

Judging a Book by its Cover

Every change is a menace to stability. That's another reason we're so chary of applying new inventions. Every discovery in pure science is potentially subversive; even science must sometimes be treated as a possible enemy. Yes, even science. (Huxley, 1932, p. 224)

Trepidation is a first response when encountering a book provocatively titled "Technopoly: The Surrender of Culture to Technology." Adding to this feeling is the quote that graces the cover that speaks to the need to "fight back." Words such as battle and surrender set the stage, leading the reader to anticipate an attack on technology. However, the text that follows is a surprisingly thoughtful examination of adopting new technology and discussions of multi-dimensional analysis, bargains and ecology. What fun!

A good place to start is to consider how we analyze the impact of technology. Elsewhere we see analyses where others see two sides of a coin and view technology as an either-or proposition. For instance, "Critics accuse the computer of promoting homogeneity in our society, of producing uniformity through automation, but electronic reading and writing seem to have just the opposite effect" (Bolter, 2001, p. 11). However, Postman challenges us to take on a multi-dimensional mindset and open ourselves to see that "Every technology is both a burden and a blessing; not either-or, but this-and-that" (Postman, 1993, p. 5). This goes beyond just black and white, good and evil, to recognizing that there are nuances and considerations. With such a line of reasoning, we could consider that the computer, for instance, provides for both homogeneity and heterogeneity.

Digging further into Postman's work, we encounter a discussion of bargains. Recent world history has seen the proliferation of personal devices, networking on an unprecedented scale and sub-second communications across the globe. Participating in this technology infused environment appears to have a low cost of admission which has allowed participation across ages and economic status. Yet, there's more to the cost than just the up-front purchase price. "A bargain is struck in which technology giveth and technology taketh away" (Postman, 1993, p. 5). Typically, in a bargain there is an exchange of value for value. The up-front purchase price is part of this value exchange, but with our thinking attuned to consideration of multiple dimensions, there must be more. To better understand the bargain Postman introduces the idea of a "...calculus of technological change" (Postman, 1993, p. 7). Hearing the word "calculus" brings to mind thoughtful calculation and variables and an approach that we can use to get beyond superficial views that consider only the price tag stuck on today's newest inventions.

A first variable to consider in this calculus is the impact that new technology has on our vocabulary as it redefines existing words and introduces new words. For instance, consider the meaning that springs to mind when we hear "twitter" or "tweet." The founders of Twitter have shared that they settled on their company name as they brainstormed and came upon the following definition: "...a short burst of inconsequential information..." (Cross, 2011, p. 58). While some might argue that this definition still holds true, many others would disagree and point to informative and valuable information that they receive via tweets.

And perhaps the most interesting aspect of this calculus is the consideration of ecology and environments.

If you remove caterpillars from a given habitat, you are not left with the same environment minus caterpillars; you have a new environment, and you have reconstituted the conditions of survival; the same is true if you add caterpillars to an environment that has none.... A new technology does not add or subtract something. It changes everything. (Postman, 1993, p. 18)

Starting with a basic, literal interpretation of this quote, insufficiency of terms such as “addition” and “subtraction” further highlight that an evaluation of new technology requires more sophisticated “mathematics”. However, the idea that the addition of a new technology leads to a new environment is a powerful concept. Having the right calculus and mindset can help us to successfully introduce new technology into a school, region or a business. For myself, I’ve been embracing the use of Galbraith’s (2014) Star Model as a mechanism to support change. While that model has been used for years and is well respected, it lacks a concept as clean and impactful as that of ecology and environments. Starting from a perspective of “everything is new” resets expectations and should lead to improved discovery and planning for successful technology adoption.

References

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