Digital Locks and the Future of Security

Hello Internet, we need to talk about locks, physical and digital.

In the physical world locks, aren't as good as you think they are. The

balt Lock on your front door is more for your piece of mind than actual

security - as two minutes of searching will reveal - (probably it's also

cheap. Spend more, get more - but there's no unbreakable lock. All locks-

fail with time and tools enough.

But that locks are bad at locking in the physical world, mostly doesn't

matter, because burglar are constrained by the physical world.

must

makes that

To

A burglar has to cruise the neighborhood and pick a target - Which is-

Toward hence

why having a house look secure is most of the way to making it secure.

But digital is different. On The Internet the appearance of security

from

counts for nothing because a digital lock **hese to** protected you not just

from burglar in your neighborhood but all the burglar in the world -

for, on the Internet, there's no such thing as distance. Every burglar

can be at your door simultaneously - in fact, at everyone's door because

digital burglars don't crack the locks themselves, they build burglar

sending them

bots to try billions of locks billions of times to just see what opens.

Thanks to Math re different. Digital locks can be made 'un' diai

Burgular bate are fast quessers

breakable. This is why websites pester you about passwords: they want

but a secure password you to make something burglar bots won't crack and a {Q} password will

take longer than the heat death of the universe to crack. Functionally,

unbreakable.

Well-designed digital locks work even if a burglar gets their hands on

your phone: no matter how much of leet hacker your mom is, she can't see

your browser history. While this is the greatest good possible: it

just be the greatest But easy to imagine unbreakable digital locks as bad news: for moth Maximum lazy: ticking time bomb – the location and off code of which are many him incrachable phone Were the information on a piece of paper in his house, this would be under a protein: society agrees this is a reasonable time to have police break senario its a door lock real-world locks Interestingly this means the lock isn't weak just physically but also arent mech legally - We could live in a world where police weren't allowed to break weaknot bochids police locks, no matter how flimsy, but we don't, cuz that'd be dumb. under all circumstances Mpw this is where gears start turning in governmental heads: if digital legal weakness is what stats locks are physically invulnerable, then maybe we can make them legally they can be made weak - to required that digital locks are built with a keyhole - highly

be

secure, top secret, for emergencies only, surely - but a keyhole

nonetheless. This is an idea that many, many governments are interested

in.

To make selling or devning flawless tocks illegal and to require 7

And governments rightly draw the parallel to physical locks: if a

warrant lets police into your house it should let police into your

phone. If your home is your castle, but the need pressing enough, they

can bring a battering ram. But there is no battering ram that will crack

open the phone - not in a helpful way.

So legally require it.

The legal maneuver here is to require all castles have backdoors, and

all locks have a second keyhole. And while it's easy to see when this

would be useful, when it would save lives, we must now remember that

digital is different and that on the Internet there's no such thing as

distance – 🔊 digital locks must stand up to every threat in the world.

Even if you Xanadu government is a bureaucracy of the seraphim

incorruptible - nonetheless phones and computers manufactured there are

would have a payhole the whole rest reak to the attacks of others. of the world will try to pich. weak to the attacks of others.

The strength of digital locks is the foundation upon which the whole of

the Internet is built: banking, buying, blogging, vloging, tweeting,

beating, meeting all of this stuff can happen securely because of

digital locks.

There's no way to have locks that only angels can open and demons

cannot. Those who tell you otherwise do so because they think you a

child to manipulate with a fairy tale.

The nature of keyholes is to be cracked and it matters not who installed

them.

Either our digital locks en be made unbreakable or they cannot not.

There is no in between.