Last Word



A

mbivalence can be defined as "...simultaneous conflicting feelings or beliefs..." (1) In Latin, the prefix

ambi means both; the suffix valence means vigor, or the attraction and/or aversion felt toward something (1). Ambivalence is believed to be intensifying in society, resulting in inhibited growth and impaired decision-making (2), (3). Researchers assert that humans utilize two basic forms of coping with ambivalence: emotionfocused and problem-focused (2).

With emotion-focused coping, humans avoid, procrastinate, or downplay the significance of situations (i.e., valence-carriers); humans may feel relieved superficially, yet dilemmas remain unresolved (2). With problem-focused coping, humans seek information and weigh the pros/ cons of alternatives (i.e., valence-carriers); humans invest time and cognitive effort to maximize confidence for the best possible decisions (2).

In contrast to emotion-focused coping, our community excavates dichotomies; we probe ambivalenceinduced discomforts. Our contributors explored a variety of valencecarriers. We traversed a spectrum of science and engineering to better integrate conflicting values, needs, and beliefs. Authors guided us toward quality journalism; we envision growing pains likely to include dismay and delight coexisting with rapidly disseminated acts of journalism. With problem-focused coping, our com-

Digital Object Identifier 10.1109/MTS.2020.3012335 Date of current version: 2 September 2020

Technology Valence-Carriers and Ambivalence Tolerance

munity informs and guides society to explore difficult-to-solve scenarios such as the need for balancing profit and privacy relative to the centralized/decentralized dichotomies of Collective Adaptive Systems (CASs) (4). We perceived the divergent attributes of precision agriculture (PA), especially when farmers desire to use PA to optimize the management of field inputs for maximum yields, yet do not desire to release data without knowledge or consent. Predictably, ambivalence often negatively impacts adoption rates of technology (3).

When considering the deployment of technology, our community helps society avoid false dilemmas leading to the paralysis of ambivalence. We resist the either/or of ambivalent thinking; rather, we recognize technology usage as often both good and bad, simultaneously. Ambivalence is supposed to diminish if humans prioritize in a manner that is congruent with society's needs over the long term (2). Therefore, contributors help us cope with the mental mess of ambivalence by teaching us to prioritize such principles as using humanitarian fundamentals as prime rationale for context-specific decisions.

As our community untangles the vast array of negative and positive valences of technologies, we help society to better cope. Consequently, we strengthen ambivalence tolerance.

Author Information

Christine Perakslis serves as an adjunct professor, as well as a consultant for various industries. She can be reached at perakslis@hotmail.com.

References

 P. Fusar-Poli and P. Politi, "Paul Eugen Bleuler and the birth of schizophrenia (1908)," *Am J Psychiatry*, vol. 165, no. 11, p. 1407, 2008.
F. Van Harreveld, I.K. Schneider, I.K., H. Nohlen, and J. van der Pligt, "Ambivalence and conflict in attitudes and decision-making," in *Cognitive Consistency: A Fundamental Principle in Social Cognition*, B. Gawronski and F. Strack, Eds., 2011.
B. Rieger, "'Modern wonders': Technological innovation and public ambivalence in Britain and Germany, 1890s to 1933," *History Workshop J.*, vol. 55, no. 1, pp. 152-176, Spr. 2003.

(4) R. de Lemos et al., "Software engineering for self-adaptive systems: A second research roadmap," in Proc. Software Engineering for Self-Adaptive Systems II: International Seminar (Dagstuhl Castle, Germany), Oct. 24-29, 2010 (Revised Selected and Invited Papers). Berlin, Heidelberg: Springer Berlin Heidelberg, 2013, pp. 1–32.

TS