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POSTERMINARIES

Seinfeld, Sherlock Holmes, and Much Ado about Nothing

“Is there any point to which you would wish to draw my attention?”

“To the curious incident of the dog in the night-time.”

“The dog did nothing in the night-time.”

“That is the curious incident,” remarked Sherlock Holmes.

Learning from the absence of information seems to require a particular knack. How many of us see the polar bear in the snowstorm each time we pick up a blank piece of white paper? My favorite detective has always been TV’s Columbo, not Dr. Watson’s mentor. I used to intently concentrate on the television screen trying to see the same clues Lt. Columbo found when he visited the scene of the crime. Since the clues he saw were only written down in his notepad and not communicated to the TV audience until the mystery was solved at the end of the hour-long show, I was hooked. I can still vividly see a pair of sneakers on the victim’s feet and I wondered what Columbo was so fascinated with. The victim had not tied his shoes on his feet himself (we later learn) because evidently they had been tied by a right-handed person facing the victim. In Sir Arthur Conan Doyle’s *Mystery of the Silver Blaze*, Sherlock Holmes picks up on something that did not happen. A quiet dog in spite of a crime can only mean the dog knew the perpetrator very well. TV mystery crimes with key clues being the absence of information make for rather unusual cinematography. In the days when *Columbo* was originally broadcast, there were no remotes for televisions, and only 3–5 TV stations were available to most people. TV screenplays were written for audiences who watched the show from start to finish—now I assume screenwriters have to allow for general channel surfing. A level of willingness to concentrate seems to be sorely missing in today’s broadcast smorgasbord. Maybe I’m wrong, and it’s too much to expect to

draw much of a crowd to a museum filled with blank white canvases.

The writers of the overwhelmingly popular situation comedy *Seinfeld* leveraged the suggestion that the show was “about nothing” to great advantage. It wasn’t that their scripts focused on the visual or psychological absence of information, but that compared to all previous and contemporary sitcoms, their scripts were made entirely of exceptionally unpredictable bits that were independent temporarily within a particular show. I bring *Seinfeld* into this because, in the short space allocated for this piece, I cannot do the topic of “nothing” justice. Instead, I wish to point out examples of “nothing” in the sciences and to challenge readers to find their own.

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The first clearly defined metric based on the absence of something that comes to my mind is the concept of a mean free path between gas-molecule collisions. A distance of length over which nothing happens—how does one get students excited about such an important concept in vacuum technology and gas-phase chemistry?

An example that’s easier to visualize is the case of “heiligschein.” The optical physics behind the phenomenon is simple but would take up too much space to explain. Let’s just say that retro-reflected light is highly collimated. Just because your headlights illuminate the miniature glass spheres in the road sign ahead at night so that you can easily read it does not mean that a neighboring car traveling

without its headlights turned on would be able to read the same sign. Now jump back hundreds of years to a time when religious explanations were associated with all natural phenomena. You and a colleague are standing side-by-side, backs to the early-morning sunshine, outside in a field of grass that is laden with morning dew. Both your shadows are visible. In your mind’s eye, around your shadow’s head appears a bright halo, while around your colleague’s nothing appears. You conclude you are blessed in God’s eyes, while something sinister in your colleague’s soul keeps him from such favor. He perceives the same about himself and you. You each have a “holy glory” that only you can see and around only your own back-reflector receptors. Those interested in this and other optical phenomena of the lower atmosphere should purchase the classic text *Light and Color in the Outdoors* by the Dutch astronomer M.G.J. Minnaert. First published in 1937, it was updated with color photographs in a 1993 reprinting.

My last example comes not from the sciences but from personal experience in that strange form of pre-Little League baseball called “T-ball.” The reasons why I inherited “running” this league for kindergarten-age children 25 years ago escape me now, but memories of the outrage and wrath I suffered from a large portion of the children’s fathers are still vivid. I had made up my mind that competition had no place in instructional baseball. I instituted no striking out, batting around every inning, and, most objectionable, no score-keeping. The absence of having a winner and loser was, of course, what troubled so many fathers so very much. How else could they frame their post-game father-to-son discussions? For those who are not avid fans of America’s favorite pastime, perhaps the phrase “much ado about nothing” summarizes their view of the game even with a scoreboard.

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