

**The Future
We Deserve:
*“Facebook for the
Five Billion?”***

Digital Identity

Tell me who you are

- I am Vinay Gupta
 - [Http://hexayurt.com](http://hexayurt.com) Free hardware housing
 - [Http://twitter.com/leashless](http://twitter.com/leashless) Microblog
 - [Http://hexayurt.com/plan](http://hexayurt.com/plan) Bio, picture, resume
- Now, prove it?
 - Could show you a picture ID (government)
 - We could ask my friends (group, social network)
 - You could recognize my face (individual)
 - *How do you know I'm really Vinay?*

Advances in all three modes

- You could show me a picture ID (government)
 - Biometric passports, huge databases
- We could ask your friends (social network)
 - Facebook, LinkedIn etc. are public profiles
- I could recognize your face
 - We stay in far, far better contact with our pasts than in former times, maintaining much larger webs of personal relationships.
 - Even your least-liked classmates from Primary School will still be able to find you!

In rich areas, government owns ID

- In the UK, the definitive ID is government-issued numbers like National Insurance, Passport and similar identity numbers.
- In poorer countries it is quite possible to be born and not registered with the State, leaving people without a national ID number.
 - For such people, the primary identity which defines them is a *social identity* not a *state identity*.

Banking: who owns the account?

- Grameen Bank lent to people with weak *State Identity* credentials by using their *Social Identity* credentials – they lend to groups of villagers and use your social standing as debt collateral
- Infrastructure like roads can be private or government property
- So too with identity: if you are a Nigerian who went to school in the US, your Facebook profile (private property, not yours!) is likely to engender more trust than your *State Identity*

Digital Currency

Once upon a time

- In the 1990s I was paid in a digital currency called e-gold
 - A privately-issued 100% gold-backed account-based digital currency (I pay you 5 grams of gold)
- E-gold was sandbagged by the US Federal Government in 2005 leaving two tons of reserve
- E-gold was efficient for micropayments, secure, independent of government money supply decisions, kept honest books, and in every way represented an honest, fair independent money

Bitcoin

- Instead of using gold to provide natural scarcity, bitcoin uses hard-to-find mathematical facts
- Gold has common value, bitcoins are only valuable as currency (no inherent value)
- Anybody with a computer can search for scarce mathematical facts.
- Right now, bitcoin is struggling to find a stable exchange rate against other currencies and is gaining value relative to the dollar very quickly

M-PESA

M-PESA is “just” a way of moving money

- Like Western Union
- An M-PESA trade turns cash into a number. You send the number by SMS, and the recipient turns it back into cash at the local gas station
- M-PESA is used in many countries
- They could start to issue currency, not just exchange currency, without major new tech
- Would M-PESA currency beat weak local cash?

Digital Culture

Two Videos

MIA, Jimmy

- Daughter of a Tamil Tiger leader
- Grew up in exile in London
- “when you go to Rwanda and Congo, take me on your genocide tour...”
- Die Antwoort, Enter the Ninja
 - South African art pranksters embark on a project to embody South Africa
 - If you think this is scaryweird, see Evil Boy (nsfw)

What is going on here?

Some musicians sell female sexuality

- Kate Bush, Madonna, Britney Spears, Ke\$ha

• Some sell male sexuality

- Elvis, Cliff Richards, George Michael, Barry White

• Fringe culture sells “dangerousness”

- Robert Johnston, Sex Pistols, Psychick TV, Niggers With Attitude (NWA), Jay-Z

- “Terrorist Chic/k” from MIA

- South African ghetto culture commodified: they win

**Prospects:
rollover**

Reversal of aspiration

The rich nations are about to get a ton poorer

- I just moved to *Ireland*
- The toughest, scariest, edgiest people in world culture are not from American inner cities
- Sophisticated tools for culture creation are now everywhere (see recent Bollywood CGI films)
- You want to be “tough” but are you tough enough to “hang” with Tamil Tigers in the slums of Johannesburg? *Didn't think so, and me either*

Rollover

We suppress radical innovation just as much as we encourage it

- Can the next Google come from Bangalore rather than the Bay Area?
- Will the first developing world tech giant be as wary of asserting its political power as Google?
- Put together digital identity and digital money, and use them to pay for digital culture?
 - Die Antwoord on Diaspora with Bitcoin...

We approach an edge event

We have seen multiple stepfunction changes in technology without any substantial change in governance of government

- Unchecked environmental insult continues
- Poverty continues
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- Why would you think that tomorrow will look like today?
- *How can we get to The Future We Deserve?*

Breakthrough

Ok, ok, so there's radical change...

The dual problems: poverty and environment

- (you *can* add a third, resource scarcity, but mostly that is imposed by under-investment and ecology)
- We've seen fundamental transformation in identity, currency and culture, but not yet in politics, government or governance.
- What about all the tricky stuff in the middle, infrastructure and supply chains?

Radical decentralization pays well

Small is Profitable is The Economist's Book of the Year, 2003 (I was on the editorial team.)

- 207 advantages of making energy resources the “right size,” mainly
 - Demand is close to supply
 - 30 small projects have less risk than one big one, particularly if they are sequential rather than parallel
 - There's no fuel price volatility baked in (i.e. A coal power station is a “coal future” not just energy)
 - Works all the way down to the household level

Household level decentralization brings *degovernancing*

The three *bureaucracies of sharing* are

- The Owner Bureaucracy
 - The legal entity which owns resources, a board etc
- The Manager Bureaucracy
 - Who gets services, at what cost, with what terms?
- The Protection Bureaucracy
 - Who protects the resource from theft and wear?
- Scale a resource to the household level and you can decide all of these things for yourselves

What can be *degovernanced*?

- Electricity supply by rooftop wind and solar
- Water supply by wells and biosand filters
- Sanitation using composting toilets
- Cooking by using efficient wood stoves
- Telecommunications using mesh networks
- Transportation using bicycles and locally maintained roads
- In short, you could run a poor country this way

Sharing through Freedom, not Sharing through Control

The Free Hardware movement is moving from gadgets to tools and infrastructure

- Open Source Ecology has a tractor and bricks
- Biosand filters
- Rocket stoves
- Sulabh toilet
- Hexayurt house
- Sharing technical know-how leaves the other person free to decide how they will use it

Cooperation Without Control

unity of effort without unity of command

A bit of a Holy Grail

Free hardware does not preclude sale

- It does enable sharing and cooperation in ideas
- It has the possibility to provide for many, and in time perhaps most or all basic human needs
- It is politically sound, being free of coercion
- It works for the poor and rich alike, but perhaps not for everything
- **I know of no other realistic way forwards**