

Re: Question about General Relativity

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- *From:* "Edward Green" <spamspamsam3@xxxxxxxxxxxx>
 - *Date:* 20 May 2006 09:11:27 -0700
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jmfahciv@xxxxxxx wrote:

"Edward Green" <spamspamsam3@xxxxxxxxxxxx> wrote:

Physics needs pictures.

But not pretty pictures that have been doctored up to
"look nice" by an editor.

Yes, I suppose people might do that, but that's not what I was
suggesting.

My vision is, you are writing a post, you click "insert sketch", you
pick up your stylus on your digitized sketch pad, and you hand write an
equation or sketch some vectors, and the software takes care of the
rest. Maybe your sketch would appear in line with your text, like so:

text
text
text

messy line drawing
messy line drawing
messy line drawing

text
text
text

I was imagining editing might be limited to rubbing out mistakes --
although "editors" would no doubt appear which would make more
professional looking pictures for those so inclined. But that's not
the point.

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It needs sexy pictures that show math, phase diagrams, force maps, little pointy sticks with arrows at the end and all that kewl stuff.

Yes. Possibly excepting "sexy".

I wonder if it is possible, in principle, to have highly intelligent

and even creative beings who would not become bored talking to any dolt.

They need a serious mothering instinct for that.

Good point! Good mothers appear to be intelligent beings with a very high threshold of tolerance for talking to dolts ^H^H^H^H... small children. So it is possible in principle.

It might not be. It has been suggested that boredom is a debugger which looks for loops, into which behavior might otherwise be trapped. Perhaps intelligent robots without the ability to cease communication based on repetitive futility would become slightly derranged... like regular USENET posters.

Nah, there will always be a new one who is willing to learn something. Every once in a while, a new kid shows up here, asks a question, gets an answer, asks a rebuttal, gets a hint, and then posts a thanks with the comment "Now I know where to go and what to do next". A breath of spring air laden with a few ozone particles.

More often they never reply, or offer some comment about how their important thread was side-tracked into a denunciation of special relativity.

Oh, honey. Not cheaply. My library now charges a US\$1/page and the text isn't bound.

Well, you can do a lot cheaper than that at home. There are already virtual libraries of stuff out there in .pdf format which can be had in

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hardcopy for the cost of printing, which, even with inkjet, is a lot less than \$1/page. And if you have the right laptop, you can dispense with the printing (I have an old one I've tried to use as an e-book... at least it allows me to lie in bed and read, but it's still not as comfortable as a bound volume).

hmm..can you really use a computer without thinking or having half your senses aware of the fine tuning underneath? This one just occurred to me. I am unable to do that.

Maybe that's your long-term professional training. I can occasionally use a computer as a fully transparent tool -- when I've mastered the software, and no bug or necessity for clever work-around is manifesting itself at that very moment.

My nephew is installing this as we speak for a couple of college profs. I've been told that he hates this tech but I don't know why; the gossip was second-hand and filtered through a person who doesn't know the computer biz.

I'd like to know more about what he's doing.

Classroom writing screens. He's finishing freshman year. Apparently, homework due dates are old stuff. Now those date data have times appended to them. He had until midnight to submit his homework. And it was always submitted via the nets. I don't quite know the advantage of having all students having a screen to write that can be projected on the prof's "blackboard".

New and cool?

That certainly is a closely related technology, if not exactly what I had in mind.

I was going to add "and why he hates it", but that's not important.

Oh, I'm interested in that one but I used get paid to learn that kind of stuff.

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Ah. So when a customer hated your technology, part of your job was to try to find out exactly why. Makes sense.

I take it he is young, and
it offends some variety of purism he is subject to.

Nah, I don't think it's purism.

Like the groups in
Brooklyn who cobble together bizarre double height bikes out of
cast-offs, and are vehement that no such bike can be bought or sold,
ever, and you must make it with your own two hands, and forage for food
in garbage bins to prove you are worthy, and not wasteful.

Oh, dear me, no :-))) . He is farm stock.

Ok. Common sense assumed.

Merely an
extreme example. Your nephew no doubt has some milder form of the
syndrome.

I think it's about the device or perhaps it's the way the
software works. I do know that the scratch pads on the
laptops a couple years ago didn't work for me when I'd
annually check out the latest tech at CompUSA.

Ah. I hadn't seen the laptops with scratch pads. Unless you are
talking about the so-called tablet computers?

I admit, I've never tried writing an equation or sketching on a
digitized pad — it might be a lot more unnatural and awkward than I
think. Like the signature digitizers most people have probably used by
now. I do notice that these are getting better, though, so the
technology is, of course, improving.

My
guess is that the shit doesn't work. hmmm...I think I
used one of those when I bought shoes last month. oh...
now I beginning to understand. YEa, the shit doesn't work
well at least not the equivalent of pen and paper. That

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was the first time I'd ever used on those devices. It is not fine point nib. I would need a fine point to write equations, even baby ones you get in high school algebra need a fine point nib.

I've noticed some work a lot better than others.

There is a bug in your plan. You'd have to wait a whole generation for penmanship to become important in grade schools again.

I'm not talking about writing out posts in long hand. I'm just talking about adding sketches or equations in a natural way — as if you were writing on a pad.

I know. Now think again. If you can't control a pen to write script, how are untrained hands and fingers going to do intricate writings that we call equations and diagrams?

Hmm... not so much penmanship, but the quality of the pads. My handwriting sucks, but I can make a decent sketch. Yes... now I do see that these pads have been in common use for a while, and the quality is lacking, but improving. The real question is, on a high quality digitizer — with a fine grid and no drop-outs — just how hard would it be to learn to sketch, when you couldn't see the developing sketch on the pad, but rather it appeared on a screen some distance away? If this is a short learning curve for most people, the idea is workable; if it's not, the idea must await some more expensive vapor-technology — like transparent digitizers over LCD's, which would mimic writing on paper.

<sudden flash of forehead slapping insight>

Oh! That is what the "tablet" computers are supposed to do. They exist!

So, what is wrong with them?

A second question would be if this write-on-screen technology existed for independent sketch pads, with the necessity of buying an entire computer.

That's an essential part of communicating in science or mathematics, and it's what's missing here.

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Ptui. What's missing is labs ;-). But then I always had to be kicked out of the labs; they were never long enough to suit me.

Negativist! :-)

If something like USENET were available, but with a transparent way to include handwritten sketches and equations, you would see a — dare I say — quantum leap in the efficiency of communication in the medium for math and physics, probably for biology and other disciplines as well. Scientists communicate in person by making sketches and writing equations on odd pieces of paper.

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