

PLAYING THE FIELDS



Yet some see more — enough, over the ages, to paint a picture of what happens. Between the hours of 23:00 on December 24 and 4:00 on December 25, local time, a rotund, white-bearded man in red-white coat and trousers manifests near a heat source in one's home. Seeking out a decorated coniferous tree or its luminescent equivalent, he produces an assortment of mid-size commercial goods from a large, lumpy, scarlet sack slung over his shoulder. At the next instant he goes unseen, he spirits himself away. Voices do not halt him; brushes or blows cannot not faze him. On occasion, he will offer a friendly nod to the home's occupants, but no more.

SANTAOLGY

A closer look at the most polarizing field in modern science.

By Elliott Cain, Jr.

THE DAWN OF TIME. The breadth of the universe. What came before us, and what lies beyond. For eons, after all of civilization's discoveries, the same grand questions still hang over every human's mind.

But one mystery, one confounding unknown, promises the most tantalizing truth — and yet remains locked away like an ancient safe:

Santa Claus.

What force transformed this ancient Turkish saint into the most well-documented yet elusive supernatural entity in recorded history? Most accept it at an early age. Some go mad trying to understand it until their final day.

But a select few take it upon themselves to study this benevolent demigod, and how he affects our planet. In this month's installment of PTF, we will look past the legends, gossip, and pop culture, and delve into what really goes on in the field of Santaology.

The Night Before

From childhood, the routine is familiar to us all. We awaken on Christmas morning to see the Presents present beneath our tree, the offering of milk and cookies eaten, and no trace to prove the party responsible.



A blurry shot of a red-and-white figure striding across a snowy forest toward an ice-encrusted sleigh. The first color photograph of Santa Claus, taken in 1966 by Johnathan P. Mitchell of Morton, Washington as he left his logging site, captivated the globe. Since then, provocative Santa-based findings have only increased in number. The U.S. Department of Housing and Urban Development's 1978 discovery that a decline in traditional chimneys had no statistical effect on Santa's stops. A controversial census of the United Kingdom in 1997 showing that a rise in secularism had little to no effect on Present distribution. Comprehensive satellite topography of the North Pole in 2009 by Google that failed to reveal so much as a single candy cane.

Yet who is to make sense of these revelations — or indeed, make them at all? That is where Santaologists come in.

Santaology 101

In general, Santaologists devote their careers to the biology, sociology, geography, and metaphysical implications of all things related to Santa Claus. Is his prodigious beard an effect of his abilities or their cause?

Does the color of his clothing have some spiritual significance or is it symbolic, akin to a superhero's uniform? And what size *are* those shiny black boots? No detail is too small, for budding Santaologists must be prepared to consider all the merry minutiae the rest of us take for granted.

Early Santaologists, predominantly older Anglo-Saxon men, concerned themselves with basic observation and research that would come to lay the groundwork for the field. Sadly, they often found their experiments squandered by skeptical government backers, and a public all too ready to accuse them of meddling in the affairs of either a higher or lower power. Despite Santa's legacy, with sightings stretching as far back as medieval Scandinavia, Santaology was not recognized by the greater scientific community until roughly 1605.



Map of the North Pole by Gerardus Mercator, cartographer/Santaologist (c. 1595).

Today, Santaologists of diverse backgrounds can be found all around the world, crossing disciplines to further their impact with fellow sciences. Many concern themselves with charting the economic effects of Santa's presence. "So many industries rise and fall on the influence of Santa that I'm surprised we don't get our own parade in December," jokes Joseph Kohls, Ph.D., a professor of Theoretical Santaology at Cornell University. "The fiscal impact of every toy and consumer electronics company's stock plummeting between Thanksgiving and New Year's Day is a phenomenon as fundamental to the season as blizzards and bare trees. Red Friday simply drives our economy. And yet, even now, we know shockingly little about *how* those packages appear under our trees."

Kohls' curiosity echoes that of many. It should go without saying that the Presents foster the most paranoia —

and yet comfort — for those blessed by Santa every winter. "Heck of a thing," says Terry Ibrahim, polishing a sleek security camera's oblong lens as he mans the counter of his small surveillance store in downtown Boston. "All the cameras in the city and we can't catch the guy. But, then I got people who come in here 'n say they want the cameras taken *down!* Something about the magic of it all. And eh, might as well save money while they're at it."

Other Santaologists delve into the legal logistics of Saint Nick. Take Alana Swanson, who parlayed a Santaology major at Stanford University into a career as one of the West Coast's most formidable intellectual property attorneys. When asked the foundation of her success, Swanson doesn't hesitate in citing her undergraduate studies. "Once I realized — I mean, *really* realized — that eighty percent of the Presents Santa distributes are trademarked products, I knew this was the job for me." Her most recent case: defending a class action by numerous computer manufacturers alleging their competitors' complicity in the duplication of serial numbers and several proprietary designs disseminated by Santa between 2009 and 2017. "These suits crop up all the time," Swanson sighs with a wave of her hand. "Your kids may have gotten used to it, but the IP lawyers sure haven't! It's a pain to settle, but it's cheaper than the alternative."

Many Santaologists work in-house, consulting for large firms and corporations on how best to make their businesses Santa-friendly. Garrett Browne, a Delaware Santaologist, heads a division of Nestlé which tailors its treats for ideal digestion by Santa. Based on past metrics drawn from random surveys, and collaborating with the FDA and other international bodies, they analyze current Present distribution trends in response to a variety of factors, including consistency, sugar levels, and the amount of nuts or nut byproducts permitted in the mixing process. "If Santa has allergies, we don't want to find out the hard way," Browne declares, arm on an iron railing as he looks out from under a hard hat to the Toll House Cookies assembly line below. Likewise, Darigold employs numerous Santaologists to help approve its batches of milk. The increasing popularity among consumers of vegan-friendly alternatives, such as soy and almond milk, could not have been possible without the number-crunching to safely assume Santa would enjoy it too.

A common misconception is that Santaologists study Elves as well. In actuality, Elfology constitutes a distinct and robust area, the details of which surpasses this column. However, there is plenty of overlap between the two. Many Santaologists employ their understanding of toy production cycles to support Elfological research. Likewise, a deeper understanding of Elf biology and sociology, including their presumed connection to cross-cultural lore of "sprites" and "gremlins," can help fill in the gaps when Santaologists fall

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short. Most prominently, since 1999, the International Society of Santaologists and Elfologists United have formally collaborated on attempting to locate the theorized “Workshop” where Presents are created and/or collected.

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But what about Santaologists’ pursuits in the most critical arena for our readers: concrete advancements of the natural sciences? By all accounts, the possibilities are endless. “If we could somehow tap into Santa’s ability to physically transcend linear chronology as we know it,” muses Philip White, President of the North American Association of Santaologists, “the implications for human wellness are staggering. We could grow crops in record time; keep people who are ill in care for months and yet release them within a day. I believe we’ve only scratched the surface of what Santa is capable of.”

What Santa even *is* remains under much debate, though. “Our best hypothesis is that Santa, at some point around 343 B.C.E., became the first multicellular organism capable of existing in a quantum superposition,” says Carl Grimble, a retired Santaologist who now provides consultations on a contract basis from his office in Tampa, Florida. “Or maybe he always was one. In any case, given that our fundamental understanding of how space operates make time travel on a macro scale impossible without creating apocalyptic rifts in the universe, little else makes sense.” That archaeological efforts to locate the tomb of Saint Nicholas continue to come up short lends credence to Grimble’s speculations.

Santa’s Bag is another enduring conundrum. Do its debatably infinite depths contain a folded reality, the likes of which could prove string theory, or is it merely an extension of his own omnipresent abilities? An annual collaborative undertaking among Santaology organizations, under the auspices of the United Nations, triangulates Claus sightings and confirmed Present drops across time zones on Christmas Eve. Invariably, multiple trackers record simultaneous sightings in locations as disparate as Belfast, Ireland and Cairo, Egypt.

What does it take to become a Santaologist, to try and solve these puzzles? STEM experience, naturally, is a common prerequisite. Specifically, a background in macroeconomics, quantum theory, physics, and/or business is invaluable. However, just as many disciplines cross paths with Santaology, so can many lend themselves to it. Whatever one’s resume, the field promises work rich with discovery and difference.

Questions and Controversies

So what’s next for Santaology? First and foremost: breaking down barriers. As noted above, age-old assumptions about the hows and whys of Santa’s behavior continue to come into focus, or change altogether, under the weight of hundreds of studies, surveys, and experiments. Yet there are issues with which, even after centuries, Santaology still struggles.

Perhaps no taboo exemplifies this more than the Naughty-or-Nice dichotomy (or “NoN”). It is an open secret among Santaologists that ample research supports a hypothesis of not a binary, but potentially infinite gradations of morality which determine Santa’s Present distribution. However, pressure from both within and without the community leaves much substantive discovery in shadows. Indeed, to the millions for whom NoN is a moral code — and, for millions more Santaists, a religion — no amount of peer-reviewed findings will sway their convictions. Few phrases are more commonly seen come December 1, whether expounded from humble street corners or upon placards held aloft in the center of Times Square, than “Praise Saint Nicholas.” Santa inspires faith in many, fear in others, but always a sense of certain uncertainty. Those who believe Santa’s acknowledgment of their presence during Christmas Eve grants them some special status are routinely either lionized or lambasted. People will come to blows over accusations of Naughtiness, just as they will climb out from despondency upon receiving a more expensive-looking Present than the year before. When the answers to how Santa passes judgment do come, they may very well land outside the scope of this magazine.



Determining the geopolitical effects of Santa’s influence is also a difficult task for Santaologists. There can be little question that whoever could control Santa — his power, or even just his image — could control the Earth. Yet the true extent of international governments’ Santa-related operations remains shrouded in darkness. NORAD, for one, is tight-lipped about what its satellites detect in their annual attempts to trace the Sleigh. Some believe the United

States and Russian governments already have access to Santa's technology. Whether it's for welfare or warfare, though, opinions differ. "It's all a con, man," said one student at Columbia University who requested anonymity when asked his opinion on Santaologists. "The feds are funding Kris Kringle up there with our tax dollars, for high-tech transportation — real Roswell-type stuff, look it up. And what do we get in return? Spying, spoon-fed capitalism, state-sanctioned home invasion on a national scale. Pause the Claus," he concluded, thumping his chest.

In recent years, Santaology has also come under fire from both environmentalist and labor unions for its perceived enabling of the coal industry. With blue-collar mining jobs declining and "green" energy gaining traction, many question the acceptance of a man who so freely gives out the mineral as punishment.

Lastly, many Santaologists unfortunately find themselves overworked and underfunded. For example, a decade-long study embarked upon by the World Wildlife Fund to prove Santa's reindeer share a common genetic ancestor with common caribou was axed for lack of funding in January 2017. The sole conclusive finding, that a migratory divide led to narrowly sequestered areas of the Arctic Circle hosting aerial reindeer out of evolutionary necessity, was a frustratingly obvious one. Worldwide attempts to obtain hair or stool samples from reindeer during Christmas Eve are ongoing, however, bolstered stateside by a crowdfunding campaign in conjunction with the National Parks Service.

Ironic that for as much joy as he brings, there can sometimes be little that is jolly about analyzing Father Christmas. Still, for those with the time, tenacity, and steady holiday spirit, no impasse is too great to distract from chasing the thrill of a true Santalogical breakthrough.

And To All A Good Night



Alien? Angel? One-of-a-kind natural phenomenon? Whatever his true status, Santa is sure to stay a figure of wonder and worry alike for years to come. Fortunately, science can help promote the former over the latter. Whether it's a busy July day or a night when not a creature is stirring all through their houses, Santaologists will keep hard at work — until the mysteries of Santa Claus are finally laid as bare as pure-driven snow.

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Interested in learning more? Check out the Jacques Hiver Museum of Santaology, located along the Museum Mile on 5th Avenue in Manhattan. The MoS offers a wide variety of fascinating topical exhibits, including a shred of wood believed to come from Santa's Sleigh, some of the first Presents delivered to children of the original thirteen colonies, and a rare photograph of Santa Claus and Gandhi shaking hands. Tickets can be obtained online at mosanta.org. ■

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