

Essay

Technology of Behavior and Success Models: The 10th Man View of National Security

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"The real question is not whether machines think but whether men do. The mystery which surrounds a thinking machine already surrounds a thinking man." - B. F. Skinner, Contingencies of Reinforcement: A Theoretical Analysis (1969).

"Almost all major problems involve human behavior, and they cannot be solved by physical and biological technology alone. What is needed is a technology of human behavior." - B.F. Skinner, Beyond Freedom and Dignity (1971).

October 2022 was an interesting month. It started with Meta (the parent company of Instagram and Facebook) securing a mention in the "Terrorists and Extremists groups' list issued by Rosfinmonitoring (the Russian financial monitoring agency) and ended with Twitter's freeing the 'Bird'. In the middle of some highly tense strategic debates, these developments came as a fresh reminder about the typical western approach that lectures humanity at breakfast, facilitates crisis at lunch, and sells justice/equality/freedom at the dinner table! It is important here to note that the bird which twitter's new boss is claiming to set free (with his 'the bird is freed' tweet) is not an ordinary bird!¹ It's a bird that a whole generation of western behaviorists worked hard to cage inside their experiment box and invested heavily in its conditioning/behavior modification methods, and this bird has now reached a point where like a typical addict (of casino, and gambling sports), it is ready to pay the price for her own manipulation.

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There is something about the nature of digital tech products which attracts behaviorist thinking. There is also a background behind the character of current tech products, which is influenced by a scientific movement called Behaviorism that surfaced nearly in parallel to the tech developments of the previous century. But the question is: if such an influential movement existed, why have we never heard about it in the popular discussions? In some societies there is a tendency to express disagreement with certain things in public while embracing them in private. The movement which shaped the core ideas of current tech improvisations is one such uncomfortable incident in the recent past that largely remained ignored and sidelined from the mainstream of conversations on the state of digital technology. It was a movement that was dominated by not some superficial entities, i.e., tech geeks, college dropouts, or garage entrepreneurs, but some real-world western behaviorists like B. F. Skinner, who once argued that: "If the world is to save any part of its resources for the future, it must reduce not only consumption but the number of consumers!" And its impact was not limited to tech alone! Careful observation reveals that such behaviorists and their strategies/methodical systems have greatly influenced Western culture -- from their educational designs, social theories, political moves, and economic exchanges to broader engagements with the rest of the world. And those strategies sometimes worked too!

This essay attempts to discover such infamous architects of the technology industry and their infamous experiments related to human behavior and psychology, which form the core of the platforms where over 800 million smartphone users of India are now engaged, day/night.

If these improvisations had been restricted to technology, education, or entertainment alone, we could have afforded to ignore them. But according to some recent trends, India, one of the most online countries of the world, is now marching on a path to becoming a top performer in the tech-driven 'Creator Economy' too, where from a 3-year-old baby to an 80-year-old grandma, everyone has something to show and to earn for! The need, therefore, is to have an overview of these emerging patterns, and their implications on influencing the character of our society, economy, religion, and political life, from a National Security perspective.

History tells us that creating, nurturing, promoting, and sustaining 'Success Models' is a serious business of powerful countries of the world! It's a business with which

every post-colonial society, including Bharat (India), is quite familiar, as a large part of their modern history is nothing but a tale of fighting the 'Acceptance' of those Success Models in the minds of their people! Now, this Business has a partnership with digital technology, and technology, as we know, often brings in 'Ease of Doing Business!'

Technology dominance is a misleading term! Some of the most impactful innovations of our time are not 'technological,' they are 'psychological,' crafted by psychologists/behaviorists of Silicon Valley labs! Ideas, after experimenting successfully on rats and pigeons, are offered to the social media animals (a bit higher class of species), to confirm their validity/effectiveness. Then our responses are monitored/recorded in real-time so that improvements/enhancements can be made for better 'conditioning' in the future! It's an endless loop of behavior modification, and there is no way to turn it off! If these examples sound unusual and uncomfortable, then we need to look at what one of the most radical behaviorists of the 20th century, B.F. Skinner was doing with his 'Skinner Box' in the middle of World War II.

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'Skinner Box' and the Idea of 'Conditioning'

One fine day, the American psychologist received funding from the U.S. Military to implement his 'crackpot idea' (as he referred to it) to set up the Project Pigeon, a proposal to use living organisms (pigeons in this case) to guide missiles. Two of his programmes, a research programme during World War II called "Project Pigeon" and a peacetime continuation of that programme called "ORCON" (short form for Organic Control), obtained sponsorship from U.S. Naval Research Laboratory. While working on the project, he realised the power of 'behavior shaping' methods, which in simple words means rewarding an animal for a desired behavior/response and punishing him for doing the opposite.

Shortly, Project Pigeon got suspended, but the idea was captured and implemented in developing the electronic guided systems! Encouraged by the response to his crazy ideas, Skinner continued his experiments to test his 'ideas of behavior shaping' on rats, pigeons, and other testable animals and developed a doctrine called 'Technology of Behavior,' which is also known as a technology of behavior modification.

In Skinner Box, a soundproof enclosure with a food dispenser that a rat can operate by pressing a lever or a pigeon by pecking a key, Skinner used to experiment with the animal's behavior through 'contingencies of reinforcement', or circumstances under which desired behavior is rewarded to ensure it will be repeated.

The behavior he demanded from those pigeons/rats was weird and unnatural for them, such as he used to make them walk by making figure eight, by rewarding them with food at some moments. And the process, as explained by Skinner, goes like this: "I watch a hungry pigeon carefully. When he makes a slight clockwise turn he's instantly rewarded for it. After he eats, he immediately tries it again. Then I wait for more of a turn and reinforce again. Within two or three minutes, I can get any pigeon to make a full circle." Through this process, what he called operant 'conditioning' or technology of 'behavior,' he taught pigeons to dance and to play Ping Pong too. And one of his partners in those experiments got so excited that he left his full-time psychology career and started a commercial behavior business for animals!

One of the key discoveries from those experiments, in Skinner's view, was the 'schedule of reinforcements/rewards,' and based on that, he devised different ways of delivering rewards, as per the response rate of animals(pigeons/rats). He insisted that "a procedure in which behavior is reinforced or rewarded after scheduled but unpredictable time durations yields the most stable rate of response". It meant that if an animal knows he will get some rewards for his particular behavior, but the timing for that is not fixed, it is unpredictable, then he can be tempted to do more, as long as the person who controls the box and lever of rewards wants! This is how all gambling/casino systems work and they are highly addictive too.

If it can work for rats or pigeons, then why can't it work on humans too? With this fantasy in his mind, he invented several other devices, such as a cumulative recorder, an air crib for training infants, a teaching machine to automate programmed learning, and a verbal summator, etc. It is said that he went to the extent of performing those experiments on his kids! Skinner aspired to build such a Skinner box for the whole of humanity, where people's behavior can be shaped and controlled by a few and chosen people of the world! But who are those few people in his views? It's a question that he never bothered to answer! Later, Skinner wrote a sci-fi novel called "Walden Two" (1948) where he visualised a perfectly socially engineered society, working as per his principles of operant conditioning!

"I've had only one idea in my life...to put it as bluntly as possible - it is the idea of having my own way, the control of human behavior...I remember the rage I used to feel when a prediction went awry. I could have shouted at the subjects of my experiments, Behave, damn you! Behave as you ought!" - B.F. Skinner, Walden Two, (the dialogue is from a character in the novel, who is also an alter ego of the author).

It is interesting that this radical behaviorist who denied the idea of 'free will' and independent thinking (he used to call them illusions), propagated the thesis of 'conditioning' human actions like those of rats and pigeons, and formulated devices of social engineering, is the Man behind the 'User Experience' of the world's first computer network and the first social media platform (PLATO system) too! As Skinner mentioned in his paper 'Pigeons in a Pelican,': "One virtue in crackpot ideas is that they breed rapidly and their progeny show extraordinary mutations."

It is a western hypocrisy that B.F. Skinner has emerged as one of the most ridiculed as well as the most acclaimed behaviorists of his time! It seems that his ideas were criticised in public but implemented in private, particularly in all the Tech innovations of the post-war phase! To see whether Skinner was successful in his experiments or not, one needs to simply look around, Skinner box is already in action! How dopamine-driven social platforms work and how they exploit the vulnerability of human behavioral aspects is now an open fact! But that does not stop people from indulging in them! After all, a pigeon inside the Skinner box has no 'liberty' to choose, other than constantly pecking, either for reward or to avoid punishment! Look at the state of User Experience today, terms like 'User Friendly,' 'Customer Focused,' or YES/NO buttons are obsolete ideas in the world of auto-play, auto-correct, auto-post, auto-feed, auto-update, and auto 'Everything,' people are denied even fraction of seconds to decide what they want to see/hear or read, it's like feeding whatever the box owner wants!

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'Success Models' - A Serious Business

"War belongs not to the province of Arts and Sciences...it would be better instead of comparing it with any Art, to liken it to business competition, which is also a conflict of human interests and activities." - Carl von Clausewitz

Developing, promoting, and nurturing 'Success Models' is a serious business for the powerful nations of the world! Think about this, what would be the response of those rats/pigeons that were not inside the 'box' but were watching their community members earning some easy 'rewards' (food in that case) only by displaying a particular kind of behavior, repeatedly! For them, the whole process occurs as nothing but a Success Model, a path to sure Success!

The business model of these 'psychological' cum tech innovations is based on three key things: Rewards -- like/share/re-tweets/followers/impressions/branding and other symbolic items with some real monetary benefits as well; Punishments -- shadow ban, complete ban, downgrading, false ratings, suspension, follower reduction, de-branding, etc.; and Feedback -- monitoring response/movements in real-time and customising the settings accordingly, or everything

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which tech corporations sum up in one word 'Engagement.' These are the similar kind of components which Skinner's Technology of Behavior was weaved around! What Skinner wanted throughout his life was a way to test his 'Crackpot' ideas on a massive population-set and to shape those ideas into a template/model that countries across the world would emulate to create a perfectly 'shaped' world. He was often found saying in his interviews that "It would set a pattern. It would be copied by others if we remain successful." Within a few years of his research, Skinner's box was launched in a new avatar - the 'World Wide Web,' and the rest is history!

Today, India is the most online country in the world. An average Indian spends 6.36 hours a day online, which is close to a full day work shift! Now the question that we need to ask is how long can we afford to watch our people and societies being 'conditioned' by some devoted disciples of Skinner, sitting in Silicon Valley, Harvard, or at the campus of the American Psychological Association? It is important here to note that all these experiments were going on parallel to the efforts of developing the "Information Warfare" doctrine by the US Military establishment, and their main theme was to 'Target' and 'Attack' the Will of the enemy or enemy nation. If in Skinner's argument, 'Free-Will' is nothing but an illusion, then what was the US military planning to attack? And why do they invest so heavily in subverting/conquering something which does not exist?

To explore the idea of Success Models, let's take an example from our colonial past!

Colonial Past - Whom did We Fight?

Today, Bharat (India) is on a mission to free itself from all the symbols of the colonial past! The historic images of Netaji's Statue getting its deserved place at the India Gate fills the hearts of all Bhartiya with immense pride and honour! But this is a moment to take a pause and introspect too. Through different creative improvisations, we are often reminded that we fought with the British for our freedom and dignity. But those visuals sometimes haunt us! A mighty and ancient civilization like Bharat (and an economic superpower for most of its history) fought with a bunch of British invaders for nearly 200 years. This is not an easy-to-grasp fact! So the question comes, with whom did we fight? There are many dimensions to view our 'Freedom Struggle' against the British and all of them have their relevance in different contexts. But what makes us wonder is how after the first war of Independence in 1857, which started with a straight mission and slogan 'Maro Firanghee ko (beat the foreigner),' our fight for Independence stretched for another 90 years? Why did it take us so long to reclaim our freedom and dignity back?

In hindsight, it is evident that we fought not with the British but with their Success Models! Some economic/political Success Models were created, nurtured and promoted by the British in our land, that initially appealed to our people, and they started participating in them for different interests, a majority of which were not economic alone but behavioral/psychological as well. Through some rewards, some gains, and some benefits, our people were 'conditioned' to the extent that living under the instructions of foreign masters became preferable, rewarding and convenient to them than living under old-style local rulers! The loyalty to the British was more rewarding than fighting for the motherland!

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But as history tell us those Success Models cost us heavily and by the time the people woke up to their realities and recognised that they were participating in a system designed by outsiders who were here for only plunder and loot, they had lost not just their dignity, freedom, and sovereignty but countless precious lives of those who challenged the Success Models of the British- the warriors, the great sons of Mother

India! In the words of Veer Savarkar:

“Oh Martyrs...say that the only cause of the defeat of Hindusthan was Hindusthan herself, that shaking away the slumber of centuries, the mother rose to hit the foe, but while her right hand was striking the Feringhee dead, her left hand struck, alas, not the enemy, but her forehead! So she staggered and fell back into the inevitable swoon of 50 years.” (‘Letters from Andaman,’ Veer Savarkar, while recalling the martyrs of 1857- the First War of Independence).

An interesting thing about Success Models is that those who pursue them live in an illusion of ‘control’ and think that whatever they are getting is due to the pain and hard work they are putting into it. Why? Because their schedule of ‘rewards’ is not fixed! It’s not that they are sure to be rewarded for each and every action, sometimes they get nothing and sometimes a lot. This unpredictable nature of rewards make them more devoted pigeons, who try hard and think maybe I have not pecked enough. For them there are some motivational quotes available in the market too, such as “No Pain, No Gain.” This is the idea of Variable Ratio Reinforcement theory, which in Skinner’s view yields maximum response rate and maximum sustainability!

We have experienced many such Success Models in the past, and today with Technology, producing these Success Models in any part of the world is only a matter of a few clicks!

Creator Economy - Early Signs

Over the last few weeks, some headlines have been flashing in the mainstream media about the Tulsi Village of Chhattisgarh. The village is now called a YouTubers’ hub, YouTuber Hot Spot, and Content Capital of India, as 1 in every 3 residents of village is now a YouTuber, a member of Creator Economy. There are over a thousand YouTubers in the village with a population of approximately 3,000. These days all national media outlets are filled with the Success Stories of this village. There are stories from an 85-year-old grandmother to a 15-year-old boy, from people leaving government jobs and farming type routine professions to earn name, fame, and celebrity status. And the village is now being promoted as a Model Village for the country! Some outlets have mentioned that every kid born in this village and its surrounding, now aims to be only a YouTuber in life. After all, those who used to earn 10-15 thousand in a month, are today earning 35-40 thousand, and as the number of their subscribers/followers is

ramping up, there is no limit to their Success!

The whole scheme of the creator economy looks like nothing less than a dream for the residents of this small village of Bharat, at least in numbers and narration. This is a classic case of a 'Success Model' in making! Creator Economy has already started setting its footholds in our small towns and villages, the Tier II/Tier III towns and villages are their main target! One can say that this is a unique model of '*Aatma Nirbharta*' (self-reliance), which is developed by, nurtured by, and promoted by foreign platforms! Now the question comes how would we convince a kid growing up in these villages, to perform the real work in life, when everyone around him/her is earning not just 100 times more money but name/fame and celebrity status too? Especially, when all it takes is a Smartphone and some 'fakeness' before the camera!

We cannot ignore the fact that it is our Small Towns and Villages which produce our farmers, our soldiers, our craftsmen and our industrial clusters. Giving the foreign tech platforms' Creator Economy a free runway here is like leasing out the potential of Bharat! And if these viral trends of today become 'Success Models' of tomorrow, it will probably take another War of Independence in future to bring our people back on track! Addiction is a neurological process, which can shatter the life of individuals, societies and nations and it is generally irreversible! Drug Addiction in some of our border states like Punjab is one of our key national security issues, and we have seen rural Punjab falling in the grip of this menace before our eyes! Now these platforms of virtual dopamine are another man-made calamity in making, gradually spreading in the villages and small towns under the shadow of 'Creator Economy.'

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Our inability to not see these trends can be called nothing but our intentional or unintentional 'Vision Blindness.' And it's a matter of National Security concern!

'Pit bull' Controversy

Some time ago, the news about a gym trainer's 80-plus-year-old mother getting killed by their American pit bull dog surfaced in the media. The way hundreds of dog/cat lovers across social media platforms rallied in support of the killer dog, displayed unusual empathy with the owner for his love for the dog despite losing his mother, and

the way the entire focus of discussions shifted toward pit-bull's emotions, makes one wonder what has caused our society to become so insensitive, inhuman and immoral! From day one, the young man was pretending to be more 'unusually' caring and loving toward his killer pet, and his whole focus was on showing himself 'cool' and saving his and his American pit-bull's brand image. After all, he was in the centre of a viral trend, how can he pretend to be a normal human!

This is the reality of this token economy, where being viral is more important than living as a normal human. Jaron Lanier, author of *Ten Arguments for Deleting your Social Media Account Right Now* and creator of Virtual Reality, writes: "With nothing else to seek but attention, ordinary people tend to become assholes, because the biggest assholes get the most attention. This inherent bias toward asshole-dom flavors the action of all the other parts of the BUMMER (Behaviors of Users Modified and Made into Empires for Rent) machine."

If we take the above case as a symbolic reference, then the young man represents our Gen Z and emerging Creators' community, his pit bull represents American tech platforms, and the old mother can be seen as a symbol of our National Interests. With whom do you think our youngsters will stand in the future? As Skinner writes: "The mob rushes in where individuals fear to tread." (*Walden Two*).

There are many such early warning signs related to Creator Economy that exists. In a nutshell, Creator Economy is now turning into the most upgraded engine for producing new/improved Success Models! Bit by bit, Success Models that it produces are tapping our society, politics, economy, religion, spirituality, cultural and civilizational symbols, and every single aspect of our National Identity is being covered! Observing these early warning signs/symptoms with a System thinking mindset is beyond the capacity of traditional strategic security frameworks! A fresh approach is needed. And perhaps, this time, we will have to borrow the 10th Man View in our National Security-related issues!

The 10th Man View of the National Security

"If nine of us who get the same information arrived at the same conclusion, it's the duty of the tenth man to disagree. No matter how improbable it may seem. The tenth man has to start thinking about the assumption that the other nine are wrong."

This popular dialogue from the movie 'World War Z' is basically about an alternative method of intelligence estimates (also called critical method) developed by the team that was formed to analyse the intelligence failure of the Yom Kippur War (1973). The logic behind this approach, pioneered by political philosopher Karl Popper, was based on the idea of *refutation* not verification or the human tendency to generalise from their experience. It says that: "from all the hypotheses that can explain what is happening, one must choose not necessarily the one that is better supported by information, but the one that has no information that refutes it," as shared by Major Gen. (Res.) Professor Isaac Ben-Israel (a member of that team) in his paper 'Philosophy and Methodology of Intelligence.' It is important here to note that Israel is an example of the western bloc's partnership. It's a nation whose dependence on the western world is crucial for its existence in a hostile region and among the most complex neighbours in the world! But despite that, when it comes to its National Security, it works on two key doctrines: the 10th Man View and Rise and Kill First principles. No strategic calculations can stop Israel from not pursuing that. So this idea that bearing the burden of US Partnership is more important than pursuing India's National Security priorities belongs to an obsolete outlook. It's a moral hurdle that needs to be discarded!

Some of the early signs of the creator economy that we discussed above are also based on this 10th Man View! At a time when everyone around is becoming an active participant in the Creator Economy and its Success Models, it is the job of the 10th Man to suspect and reject them!

Invisible Success Models - A Case of Bharat

A unique case about Bharat (India) is that most of its people are patriotic and possess a great love for the nation. This is reflected during all major events/calamities, local or global, and it is this core element of its nationhood that enables it to always bounce back stronger! The question is if there are numerous visible Success Models of outside forces around us, then what happens to those who reject them? Those who have faith in everything that belongs to their motherland -- what references exist for them? How are they motivated to follow a path of no rewards and no return? It is generally a blank space for them, which can be filled as per his/her motivation! So, where does this motivation really come from? Why is that blank space more special than any reward/recognition? And why no Skinnerian Model works for them? The one-line answer can be it cannot be defined, those who pursue it know it!

But if we have to put it in words, then we can recall a small story which the current National Security Advisor (NSA) Ajit Doval once shared in a talk. He said that once there was a grand Banyan tree (Vat Vriksha) in a forest. As the time passed, it got encircled by many weeds and small trees here and there. Over time the small trees and weeds expanded to an extent that they overshadowed the Banyan Tree itself, and soon the entire existence of the Tree became blurred, almost invisible. Some people started saying that the area was covered by only small trees and weeds, the Banyan tree never existed there! But the truth is that the Banyan tree was always there. It stood there for ages, and would stand forever! Few small trees and weeds could never uproot the Tree from its roots, what they could only do was to reduce its existence for some time!

That Banyan Tree, the Vat Vriksha, represents the Invisible Success Model of Bharat, which was planted and nurtured by the visionary ancestors. To see the Invisible Success Models, the need is to cut the weeds that surround it, with the sharpness of self-consciousness and wisdom! The Banyan Tree also represents India's national cultural civilization identity, the roots of which have gone so deep down the earth that even Indians have no idea how deep they are! They need to clean the weeds and small trees all around so that the Tree shines in full glory in front of the young generation, and ensure that it is from this Tree that the youth derives its inspiration to put Bharat back on the throne of the Superpower, not from the Artificial Success Models of outside forces!

When such a day comes, when Bharat starts identifying, acknowledging and working on its own Success Models, when it begins to address its own problems, challenges, and even its enemies, that will be called the first *Shankh Naad* (the Call of the Conch signifying the call for a just war, a grand reform, a call for victory) of a powerful country!

Conclusion

"In such things as War, the errors which proceed from the spirit of benevolence are the worst!" -Carl von Clausewitz

Whenever the issue of tech-related challenges comes, the most dominating thought in our security establishment is that we must be aware and educate the people! This idea that aware and enlightened people can fight their own battles is often the first reaction in everyone's mind. Sadly, the whole process of figuring out solutions ends

with this conclusion. We cannot forget that there was a time when a similar Educate and Awareness campaign model was presented for confronting the Terrorism-related challenges in Jammu and Kashmir too! A whole lobby in Lutyen's Delhi developed, nurtured, and promoted those false promises and those fancy solutions, and various governments, unfortunately, gave enough space to those recommendations in their policies (when 'Pyara Gulshan Apna' kind of songs were used to be frequently aired in *Doordarshan* in the mid-90s). Those models cost the country dearly!

It was only after 2014, when the outlook and methods of dealing with National Security challenges changed, when the government adopted an action-oriented mindset, implemented needed policies/reforms in that direction, and most importantly, when the right leadership intent was displayed, then only the situation started improving and today we can say that we are on the path of peace, prosperity, and security in the region!

Something similar is the case with Education and Awareness solutions to tech-related challenges! An educated and aware public can do nothing that can stop the Tsunami of improvisations coming from an engine, which is based not on some technical skills/competencies but on the craft of psychologists and behavioral experts! In one line, expecting common people to fight their own battle in this domain is an unfair demand!

On a global level, Bharat, which is ready to lead in all major problem areas-- from climate change to terror, to food and fuel/energy security, strangely always prefers to present itself as a mute follower on matters related to technology! A country that believes in the mantra: 'Let noble thoughts come to us from all sides' since the Rig Veda times, surprisingly turns deaf/dumb on Technology related challenges! The reason for this can be anything but not our inability or lack of intellect. There are many such discussions about the trajectory of technological/psychological innovations of our time that are going on all over the world, and a majority of these debates are going on at the Headquarters of these very technologies, their home countries themselves! Today, there is a whole lobby of Silicon Valley Hippies (the founding members, ex-executives of Big Tech corporations, scientists, and inventors) that is campaigning to find a global solution to the menace that their products have created, and are in search of a human-centric perspective, which rests with Bharat!

The world is looking at Bharat to provide a perspective and a template to follow and this is the right time to introduce its Human Intelligence improvisations as the Success models to the world!

Reference

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