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To Serve Man: AI at RSNA

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“Don’t get on that ship! The rest of the book, To Serve Man, it’s... it’s a cookbook!”

— “The Twilight Zone,” episode 89 (aired 3/2/62). Based on the short story To Serve Man, by Damon Knight.

Radiology was last spotted in the back seat of a black SUV moving south at a high rate of speed from Chicago. Witnesses at the scene described Radiology arriving at McCormick Place for the annual RSNA meeting and subsequently being forced into the back seat of the car by four to six individuals wearing black suits and black wraparound Ray-Ban sunglasses. The vehicle left with a stylish squeal of tires and then roared out of town, never to be seen again.

Seriously, did you get to the RSNA? WTF?

Now, I’m not saying artificial intelligence (AI) hijacked the show, but AI hijacked the show. Holy ****, they somehow found a massive part of McCormick that I swear I’ve never been in before and made it AI-centric. It was like the AI Temple of Anubis. Ribbons with AI were all the rage (see previous column on ribbons, sometime in the last year or two. Maybe more.).

AI was everywhere. It permeated every session and stuck to you. I was getting a burger at McDonald’s and the server asked if I’d like a side of AI with that. This isn’t the tail wagging the dog; this is a tail wagging the WORLD. I learned a few things during my time at RSNA and I’d like to share them with you. I’d also like to make my standard, cursory, and pithy observations. Please forgive me.

First, AI is not out to take over radiology. AI is here to help us. I cannot help but be reminded of that “Twilight Zone” episode, “To Serve Man.” Those aliens, like AI, seemed so nice (though their foreheads were a little too big for my taste) and also were here to “serve” us. Didn’t turn out so well. If AI did a few things for me and made it easier

to read studies, cool. If AI is here to “serve” me, we have an issue. Someone told me that AI was so great because it is essentially free. Free? Come on. If that’s true, how can I find a price point competing with it?

The other thing was ML, and I don’t mean major league, or medial lemniscus, or even Merrill Lynch. ML = machine learning. ML seems to be a fellow traveler with AI. Buddies. So, if AI doesn’t eat our lunch in the near term, ML clearly will. So, as I’ve been schooled, ML means that the computers start to learn tasks without being programmed explicitly to do so. I think about this exactly like teaching the resident staff: The computer is presented a stack of the same lesion you want to diagnose and also, hopefully, some normals, and supposedly learns from this repetition how to diagnose the lesion. Then, you can show it unknowns. “The Terminator” parallels here are too easy, and I will not go there, except to say that when the ML system reading your scan decides that you aren’t worth the bother, or your disease is too bad, you could conceivably be “terminated.” My advice? Bring a close friend (or two) with you to the imaging center.

My take on this from the RSNA 2019 is that we somehow got lost in the weeds. AI/ML took over learning how to diagnose disease on a cross-sectional imaging study UNLESS you choose to use them – they have to be invited. I guess AI/ML is popular; I saw a few of the rooms where AI/ML was being presented, and a greater-than-I-expected number of people were not sleeping. The residents and fellows have taken to AI/ML in a big way, cranking out research and papers galore on AI.

So, here’s the deal. Since the youngsters like it so much, when that spaceship lands and AI wants us to come aboard and be “served,” we let them go first.

Keep doing that good work. Mahalo.