/dev/random

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While perusing HyperDex—because anything with "hyper" in it draws my geekish attention like a Texas ice storm draws tow trucks—I saw that they use n-dimensional Euclidean mapping for storing and manipulating data. I happen to be enamored of the concept of and, verily, even the phrase n-dimensional, largely due to my (over)use of it in a couple of science fiction novels I wrote. Now, the inclusion of Euclidean sort of ruins it for mind-boggling potential, because Euclidean space is, in fact, composed of only three actual dimensions. Sure, that's an oversimplification. I like those. They are tidy and fit neatly on the page. I've made hundreds of them over the years. You can keep score at home, if you like.

Ignoring, for the time being, the Father of Geometry (and his college roommate, the Third Cousin Once Removed of Doodling in the Margins), let us turn our attention instead to a further examination of the relationship between extra dimensions and computing. The idea that data structures can be visualized in two or three dimensions is nothing new, of course: every beginning programming student learns about matrices. RAID configurations fall into a similar category, albeit more on the hardware side, in that data are striped across multiple disks and therefore exist conceptually in Euclidean space. All of this, while moderately interesting, is too mundane for my tastes. No, what I'm talking about is n-dimensional quantum computing. Booyah.

Let me break it down for you: quantum superposition is all well and good, but it's still limited by the fact that there are only three possible states for a qubit to possess: one, zero, and both. In my n-dimensional hyper-quantum ("ND-Hype") computer, each qubit can itself exist in infinite multiple dimensions at once, providing a hyper-exponential increase in computing power.

One of the hurdles of the current effort to build a useful quantum computer is generating enough entangled qubits to get anything useful done. The ND-Hype computer obviates that problem quite neatly in that it only requires one qubit to operate. When additional logic gates are needed to solve a problem, it dynamically recruits entangled brethren in as many dimensions as necessary, effectively giving it infinite qubits with which to work. Since the extradimensional qubits are all entangled with the original, their quantum states are transmitted to it instantaneously in what I will, naturally, call "hyperpositioning."

Thus, with but a single qubit, you can possess functionally limitless computing power. Designing the user interface might present a bit of difficulty, admittedly, since infinite simultaneous data outputs would be a little problematic to display,

but that's an issue for the GUI engineers. I suppose you'd need a fairly large amount of RAM and one heck of a data bus to hold all that information long enough to accomplish anything with it, too. Hey, I'm just the idea man here.

I think one of the reasons I'm drawn to all things quantum is that every aspect of that topic is utterly counterintuitive and bordering on the insane, and, well, like attracts like. I mean, think about it: in the quantum world, the answer to the age-old philosophical question, "If a tree falls in the forest and no one is there to hear it, does it make any sound?" is: "yes and no." Unless there is an observer, the outcome has both possible states, not one or the other. That is clearly insane.

The only way I can even begin to grasp it is to imagine that every single binary event I can witness, or even imagine, has a universe where the outcome is one, and another where it is zero. Once there is a witness to the precipitating event, the outcome is fixed and that observer is tied irrevocably to that universe. Until and unless there is an observer, however, the outcome is indeterminate. In my novels *Tangent* and *Infinite Loop* I refer to those quantum temporal inflection points as "frames." Whatever term you choose to refer to this phenomenon, "rational" does not enter into it.

But, back to HyperDex. I think their data storage and retrieval scheme is pretty slick, although it also smacks of Yet Another Insidious Cloud Computing Initiative. At least they track the precise location of your data in their n-dimensional space, which is far more than I can say for most true cloud applications. I think my next big think tank project, based on a dream I had the other night, will be to create a sort of air traffic control system for use in the cloud that allows a user to track where her data actually are at a given moment in both logical and physical space. Sort of like tracking your teenage son when he borrows your car to go the store for you via four friends' houses, the skateboard park, two different malls, and the Hyperdodecahedroplex Theater out on Route 15. And then comes home six hours later without the milk or bread. Not to mention an empty gas tank.

I'd have a huge map of the world for my data tracker like the one in *War Games* that would trace each piece of your data as it spreads out through the cloud, displaying it like radar tracking of missile launches. This would help to drive home the message that the cloud is a colossal global security risk while at the same time providing an impressive component for your next dog-and-pony affair. It might even lead to a game show called *Guess Where Your Data Will Go Next.*

"Guess where your data will go next. Hands on buzzers, ladies and gentleman. Go!"

Buzzz! "Oslo?"

Buzzz! "Seville?"

Buzzz! "Dubuque?"

"No, I'm sorry, contestants, the correct answer was Baku, Azerbaijan. Ed, tell our contestants what they get for being such lose...good sports."

"Certainly, Bob. All contestants on *Guess Where Your Data Will Go Next* receive a year's supply of pre-compromised firmware and a copy of our home game, *Guess Where That Thumb Drive You Found in the Parking Lot Has Been.*"

I should probably stop eating those habanero Brussels sprouts right before bed.