

From: Eric Roth <[REDACTED]>
To: Jeffrey Epstein <jeevacation@gmail.com>
Subject: Fwd: On Portability, aka ramblings from my flight . . .
Date: Wed, 06 Nov 2013 20:40:56 +0000

My buddy writes these emails on the train ride home from time to time- thought you might enjoy the read...

ERIC H. ROTH | PRESIDENT
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Begin forwarded message:

From: "Rosenberg, Adam" <[REDACTED]>
Date: November 6, 2013 at 2:48:49 PM EST
To: "Rosenberg, Adam" <[REDACTED]>
Subject: On Portability, aka ramblings from my flight . . .

So, microbial life on Earth very likely emerged in the water, where the primordial ingredients made in the stars clustered into chains and were all present in solution. Much easier to build self-replicating chains that way.

I once wrote a chatauqua on how these chains assembled machinery around themselves that somehow developed the ability to pack nutrients and water into self-contained bubbles (we call them "cells"), which enabled organisms to move around: We enveloped the outside world inside of our bodies, so we could pack the star stuff into little lunch boxes and take it with us wherever we went. We were no longer dependent on being in situ, or in solution. We became portable. That was a huge evolutionary advantage, and helped trigger the explosion of eventual speciation all over the planet.

It seems to me that recent technological development has progressed in an analogous way.

Think of all the things we used to do in situ -- by necessity -- that we now do on the move, enjoying portability. I can think of a few examples:

I guess telling time is the most obvious example. Pocket watches (followed by wrist watches) liberated people from the need to be near the clocktower, a specific place. Actually, there was an intermediate step: The grandfather clock, in the home. So for telling time, the progression was: Specific place, then at home, then portable.

Similarly with cameras: In the old days, you used to have to go into a dark booth inside a special studio and sit still in front of a telescopic / accordion-collapsing square black tube while it collected the light reflecting off your face. The camera itself was the situs and you had to be there, in a specific place, to use it. Long ago.

Then home versions became available. Today, I would say that hand-held portable cameras are everywhere, but that would only be partially true: The vast majority of portable cameras aren't just cameras; they are built into mobile devices that do lots of other things too. The days of the camera-only device are fading fast. I am reminded of my son's history class a few years ago, when his teacher assembled a collection of artifacts from the turn-of-the-century. One was an old-fashioned hand-held camera, complete with accordion-collapsing

square black tube. The kids simply could not comprehend that. "JUST a camera?? What else does it DO?!"

In my lifetime, the earliest instance of this phenomenon I can think of is video games. First there were in-cabinet games in actual arcades -- store-fronts in shopping centers. You drove there, walked in and played games. Then came home video console games you could plug into the back of the TV, with wires stretching across the coffee table to the couch. Still in situ. Then a kid at camp showed me his Mattel electronic football game -- that white rectangular tricorder paddle with lighted red dots representing football players blipping as you moved them across the primitive screen. Remember that? The video game had become portable. You could take it with you to General Swim. Specific place, then at home, then portable.

Next was music. In the 1600s, if you wanted to hear an orchestra play, you had to go to the theatre (with an "R E"). In our time, it is much easier: I used to visit audio appliance stores arranging components and swapping out speakers, experimenting with which combinations sounded best. The goal was to assemble a stereo for my room. If I ever wanted to listen to music in those days, I had to go to my room and put on a record (assuming I had a needle that worked) . . . and sit and listen, there in the presence of my speakers. Then one day, also at camp, a counselor showed me his Sony Walkman. So frikkin cool. I remember folding in a cassette tape, putting the tiny headphones over my ears, and screaming to him "YOU CAN'T HEAR THIS?? WHAT??" It sounded like the entire room was filled with music -- the music seemed to come from everywhere, but I was the only one who could hear it. I walked around the bunk. Music had become portable. Today every mobile device can hold massive quantities of music. Again, the progression seems to be: Specific place, then at home, then portable.

Next it happened to phones. Remember those long, curly phone cords streaming out of the kitchen wall? The phone rang, you ran to the kitchen, and you pulled off the hand-set. "Hullo?" You had no way of knowing who was calling. And you had to go to where the phone was. In situ. Then came cordless phones, followed by mobile phones. I got my first StarTac in 1997. Now, Galaxy has a wristwatch phone, and Google glass is coming soon (telecommunication through your eyeglasses). It doesn't get more portable than that.

The world-wide web went portable much later. Nancy and I discovered the web while in San Francisco in 1990, when a tech-savvy friend told us what was coming. We didn't believe him. I remember using Prodigy in law school that year -- a program that used a modem to access case law files from a database. Anyway, to go online, you used to need to be at your computer, with the modem rockin across a slow phone line -- physically there, in situ. Then came laptop computers and wifi, tablets and smart phones. Now you can go onto the internet anywhere and with any mobile device.

So here's my question: What's next?

What do we do now -- still -- only in situ that we will soon be able to do with the freedom and flexibility of being portable? It is hard to think of such things. There isn't much left that we have to go somewhere specific to do.

Shopping? Nope. Watch movies? No way. TV? Uh-uh. Can do all that on an iPad from anywhere.

At this point it occurs to me that many of the things we used to be able to do only in groups, in a social setting, we can now do alone on our solitary devices: Listening to an orchestra, going to the movies, buying new sneakers. There is a sad corellary to this: At a recent leadership conference, I learned that TV show laugh tracks will be used more and more going forward. Why? Because people aren't comfortable laughing when they are alone -- we are lemmings and will laugh with great predicatbility when we hear others laughing around us. It may surprise you, but laugh tracks really work. And, sadly, most people watch TV by themselves (and at an increasing rate).

Anyway, so what's next? What does the future hold in the realm of newfound portability? What will we, for the first time, be able to do on the go? Sleep? Take in nutrition? I don't mean taking naps on the train or grabbing fast food on the way to work; I mean a technological way of "downloading" the beneficial effects of a

long sleep instantaneously, or releasing nutrients into the body electronically through some device that transforms energy into organic matter and distributes nutrients throughout the body. Let's invent that!

What can you think of? Whatever it is could be the next big thing . . .

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