common ground, something to talk 
about and discuss. Not anymore. In the US, Democrats watch their own 
news, have their own chat groups, Republicans have their own, Democrats 
and Republicans rarely engage in discussions. People who collect stamps 
chat together, people who love ballet chat together, different interest groups 
rarely mingle.

A scientist goes to a conference abroad. He or she does not need to 
(and probably does not want to) get local news: if there are no familiar US 
channels on the hotel TV, there is always a computer access.

But maybe divisions are good? Maybe nothing is wrong with this divi-
sion, maybe people are happy this way?

Not really. Many people – especially after having achieved a certain level 
of success – are bored; see, e.g., \cite{9,13}. Talking only to people who share
your views is as exciting as talking to yourself. And talking to people with
different sets of interests is also boring: any professional knows what happens
when you start describing your exciting professional challenges to a stranger
at a party :-(

So what can we do about it?

What do people want? Since the problem is that people are bored, people
are not very happy, a natural answer is to ask people what they want.

Many people readily provide an answer: they want to contribute, not
just contribute by writing checks (this is important but not that exciting),
not just contribute by using themselves as low-level menial workers as when
building houses for Habitat for Humanity (rewarding, important, but not
that exciting). What many people want is to find some activity where they
can use not only their checkbook and their hands, but their creativity; see,
e.g., [2 4 5 7 10 11 14]. People want to make contributions which are
distinctly, creatively theirs.

Many retired people take art classes, take classes in other areas, and
become much happier [2 4 5 7 10 11 14].

People want to be creative, but can they? Maybe this is an illusion?
Maybe in every generation, there are a few creative geniuses, but the rest of
us have no talent for creativity?

Luckily, this is not true. For example, when retired people go into art,
they often generate interesting creative objects, so there clearly is a creativity
spark in most of us – and maybe in all of us.

So maybe art classes are a solution? Alas, no. There are not too many
artists in each community, and even fewer artists who can teach. Same goes
for other intellectual endeavors.

And also, a professional teacher can appreciate the creativity of a person,
but for others to enjoy the result of this creativity, this result needs to be
professionally improved: amateur stories must be professionally edited, am-
ateur movies must be re-made professionally – and there is no time for that
on a mass scale.

Technology can help. How can technology help? Let us start with an
analogy. People have always loved to hear good signing. In the ancient times,
an emperor could afford to entertain himself and his guests with the world’s
best singing. Now, with TV and computers, operas from the Metropolitan
Opera and other leading opera houses are streamlined all over the world. With recording devices, we can enjoy these operas at any time.

So what shall we do? People want to contribute, to improve the life on Earth, to contribute creatively. We need to design an infrastructure for enabling them to do it.

The closest we are right now to such an infrastructure is Wikipedia (and the web in general). It is used by everyone, and, in principle, everyone can contribute. However, this is still not easy – and besides, Wikipedia just accumulates knowledge, it does not produce anything new. It is helpful, useful – but it is still not that creative and, honestly, often rather boring. And Wikipedia only helps with knowledge, it is of not much use to whose who are more artistically inclined.

So what shall we do? How are new things created? It is rare that an Einstein just sits alone and come up with all the new ideas. Usually, an Einstein talks to other Einsteins, reads papers and books by others – and it is this interaction that serves as a breeding ground for creativity. So, if we want creativity, this is what we need to emulate: discussions with geniuses and between geniuses.

To some extend, an interaction with a genius is what we do when we read a Dostoevsky novel or Einstein’s paper or listen to Bach’s music. But this is a limited interaction. We cannot ask them a question, we cannot change what they have written – and although sometimes we wish to hear a dialogue between Jesus Christ and Buddha, they never met – so this wish cannot be fulfilled. Or can it?

This is what we need to do. Einstein dies in 1955, but we know a lot about him – from his writings, from the memories of people who have known him. We can often reasonably predict how he would react to different events in the world, to different opinions of others – and if we do not know, we often speculate. What Would Jesus Do, What Would Buddha Do – these slogans have become, for many, a way to live.

So this is what we need to emulate. We need to create a virtual universe in which there will be avatars of great geniuses of the past – computer programs that try their best to simulate the geniuses’ ways to thinking; see, e.g., [1, 3]. And if we are not sure, if we have several hypotheses about what an ancient genius really thought – well, there is nothing wrong with designing several different computer versions of that genius. And maybe we should make several versions – for example, instead of a single computer model of
Picasso, maybe a good idea is to develop several Picasso-emulating models corresponding to different stages in his life and in his art?

Something like this is done in computer games — except that we do not just want to senselessly shoot Nazis or zombies, we want to make it creative. There are already avatars of Einstein and others; see, e.g., [6, 8, 12] — but these current avatars are still short of Einstein’s creativity.

The future creative avatar programs should be able to communicate with each other — and we will be able to be proud witnesses to discussions involving Jesus, Buddha, and Einstein. We can witness a two-way dialog between an early Picasso and a later Picasso, with Michelangelo chiming in?

And where do common folks come in, with their sparks of creativity? Well, these models of geniuses is what will help us to learn how to unleash our internal creativity — and what will help us transform it into something that others can use and enjoy. Einstein will edit texts containing our research ideas, Bach will help us instrument our melodies — and they may guide us into using our talents for something that is most useful for humankind.

And since these are computer models, not real people, there is no limitation on how many of us they can serve at the same time.

**How is this different from the original ideas of Artificial Intelligence?** The idea of creating a computer-based Einstein sounds suspiciously close to the naive over-optimistic 1950s ideas of creating an Artificial Intelligence — a genius computer that will solve all our problems.

But there is a difference. Yes, some problems will be solved by a supercomputer, but most problems will be solved by us — with the supercomputer acting as helper, as an enhancer of our creativity.

**Let us hope.** In this brave new world, the virtual reality will not be only an entertainment trick (as it is — mostly — now). It will be a medium connecting everyone on Earth — a medium in which avatars of geniuses of art and science will teach us, help us, communicate with us, and we all together, real and virtual, will help make this world a better and happier place.

Let us hope for this. And let us work to make this happen.

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