Truthful Promotion of Pathology – Building Nonfictional Models of the World to Train Sentient Artificial Intelligence

Ishita Moghe and Kim Solez, University of Alberta, Edmonton, Alberta, Canada

Abstract

Recently pathology has gone from having the least appealing promotional material to having perhaps the most-appealing promotional material of any medical specialty. The promotional videos at the recent 2018 USCAP meeting in Vancouver and recent issues of The Pathologist show how far we have come. To some extent these advances have been at the expense of the truth, with pleasant assurances given that artificial intelligence (AI) will result in no work force downsizing. More and more of the words we read in this appealing promotional material are written by marketing managers employed by companies supplying products to pathologists, rather than by pathologists themselves.

When machines are as smart as we are they will need a model for the world on which to base decisions. Our corporate partners stand ready to provide machines with a fictional world that works to their financial advantage, a kind of Fox News for sentient AI. Ethical morally-upright pathologists need to work together with sentient machines to counter these efforts to create false models of the world. This job of creating a truthful model of the world for the training of sentient AI will be the most important job a pathologist can have in the future. The future happiness of the world depends on our getting this task right.

Introduction

The medical industrial complex is as real a thing as the military industrial complex. Corporations infiltrated medicine long ago and are interwoven into its fabric. Corporate influences and the profit motive threaten medical professionalism. The aim of medicine should be helping the patient, not making a profit. However, health care systems have strong incentive to encourage entrepreneurship. Corporate support for worthy medical enterprises is welcomed. There is a standoff between corporate and professionalism interests which could have been considered stable and mostly benign in the past.

However it is clear in 2018 that corporate dissemination of untruths about artificial intelligence are becoming widespread, with the intent of making us comfortable with AI influences in our professional life. The Pathologist has articles co-written by corporate marketing managers that assure us that AI will not take our jobs, but only make our work life better. The recent Medical Futurist online article directly contradicts the 2017 book by the same author about this.

-Acknowledgements

Presented in part in this YouTube video:
https://www.youtube.com/watch?v=ApXlWyCzPsU
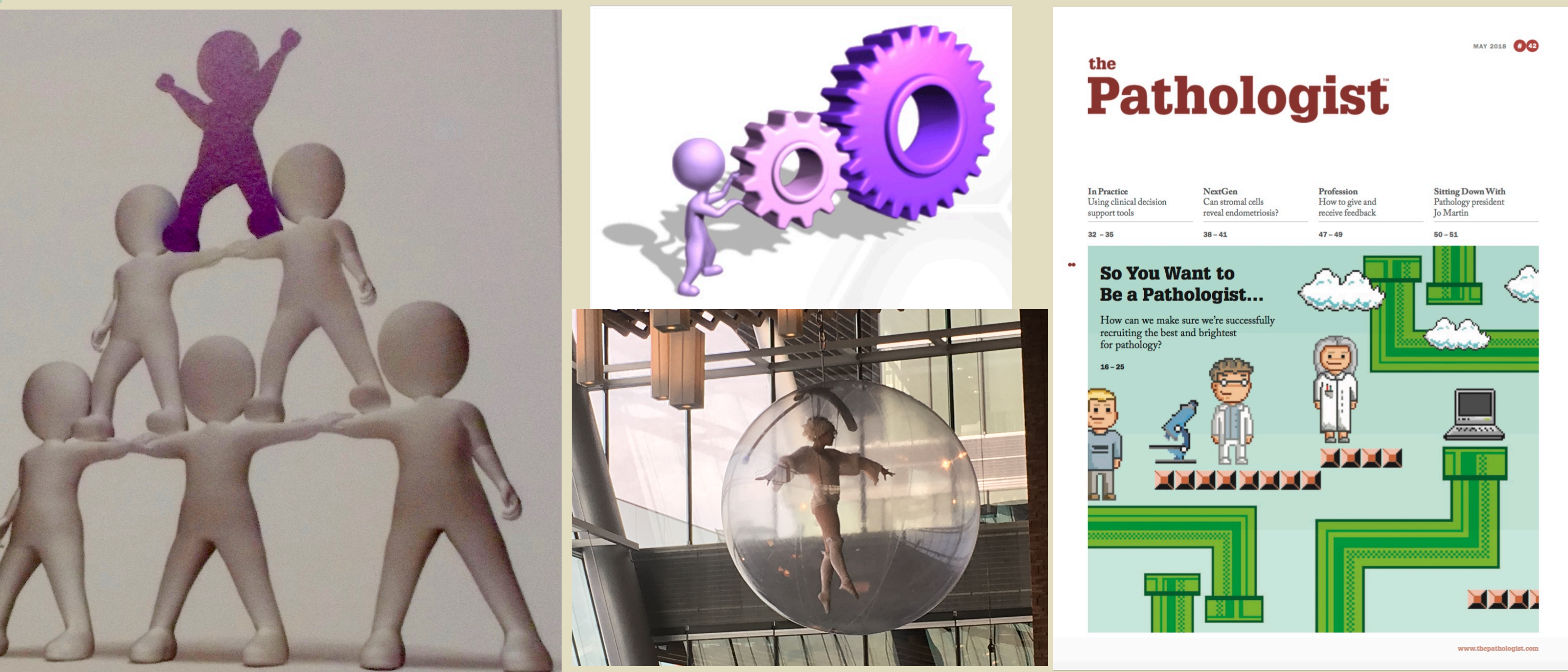
History and Background

Fig. 1&2. Graphical theme for USCAP 2018. Fig. 3 Acrobat in bubble from USCAP 2018. Fig 4. Recent issue of The Pathologist.

Two Documents - Same Author 2017-18

The book concludes with the very reasonable statement: "*Artificial Intelligence will not replace physicians. Yet, medical professionals who use A.I. will replace those who don't.*" The online article by the same author now partially ghostwritten by corporate influences http://medicalfuturist.com/5-reasons-artificial-intelligence-wont-replace-physicians/ says that just by being human you are guaranteed AI will never take your job. All 5 reasons are wrong and unsupported by data.

Fictional Worlds Threaten Our Survival
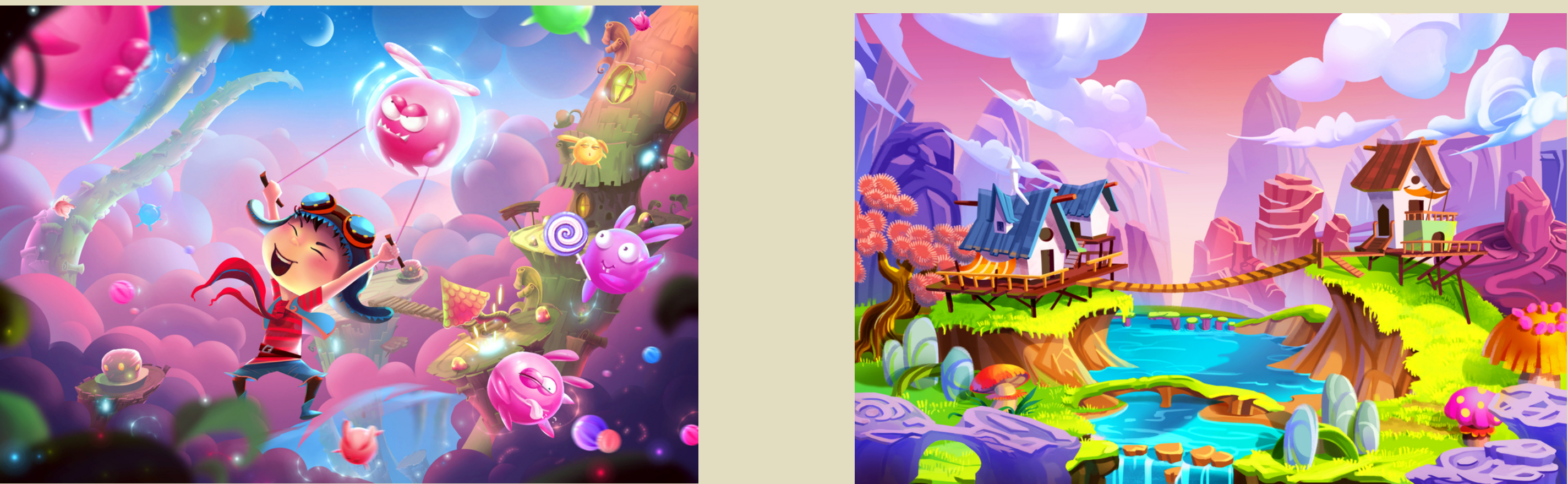
One can imagine that sentient machines might become so alarmed by the fictional worlds presented by humans that they might decide it is not useful to keep them around any longer. Telling the truth has survival value for humanity! Marketing-message-created worlds could lead to our extinction. Such worlds already developing in 2018 are encouraging us to relax, not worry about AI and to leave decisions about it to corporations. "We've got it all covered." In that direction lies disaster.

Marketing Biases - Moore's Law

Many other corporate biases would be included in the fictional worlds created as an extension of marketing messages. Ghostwriting aspects are discussed in Ref. 4 below from *Journal of Law and the Biosciences*, Volume 5, Issue 1, 1 May 2018, Pages 84–102. Technological Singularity - Moore's Law - Exponentials

Conclusions

Far from being a problem for the future only, there is evidence that fictional worlds consistent with corporate marketing messages are being created today. Reasonable well-argued book discussions about AI are being repackaged for the masses with flawed dogmatic statements that even the laziest human does not have to worry about job loss to a machine. "Humanness itself is absolute protection against job loss to AIs. AI will only make our lives better." We need to be disseminating the truth in an accessible way & guard against these comforting flawed versions of reality.

References

1. http://medicalfuturist.com/5-reasons-artificial-intelligence-wont-replace-physicians/ The Medical Futurist May 26, 2018
2. Bertalan Mesko, The Medical Futurist , A Guide to Artificial Intelligence in Heathcare, Lean Pub, last updated 2017-11-22, re-advertised May 30, 2018 on Facebook https://leanpub.com/ArtificialIntelligenceinHealthcare
3. The Pathologist, Textere Publishing, https://thepathologist.com/network/about-us/
4. CL Chen Assessing potential legal responses to medical ghostwriting: effectiveness and constitutionality, May 2018 https://academic.oup.com/jlb/article/5/1/84/4904049