

# Kansas City Star

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November 2, 2002, Saturday METROPOLITAN EDITION

OPINION; Pg. B7

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## Thoughtful about uploading

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The Kansas City Star

The Information Age sprints ahead, and in some ways our lives are better because of the changes it has brought us.

But new developments - this time having to do with quantum computing - again raise a foundational question: Do we have anything more important to say to one another at these astonishing speeds than we did when information transfer occurred by smoke signal, by forest drum, by simple shouts into primitive air?

I'm not a Luddite opposed to any new technology. In many ways, I'm dependent on constantly upgraded technology to do my job well. And I can do it better with such technology.

But it's worth asking what's so important to say, to know, that we must create faster and faster information processing technology. Thinking about the means of transmission, of numbers crunching, of getting an idea from one spot on the globe to another is important. But, in the end, it's not as important as the quality of the ideas being transmitted.

Scientists have been working on what's called quantum computing. A recently published paper in a technical journal, *Physical Review Letters*, proposes a new way to manipulate subatomic matter to reach the long-term goal of a quantum computer that would have the ability to do complex calculations in a fraction of the time required by today's fastest supercomputers.

The author of that paper, **University of Michigan** physicist Franco Nori, and his colleagues think they've found a way to work with subatomic particles called qubits that will allow computers based on quantum theory to work.

The science behind this is, frankly, beyond me - and mostly beside my point.

But for you science geeks, I can tell you that instead of using the bits normal computers use, each of which equals one or zero, quantum computing uses qubits, which can equal one or zero or even both zero and one at the same time. That greater flexibility allows for much faster computing.

I attended a fund-raising dinner the other night and spoke with someone who is active in the group that sponsored the event. But our subject wasn't people with developmental disabilities. Rather, it was e-mail. She recently experienced a death in her family and was saying how much e-mail helped keep family members in touch about events leading to the death and about their feelings afterward.

I know she's right because I've had the same experience in my own family. It's a rare day when my three sisters and I - scattered from coast to coast - aren't in e-mail contact. And I admit that it has been a wonderful thing and helped the four of us feel more closely connected despite the miles between us.

Still, I would be fooling both myself and you if I told you we were exchanging ideas and information that are radically different from what we exchanged when we relied on phone calls and letters. Our subjects still are mostly children and parents and love and grief and memories. We are communicating faster and more often, but that hasn't given us anything astoundingly new or different to say.

Sometimes it seems as if we have fallen in love with speed for the sake of speed. It's not that I don't appreciate the hugely more efficient speed of the cable modem I have on my home computer today.

But I wish we devoted as much energy to improving and expanding the content of what we're uploading and downloading as we do to the speed with which we do those tasks.

The problem is that thinking more deeply, offering more profound conclusions, arriving at more useful insights requires time.

But time to think is the one thing that faster and faster technology never seems to give us.

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