

Encapsulated Season 2 - Episode 1 of 9

FADE IN:

The stock photo appears for "TED: Ideas Worth Spreading". Hold for a few seconds, then dissolve to...

INT. TED TALK STAGE - DAY

An enthusiastic speaker, HECTOR MCKINLEY (31), stands in front of the crowd with a shirt that reads:

"I Socially Distanced and All I Got was Alive"

The crowd chuckles. He lets a few moments pass for them to appreciate the joke.

SUPER: March 2023 - Hector McKinley, The NMI

Hector begins his speech, his eyes gleaming. He paces, captivates and engages like a true salesman.

HECTOR

Leo Tolstoy wrote: Everyone thinks of changing the world, but no one thinks of changing himself. Over the last few years, the need for global change has become more evident and urgent than ever before. From the pandemic to climate change, from racial tensions and political unrest to economic disparities and mental health crises... clearly, we're living in unprecedented times, which calls for unprecedented solutions.

(pauses)

But back to Tolstoy - everyone wants to change the WORLD, but nobody wants to change THEMSELVES. See, in order for us to make meaningful change on a large scale, we need a critical mass of people who WANT to change - whether through their votes, or their dollars, or their time, or their jobs... We might have the best solutions, best systems, best public policies - none of that matters if people en masse don't want to make a difference. We need to complement systemic solutions with a majority of humanity who wants to make the world a better place, because when everyone's on board with change, only THEN is it possible.

HECTOR (cont.)

So how do we change people? And in turn, change the world? I want you to join me on a thought experiment. I want you to think of a time when you changed your mind. Maybe you decided to switch political parties, maybe you saw the light and finally stopped rooting for the Patriots-

(there's some friendly heckling, he laughs)

Whatever it was, think of some instance where you changed your mind.

(gives the audience a few seconds)

Now, raise your hand if... you changed your mind because you were being held at gunpoint.

(no hands go up)

Raise your hand if... you changed your mind because somebody was holding your family hostage.

(no hands again)

Hmm.. Raise your hand if you changed your mind because of a heated argument on Facebook.

(one hand goes up)

That man is lying.

(everybody laughs, even the guy who raised his hand)

Now - raise your hand if you changed your mind because you WANTED to. Maybe to fit in, or to spite somebody, or just because it seemed like the right thing to do.

(everybody's hands go up)

I think we can all agree that, as much as we may want to force people to change their minds, we ourselves don't want to be forced into change. And we can also agree that, when we finally DO change our minds of our OWN volition, that change is much more permanent and effective than it would be if we were forced. It's like a kid whose parents tell him not to play with matches - they could give all the best reasons, hide the matches so he can't find them, punish him when he does inevitably find them... But until HE decides that he doesn't want to play with matches, it really won't matter. And on the flip side, once he DOES decide that it's dangerous, once HE decides it - maybe because he burns himself and realizes his parents were right all along - that will be MUCH more effective at stopping him. Agreed?

The crowd murmurs in agreement. Hector smiles, takes a sip from his water bottle, then starts pacing.

HECTOR

Back in 1993, a team was assembled as an offshoot of the human genome project: the Neural Mapping Institute, or NMI. Their task was to map the human brain down to the granular level. Not just to map the different regions, but to be able to look at a brainscan and decode the thoughts, personality traits, political and religious views, fears, hopes - even to see the distinct memories. Sounds like science fiction, and that's what the team insisted from the start.

But they pressed on. They fought red tape, spotty funding, dead-ends, and a pervasive sense that this was asking too much. I joined the team about five years ago, at which point they had started to make some breakthroughs. With the help of AI and enhanced imaging technologies, they were making exponential progress. It was like the domino chain had started to fall - each day, with each improvement, we stepped closer and closer to that once out-of-reach goal.

I am thrilled to announce that our efforts have finally paid off. We still have some fine-tuning to do, but I think you'll all be blown away with our findings. Let's pull up the video.

He presses a handheld clicker to start the video on the screen behind him. It's a tour of a computer-generated house - very blocky and basic. Hector talks as the camera does a cursory exploration of the rooms in the house.

HECTOR

Ladies and gentlemen - this is my brain. We have converted all my thoughts, memories, and neural activity into a computer model of a house. This model is organized, intuitive and comprehensive: the layout makes sense and is highly structured, it's easy to navigate, and EVERYTHING about me is incorporated in the model.

(the audience is fascinated)

HECTOR (cont.)

Let that sink in for a minute. I mean, truly, just think about what this represents, about how monumental a breakthrough this is. We have the capacity to map the ENTIRETY of somebody's mind. How fricking AWESOME is that?

(enthusiastic cheering and clapping)

We call this the Mind-Scape. Very technical term, we spent weeks coming up with it.

(the audience laughs)

You laugh, but really though...

(they laugh harder)

We went back and forth between several options: The Mind Palace, Intellectual Property, BrainMap.. But Mind-Scape won out. Our vision is that over the next generation, Mind-Scape will become as ubiquitous a term as Facebook, Windows, Google. Everyone will have a Mind-Scape; exploring your Mind-Scape will be a new pastime; maybe we'll call the process Mind-Scaping, who knows?

The video ends. The Mind-Scape logo appears briefly, then transitions to a powerpoint presentation. For the rest of his speech, Hector toggles through the slides regularly. The graphics and charts on the slides correspond with what he's discussing at the moment.

HECTOR

So how does it work? To start, we do a brain scan that takes about twelve hours. It's like a CT scan on steroids. Once that's complete, we apply an algorithm that runs for almost a month to decode the brain scan. The decoded brain can then be uploaded to a generic house template, which is what you saw in the video.

The house itself has four basic elements: Rooms, items, avatars, and threads. The rooms are - well, rooms, obviously. They correspond to the appropriate parts of your mind that you would associate with them. So for instance, food-based memories are in the kitchen. Things you don't think about very often, the attic. Group memories in the living room, work habits in the office, subconscious in the basement... you get the idea.

HECTOR (cont.)

The second element is the items. Most of the items are photo albums, and they mostly contain video files. So, more accurately, they're video albums. Now, they may also include pictures or audio clips, but we found that mapping to a video file was typically the best representation.

Some items may also take the form you'd see in real life. So for example, food, clothes, your couch, your car, your phone - anything that you use regularly, and which stays constant throughout multiple memories... the software can extract that, so to speak, so you have an actual representation of the thing itself.

The other type of item is books, which contain facts, trivia, and other pieces of information you've learned, grouped by topic. So if you're a math expert, all the equations you've learned would have their own book. Some people would have a book of phone numbers, if you're part of a generation where you had to actually remember people's phone numbers.

(the audience chuckles)

But those would all fall in the second category: video albums, fact books, and things you use would all be considered 'items'. Those are all assigned to their appropriate rooms.

The third element, my personal favorite, is a little trickier - the avatars. We're especially proud of this feature, but it does take a minute to wrap your head around. Anybody who you have a distinct memory of is converted into an avatar... Think of it as a custom Sims character. It has its own internal AI that recreates the person based on your memory of them. So you can talk to them, interact with them, ask them questions, and the program will improvise their responses based on your knowledge of the person. It's as if the person is actually there, but they can only say things that YOU would expect them to say, and they can only behave the way YOU would expect them to behave.

HECTOR (cont.)

Now, just to put any concerns to rest: this does NOT mean that you have a bunch of people running wild through your Mind-Scape. The avatars only get 'activated' if you initiate the conversation. Otherwise, they just hang out in sleep mode, and you can turn them on or off at any time.

I know what you're all thinking: "I can have a copy of my in-laws, that I can say anything I want to, and if they get mad at me I can just turn them off? Where do I sign up?"

(the audience laughs)

And the same goes for animals - if you have pets, the software creates avatars of them as well.

(several people cheer)

I know right? It's awesome!

He pauses again, takes another sip of water, rolls his neck side to side, and continues.

HECTOR

Now, the fourth part - the threads. This is the most sophisticated part of the process. Crazy as this sounds, we're able to represent individual thought patterns as literal 'threads' that run through the house. Think of them as any abstract constructs that you use to make decisions: your goals, hopes, fears, political and religious perspectives, morality, work ethic, viewpoints and opinions... anything that can't be expressed as an item or an avatar is a 'thread'.

So for example, let's say you're competitive, and that's one of your defining personality traits. Your Mind-Scape would have a thread that connects all the elements that influenced that competitive spirit - maybe it's connected to the memory of your first soccer game, the avatar of your high school track coach, a book with all the sports facts you know, a board game that you loved to play in college... anything that has to do with your competitive nature is connected with this thread, and you can follow the thread to see every point where it intersects with something.

HECTOR (cont.)

I know this is all a lot to digest. If you tuned out for all of that, or feel like you got lost in the weeds, take a quick step back, and think of it this way: IT'S A 3D MODEL OF YOUR MIND! Can we once again acknowledge how INSANE that is??

The crowd cheers. Hector is feeding off the enthusiasm and is genuinely thrilled to be sharing the discovery with such a receptive audience. He waits for them to settle down before going on.

HECTOR

Alright, back to technical speak.

(the crowd laughs)

Now, clearly we have progress to make. One of the obvious areas, as you could tell from the video, is the graphics. The aesthetics of the Mind-Scape leave a lot to be desired - it's still a very rudimentary model for now.

But, this is the brain we're talking about - the most complex organ on the planet. Each model uses about one exabyte of data. That's a one with eighteen zeroes. That's the equivalent of all the books in the Library of Congress, printed a hundred thousand times. One brain. And I'm sure some of you are thinking: "It's ONLY one exabyte? There's no WAY you can fit an entire brain into just one exabyte!" You're not wrong! The fact that we condensed the data down to one exabyte was in and of itself a milestone. And as time goes on, we expect that we can compress the data even more. Until then, the graphics will look like an intro-to-Blender project.

(several audience members laugh)

Another limitation is that, because of the filesize, it's not quite ready for public use. Most people would probably crash their computers trying to open it. But again, within the next five to ten years, the data reduction on our end should match the processing power increases in the private sector. And with our proof of concept now complete, the journey toward widespread implementation is inevitable.

HECTOR (cont.)

Lastly is the environment - technically the brain is not organized like a house, and while we tried to mimic the real underlying structure, it's not a perfect representation. But as any first-year stats student can tell you: all models are wrong, but some are useful. We found that the structure of a house made for easier navigation, and like I mentioned earlier, a more intuitive experience. Nobody wants to explore a text file or a sphere of 1's and 0's, so the house is a compromise between accuracy and user-friendliness.

One other note - this research has actually coincided nicely, REALLY nicely, with the widespread adoption of virtual reality. It is technically possible to explore the Mind-Scape on a 2D computer screen, but we realized that VR provided a superior platform for the experience. Which makes sense: it's a three-dimensional model, and so you can experience it best in... three dimensions. Rocket science, I know.

(the audience chuckles)

Of course, it will basically fry any VR headset that's not hooked up to a supercomputer.

(they chuckle again)

But at least VR offers us a viable way for mass distribution and immersion once the technology becomes mainstream.

He takes another sip of water before resuming his spiel.

HECTOR

But Hector! This is great and all, but how does this relate to what you were saying earlier about changing people's minds? Just get to the part where we change the world already!

(laughter)

I promise this will all come full circle, just hang tight. Because it is a good question - our ability to MAP the mind doesn't necessarily correspond to our ability to CHANGE it. And it was never our goal to chemically or surgically alter the brain. We just wanted to understand it and visualize it.

HECTOR (cont.)

But we also had a hunch: we suspected that giving people a visual depiction of their mind could go a long way to helping them change it. We saw the Mind-Scape as a revolutionary tool - it wouldn't guarantee that people WOULD change their minds, but it could certainly facilitate the process.

So we tested it out. We conducted a pilot program with two hundred randomly selected participants. We took their initial brain scans, had them fill out a questionnaire, did a preliminary interview, all the usual steps just to establish a baseline. A month later, we invited them back, introduced each of them to their own personal Mind-Scapes, and then monitored their responses over the next six months. Each participant had three one-hour sessions a week. What we found will shock you! You won't believe what they look like now!

(the audience laughs)

Actually the results aren't THAT shocking, but they're still impressive. For instance, we found that 100% of participants - yes, 100% - LOVED the Mind-Scape. Not liked it, not felt indifferent about it - LOVED it. Every one of them enjoyed navigating their Mind-Scapes. As if that weren't a glowing enough recommendation, 100% of them said that this technology gave them a positive feeling about the future. And after using it, they had a more optimistic outlook for humanity than when they started.

We also found that, on average, they only required one hour of assistance to understand how to navigate the Mind-Scape. After that, they were able to explore on their own without any guidance from our team. Which confirmed our theory that the model is intuitive to use. 93% said that the model was 'very' user-friendly, as opposed to 7% who said it was only 'somewhat' user-friendly. But those 7% explained that their problem was with the graphics, not the user interface. The actual layout of the house made sense to them. They just wanted it to be higher resolution. People are so demanding sometimes!

The audience laughs along with him. He paces a bit and lets the noise settle down.

HECTOR

I'm just joshing. Our participants were great, couldn't ask for a better group. It certainly makes it easier when the people in your study actually want to be there, I'm sure the grad students can relate.

(murmurs of agreement)

But in that vein... Another key finding was that every single person requested MORE time to explore their Mind-Scape, in ADDITION to the three hours a week that we had allotted them. Which makes sense - ask yourself, if you had a model of your mind, wouldn't YOU want to spend as much time as you could in it?

That was actually one of the hardest parts. Having to tell them that we didn't have enough computing power to let them use it more often. Like, no joke, some of them were in tears when their one hour was up. It was rough.

Hector looks genuinely pained about this. At first the audience laughs nervously, but then Hector stops and turns to the side. They go silent. It's obvious that Hector's struggling to keep his emotions inside.

HECTOR

We - sorry, I don't -

(he turns away again)

Shoot, I told myself this wasn't going to happen. But we, mm... I'm sorry... the last week of the experiment was... it was like we were robbing them. You could see it in their eyes that they knew, they might never have this opportunity again. There was one gentleman who-

(his voice cracks)

Before the study - he said that he had given up hope that the world would get better, and he was planning... he was planning to kill himself.

The audience gasps. Hector bites his lip, his voice quivering as he fights back tears.

HECTOR

And then he does the study, he doesn't even know why he signed up, and... he finally felt like life made sense. And then six months later, we had to take it away from him..

He stops, wipes his tears, and waits a few seconds while the audience processes the story.

HECTOR

(regaining his composure)

I almost - I hate to say this, I almost wish we had waited to do the initial trials, because now people have to wait for the technology to catch up with it... they know it's out there now, but it's just not available yet...

(pauses, takes a deep breath)

Anyways... All of the participants fell in love with the program. We didn't have to force them into it, or trick them into it, or argue with them about it. We didn't have to sell them on the idea to explore their minds - they were happy to do it on their own, and I wish we could give them - not just them, I wish we could give EVERYONE that chance. Gah, it can't happen soon enough!

He shakes his head wistfully. The audience is entranced. After a few seconds, he presses on with renewed energy.

HECTOR

So what were some other measurable effects? Apart from what we already knew, which is that this technology is AWESOME!

(the audience laughs, which helps diffuse some of the lingering emotional tension)

I really want to just leave it there. We can map your brain, and you can explore it. Done. World equals changed.

(more laughter)

How many more slides are there?

(he starts clicking through the slides)

Good lord, who put this together?

(he gets to the last slide, which has his name on it)

Oh, welp...

The audience laughs even harder. He turns off the slideshow, casually tosses the clicker offstage, and winces comically when it makes a loud clattering noise.

HECTOR

And... I'm never getting invited back here.

(laughter continues, then dies down)

Alright. Where was I... yes, so some other effects of using the Mind-Scape. One was the mental health benefits. We noted that the vast majority of participants were less depressed, less anxious, and less irritable after the trial.

Now, some of this was just a psychological high. About half of them didn't have any noticeable structural or chemical differences before and after, even though they reported feeling better. But the other half DID have a biological change: their serotonin and dopamine levels were more balanced and within a healthier range than when they started. So there are measurable, biological benefits to using the Mind-Scape.

Another finding - we kinda touched on it, and it doesn't sound very scientific, but *I* love it. Zero percent of participants got bored.

(laughter)

You laugh - each person spent about 80 hours in their Mind-Scape. 80 hours isn't small change. But not ONE of them ever said 'I want this to be over soon' or 'heeeeere we go again'. They never ran out of things to do in the Mind-Scape.

And why would they? It's the brain. There's a lot to explore, right? I just think it's awesome because you think about other pastimes and how long they can keep you entertained. Like a movie, which takes you two hours to watch. Or maybe reading a book, that could be five to ten hours, twenty or thirty if you re-read it. Video games are better, some of those keep you busy for a hundred hours or more. But exploring your brain? That's basically infinite. You will never run out of things to find in your Mind-Scape. You could spend a lifetime inside it and not get bored.

HECTOR (cont.)

Plus, you don't feel guilty about it. None of the participants had ANY sense of guilt about their time in the Mind-Scape. None of them had any thoughts like 'I shouldn't be spending so much time in here', or 'I could be doing something better right now'. One hundred percent of them said that they found their time to be purposeful, constructive, and well-spent.

And just for kicks - before we even told them about the Mind-Scape, we asked them how they felt about other activities, and how 'healthy' they would rank them. Only 54% said that video games were a good use of their time.

(the audience laughs, there are some spirited cheers)

So it sounds we have some moms in the crowd.

(laughter)

Which, I'll admit, is better than the 30% who said that constantly being on social media was a good use of time.

(more laughter)

Shocking. And browsing the internet for more than an hour at a time, or refreshing your news feed every five minutes: those activities were about equal at 20% who said they were healthy. Again, not at all surprising.

Now think about that. Video games, the internet, social media, having up-to-date news at your fingertips all the time... these were all major technological breakthroughs of the last century, and they certainly have their benefits. But overwhelmingly, we can agree that we should enjoy them in moderation.

With the Mind-Scape, moderation isn't needed. Just the opposite: the more time you spend in there, the more you learn. Even if you became a recluse and spent every waking minute in your Mind-Scape, you would literally be the most self-aware person on the planet. If you spent all your time playing video games, you would be... really good at playing video games.

They laugh, he chuckles, waits for them to die down.

HECTOR

I guess I shouldn't give video games or the internet a bad rap. My point is that there's just something more beautiful about sorting through nearly-forgotten memories instead of shooting zombies with a machine gun. Something more cathartic about perusing the library of your psyche than arguing on Twitter.

And this brings me to my last point. Remember how I said that we can only change the world if we change ourselves, and we only change ourselves if we WANT to? Let me tell you about one of our participants. We'll call him Hector. He's a very handsome, intelligent guy. Great public speaker, so I'm told.

(they laugh)

So this Hector, for most of his life, he didn't have a very good opinion of people. He had never cared for human company, he never thought highly of others, he didn't think humanity was worth... anything, really. You could show him videos of people suffering, it wouldn't bother him, he was completely indifferent. You show him a video of people having fun, or one of those 'this will give you hope for the future' type of videos... nothing, no reaction. He just didn't care about other people.

Hector takes a seat at the edge of the stage, leaning in to the audience as they hang on his every word.

HECTOR

Obviously, this wasn't a problem to Hector. Everybody else was the problem, not him. People were dumb, petty, shallow, clueless, selfish, uninteresting, and pointless. The best he could do was just ignore them and try to avoid them if he could help it. So he didn't have any friends, didn't talk to his family. Bounced around between jobs every few months, usually got fired for being rude or hard to get along with. And as you can imagine, he had zero interest in counseling.

HECTOR (cont.)

But no matter what anybody told him, nothing made him think this was a problem. And this went on for several years, even when he joined the Neural Mapping Institute. At least at the Institute, they let him work on his own - so even though he hated his co-workers, he barely saw them. He just did his work, went home, kept up the same routine and avoided people as much as possible.

Then they gave him his own Mind-Scape. Everybody at work got to try it. Apparently this was some big breakthrough, although Hector found it amusing just how easily excitable humans were about the most trivial things. So dumb of them to think that a 'breakthrough' could actually make an impact in the world.

Even so, he tried it out, figured he didn't have anything better to do. Plus, his boss let him spend the entire day inside it, said that it was 'quality research' or something dumb like that. That was fine with Hector. He was happy to spend nine, ten hours a day inside his mind. This was what he'd always wanted, the freedom to be alone with his thoughts, away from other people.

But it wasn't just the escape. He loved the privacy, the independence, the fact that nobody but him could possibly appreciate what was going on inside his head. Most importantly though, the Mind-Scape reinforced just how superior he was to other people. He knew that THEIR Mind-Scapes would be boring and basic, just like THEY were. Not like HIS Mind-Scape. No, his was complex, layered, brilliant. He was better than them, after all, and his Mind-Scape was proof of that.

So he started to dissect it. He would trace one thread at a time through every memory and avatar it intersected with. He studied the rooms, read the books, relived the memories, delved into his subconscious. He couldn't rest knowing that he had SO MUCH to explore, things that only HE would understand and that only HE could unravel.

HECTOR (cont.)

And eventually, he got to the root of his distrust and disdain for humanity. He unravelled the web of painful experiences, predispositions, and broken relationships that had made him so numb to others. And he was proud that he had figured it out. It was HIS accomplishment - not something he was told, not something a therapist helped him 'work through'. HE had done the heavy lifting and HE had connected all the dots, not anyone else.

So, he finally emerged from his Mind-Scape, told his co-workers how proud he was of what he had learned, and decided to apologize. Granted, he was insistent that he was never wrong in the first place. Just misinformed and unenlightened. And still superior to them. Obviously.

(they chuckle)

But at least now he was willing to work with other people and behave like a decent person. And although his motivation was to show off just how much he'd learned about himself, it was a step in the right direction. He even helped lead a study where other people got to try the Mind-Scape, which he was very passionate about. He quickly became their most vocal advocate, in case you couldn't tell.

(they chuckle again)

And over time, his superiority complex and refusal to admit he was wrong - those gave way to humility, empathy, patience, respect... he even made a few friends. And the rest is history.

(he stands up)

So, can this change the world? Well, I can't speak for the world, but it certainly changed ME, and that's saying something. And besides, I think we're long overdue for something this awesome. After what we've been through the last few years, I'd say we deserve it. Thank you.

He smiles and bows. They give him a standing ovation.

FADE OUT.