## Plausible tomorrows 2035-2049

Vinod Khosla May 2024

### Experts extrapolate the past... and do harm when people believe them!

### Skeptics never did the impossible

### Every 5 years there is a major improbable change

#### COULD EXPERTS IMAGINE...

1985: a PC in every home

1990: email for grandma

1995: the internet, Google

2000: pervasive mobile

2005: facebook / iphone

2010: AirBnB, Uber, Tesla

2015: remote work, Zoom

2020: AI

### Large change is driven by entrepreneur led companies

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Spacex, Rocketlab
             Tesla
            Amazon
            AirBnB
             Uber
           Genentech
              Sun
            Juniper
           Microsoft
            iPhone
            Waymo
            Google
            OpenAl
Twitter, Facebook, Youtube, Netflix
```

## Entrepreneurs, with passion for a vision, invent the future they want

### #1: Expertise will be near free

We will be capable of having near free AI doctors for every person & AI tutors for every child, 24x7

### #2: Computer use will grow expansively

There will be a billion+ programmers all "programming" in human language, dramatically increasing the scope of computers

Computers will adapt to humans, not humans to computers

### #3: Internet access will be mostly by agents

Most consumer access of the internet will be agents acting for consumers doing tasks and fending off marketers and bots. Tens of billions of agents on the internet will be normal

### #4: Al will play a large role in entertainment & design

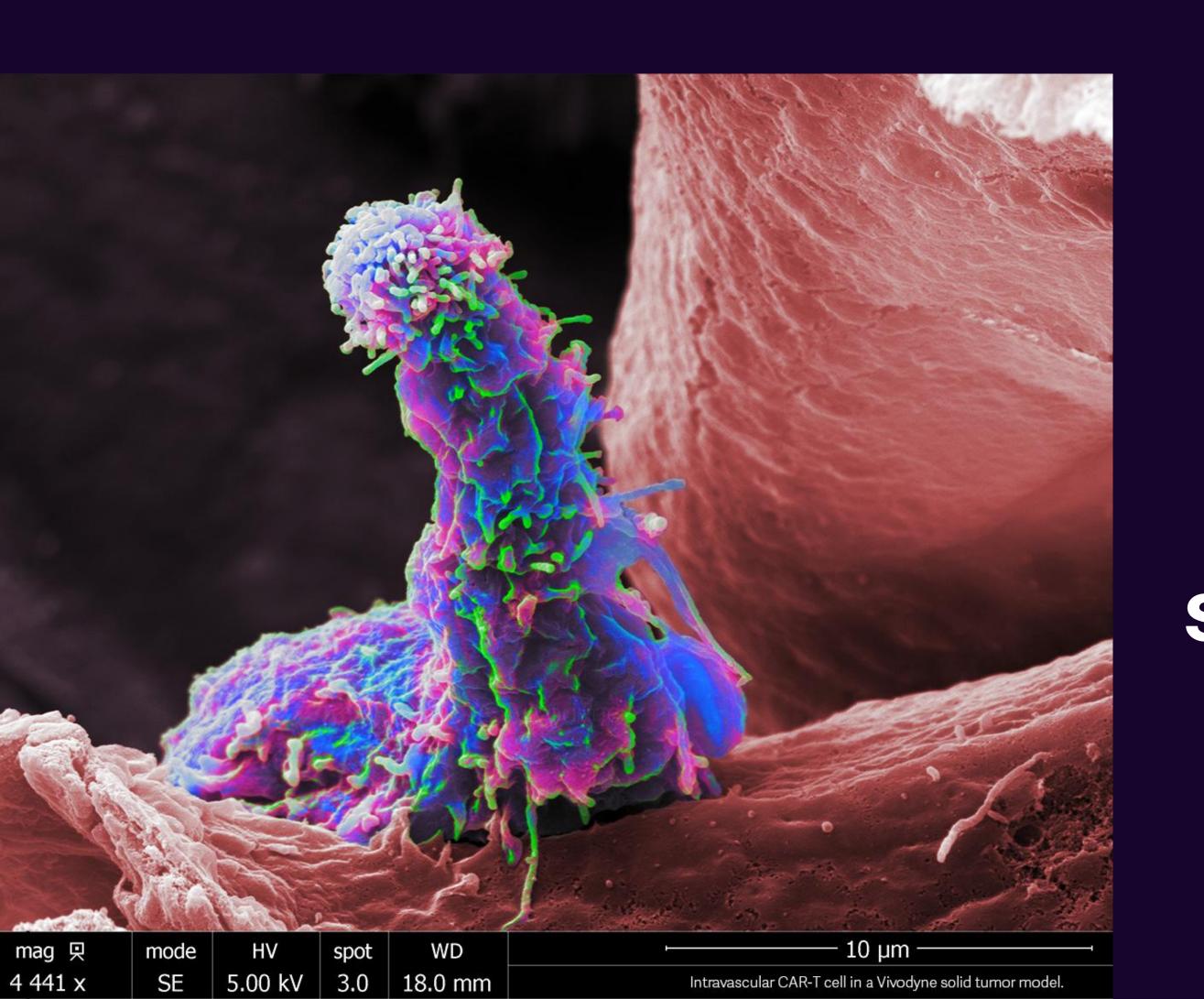
Music and entertainment will be plentiful & personalized for you & your mood! Diversity of content & creativity will increase

The celebrity-fan relationship won't change

### #5: Scientists will be supercharged

Al scientists, working alone or with humans, will become super scientists, able to 10x or 100x their capability, creativity, and volume of research

### #6: From the practice to the science of medicine



We will be capable of providing precision care based on patients'-omics, as well as Al models for each individual, enabling simulation of each body for therapeutics, dosages, etc

### #7: Labor will be near free

# We will have a billion bipedal (and other) robots freeing humans from the servitude of undesirable jobs

### #8: Manufacturing and bio manufacturing

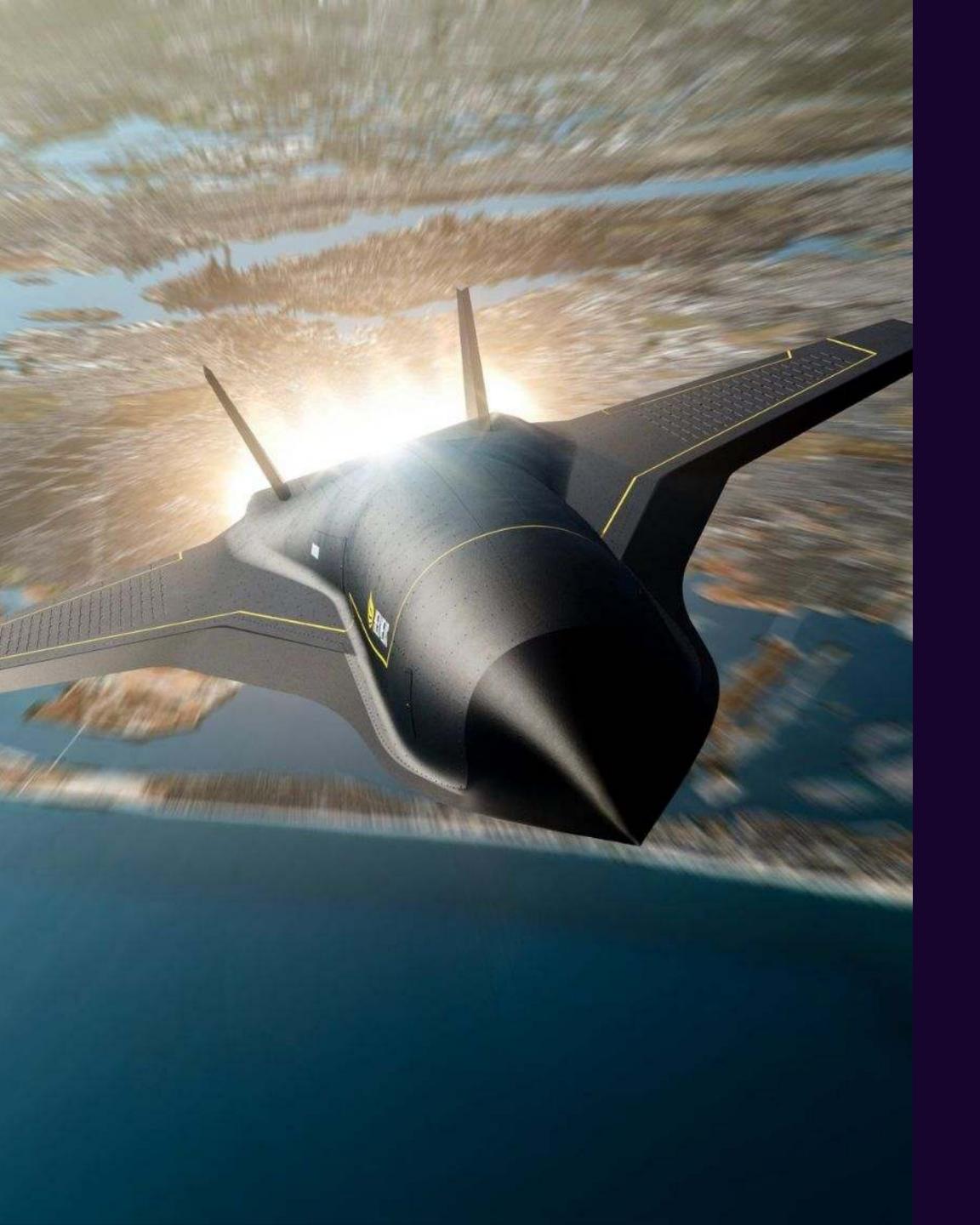
We will have text to product manufacturing capability enabling hyper-personalization and democratization

Manufacturing and bio manufacturing will be intelligent

### #9: Cars could be displaced in cities

We could replace majority of cars in cities with personal autonomous transit as on-demand, affordable, public transit, increasing street throughput dramatically





### #10: Flying will be faster

We will have Mach 5 planes that get us from NYC to London in 90 minutes – on sustainable aviation fuel, making the world closer!

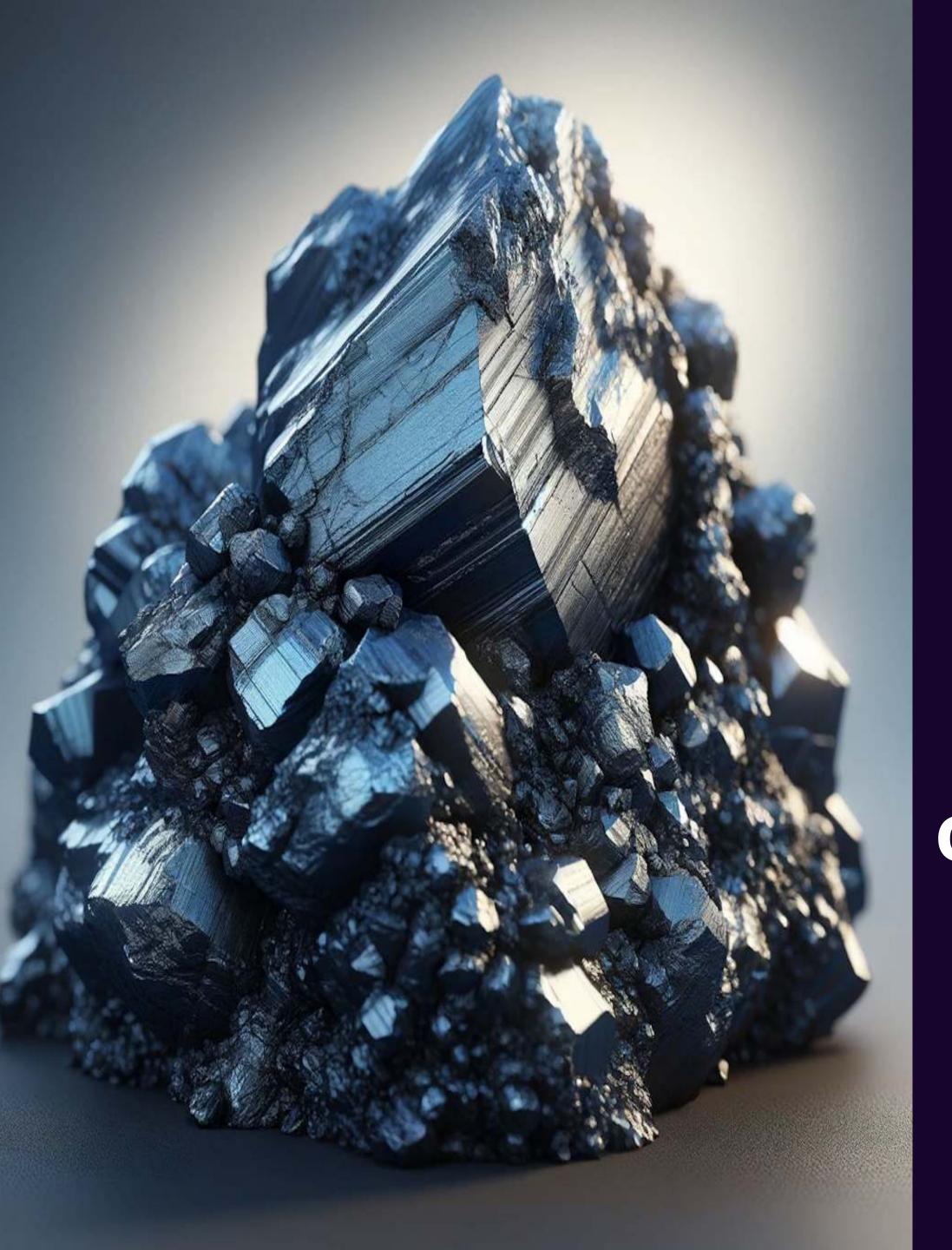
### #11: We will have new food & fertilizers

We will have much better alternate protein production to replace traditional animal protein, & "green" fertilizer. And taste will far exceed that of traditional cows!



### #12: There will be clean, dispatchable electric power

By 2050, fusion boilers will retrofit and replace coal and natural gas boilers reducing the need to build whole new fusion plants. Superhot geothermal >400C is also a real alternative



### #13: Resources will be plentiful

We will discover more natural resources than we consume & prove resource doomers wrong on lithium, cobalt, copper... even water

### #14: Carbon will have solutions ... if we have time

Carbon emissions could be a smaller issue because entrepreneurs will develop & scale better technologies for cement, steel, agriculture, transportation, power production, DAC, etc

## A few entrepreneurs, aided by policy, can make this future happen

### ... things that might slow down predictions

**Incumbent** resistance

Politicians capitalizing on fear for personal / populist gain

Tech failures or delays

Financial market conditions may kill a good idea

**Anti-tech** sentiment

Luddites hijacking the would-be advocate

A few bad AI-related outcomes that get sensationalized

**Left field events** 

Instigators/entrepreneurs may not show up to make it happen

## Abundant, awesome, technology-based, "possible tomorrows" are likely if we allow them to happen

...and entrepreneurs make them happen!

# "The real problem of humanity is we've got paleolithic emotions, medieval institutions, and god-like technologies."

-Edward O. Wilson

...problem or opportunity?

