

What is Break It Thinking?

Break It Thinking™ is the ability to consistently break existing perceptual and cognitive thinking patterns. Our patterns become more rigid and fixed over time if we do not stretch and exercise them - keeping them limber and strong. Essentially, we develop perceptual and cognitive resistors. When we '*Break It,*' we enable ourselves to think about and perceive things in new ways; apply new frames; look at challenges, problems and opportunities from opposite perspectives; experiment frequently; put together new combinations; and free up our natural capacity to produce truly novel and imaginative thinking.

What are Cognitive & Perceptual Resistors?



Cognitive & Perceptual

Resistors have their roots in learning and habit. We become comfortable and accustomed to collecting, perceiving, framing, evaluating and understanding data, problems, ideas and issues in familiar, predictable and expected ways. Consequently, **very little variance** gets in. This craving of predictability unwittingly places mental blocks in our way that prevent our seeing or exploring new combinations, patterns, meanings, ideas, relationships, uses or applications.

In my workshops I often conduct a *Cows Drink Milk* exercise by pointing to the flipchart paper and asking the participants 'What color is this?' They invariably respond '*white.*' I then ask them to increase their volume, with each response of '*white*' becoming louder and louder. Then I ask, 'What do cows drink?' And they usually respond, '*milk.*' I then ask them to increase their volume – and they shout out, '*milk.*' I pause for a few seconds and calmly ask, 'What do cows drink?' Most (not all) people then answer, '*water.*' This exercise illustrates a classical perceptual conditioning where the words white, cows and milk go

together automatically. The perception is fixed until we stop and challenge our thinking. Often, our thinking is on autopilot.

It's Comfortable to Perceive and Think About Things in Familiar Ways

Psychologists have defined the rigidity of perceiving and thinking about things in familiar ways as *cognitive fixedness, functional fixedness, or perceptual fixedness*. Why is it difficult to break habits, think about and perceive things in a new light? The following four points shed some light on this cool, calculating, deceitful creativity ***Resistor***.

First, our minds learn and are programmed to repeat success patterns and are not programmed to proactively look for new patterns. It is at the core of evolution and biological reproduction. As it relates to our perceptual blocking of innovative ideas or taking action on them, we perceive that existing ideas and concepts are good because *we are familiar with them*. So, the trap we set for ourselves is that most new ideas and concepts are generally wrong because *they break from our success patterns* – what we are familiar and comfortable with - the way we know how to do it – the way we know it will work.

Second, consciously breaking from the past and our current way of doing things is contrary to being efficient and getting our work done. It is more efficient and productive to repeat the success patterns and methods that we know. It takes conscious effort and time to break the current success pattern connection – and then to develop a new success pattern connection. It is inefficient!

Third, organizing for creative work is the inverse of organizing for everyday work. With everyday work we want to eliminate variance and repeat tasks the same way every time. We want zero variance- a zero failure rate. We want our surgeon and pilots to perform their tasks the way they know how, every time, no exceptions! Conversely, organizing for creative work is juxtaposed; variance is the lifeblood of creative work. We need to foster and accelerate variance by exposing ourselves to diverse stimulus...light the match...break from habit...perceive things differently...make many new connections. A high rate of experimentation is necessary. Thomas Edison conducted over 5,000 experiments before he was successful in making the filament of an incandescent light bulb that lasted long enough and was affordable to be commercially viable. A failure rate like this is highly problematic (you think?) in everyday work.

Fourth, perceptual fixedness is rooted in our inclination to leap to conclusions and make quick decisions without first seeing and evaluating other potential options and alternatives. This tendency to take quick action prevents us from stepping back, taking in the panoramic view and getting a more robust picture of what is occurring. If we diagnose a problem based on symptoms that seem quite familiar or continue to always use the same techniques that have worked in the past - and we do not challenge that tendency, we may very well *treat the wrong problem, or not recognize that another technique may be far more effective*. Many an auto-mechanic, teacher and physician unfortunately fall prey to these tendencies.

The Importance of Analogical Thinking

It is hard to overstate the importance of analogical thinking. The ideas required to solve our challenges are not always directly in front of us, at times we have to look analogically to find them. This requires going on *excursions*, taking ideas from one context and applying/force connecting the idea to a different context - producing a new idea. T.S. Elliot said that good writers borrow ideas, great writers steal them. Following are a few examples:

- Bill Klann of the Ford Motor Company got the idea on how to speed up production of the Model T from visiting the Swift Company's slaughterhouse in Chicago. He *borrowed* the idea of butchers performing a specific task cutting up carcasses as they moved along overhead trolleys – and used it to visualize a moving assembly line with auto workers performing a specialized task.
- Swiss engineer and amateur mountaineer George de Mestral went hiking in the woods with his dog. Upon arriving back at his home, he took note of the burrs that clung to his clothes, and he wondered if such an idea could be useful in commercial application. This connection led to the invention of Velcro.
- Steve Jobs of Apple was exposed to the computer mouse and graphical user interface (click, virtual buttons) at Xerox's Palo Alto Research Center. He used this insight coupled with other hardware and software advances to make personal computers accessible, easy-to-use, and affordable.
- Eiji Kakatsu, GM of technical development for the bullet trains of Japan was confronted with reducing severe noise problems from early designs. After listening to a lecture on birds, he led a design team to model the nose of the train after the beak of the Kingfisher bird because they have specialized beaks that allow them to dive into water at high speeds to hunt with a minimal splash.
- The idea for Pringles potato chips was sparked by the analogy of wet leaves which stack compactly and do not break/destroy themselves.

Make the Old New



We all have varying degrees of cognitive and perceptual fixedness and rigidity based on our personal learning history, set of experiences, values, biases, interests and needs. The good news is it is in our power to do something about it! How about we take some time to view and perceive *old things* through a new cognitive or perceptual prism to see something *different and new*? How about we improve 'old things' in new applications, combinations, places, uses, and ways? Walt Disney did not invent theme parks – he saw something different, improved and made *old theme parks new*. Ben & Jerry did not invent ice-cream – they saw something different, improved upon, and made *old ice cream new*. *Break It*, put together a new combination, *make the old new!* Excelsior!