

## **Presidential Address**

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To prepare for this culminating moment in my presidency, I went back and reviewed past speeches made by others who held this post. Many spent time discussing the current problems of the profession; others challenged those assembled to explore new possibilities; all were philosophic about the future prospects for the profession. However, re-reading those speeches I am quite sure that, while many were excellent, very few who heard them found them so compelling as to have retained a vivid memory of what was said — and fewer still could state specific actions they took that were motivated by the speech.

Don't get your hopes up too much; I don't expect to be able to improve on that track record.

I'd like to start with a quote from one of those past speeches:

We are in an era of transition. Technological advances are making feasible the search for new information that, as recently as a decade ago, would have been prohibitive in cost to secure.

These were the words of CAS President Harold Curry in November 1966. (I was 15 years old at the time; many of you were not even born.) He was talking about the advancing capabilities of mainframe computers and FORTRAN, not the exploding capabilities of big data and predictive analytics.

So we can see clearly that, while the specifics do change over time, the fundamental issues are immutable. Technology inexorably advances and the actuary must evolve in an ongoing effort to keep up. I have faced this challenge throughout my career over the last 40 years; when I started my career there were no personal computers, no cell phones, and no internet or email. I submit that you will face the same challenge to change over the next 40 years as well — different in specifics, but not different in fundamentals.

One of my favorite books is *The Singularity is Near* by Ray Kurzweil, one of the world's leading futurists. His thesis is that humans project future technological advancement linearly, while in reality advancement is exponential. It's human nature to think linearly. This causes us to miss the major disruptions and tipping points that come with fast-paced change.

In the book, Kurzweil makes the case that, at the current pace of advancement, computer intelligence will surpass human intelligence within the next 20 years. Computers will be able to emulate human brain function and achieve consciousness (the singularity); eventually computers will exceed the natural limits of brain function, allowing them to perform analysis and solve problems that are beyond human capacity.

While Kurzweil is a little bit of a crazy-person, the case he makes is detailed and quite strong, with implications that are worth considering. He envisions a future in which artificial intelligence technology allows us to transcend our biological limitations. For example, if our bodies fail us, our brains can be downloaded onto a computer, as in the Johnny Depp movie, *Transcendence*. In addition to being thought-provoking, I also like the book because it is an optimistic view of the future.

One can only wonder what the role of the actuary will be in the world Ray Kurzweil envisions. The point for all of us is that we need to consider the possibility that, well before our careers are over, change will fundamentally alter what we do and how we do it. Insurance coverage will be different; insurance companies will be different; data, tools-, and actuarial techniques will be different. And when I say “different” I don’t mean incrementally different. That is the trap of linear thinking. In an exponential world “different” means radically different.

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I’d like to now shift gears a bit, and talk about the role of the CAS. While I was serving as your president-elect, I led a subgroup of the board of directors that tried to address the question of “why?”

- Why do casualty actuaries exist?
- Why do professional bodies such as the CAS exist?
- And, why does the CAS exist as a distinct body?

The impetus for the project was the work of Simon Sinek, who suggested that most organizations naturally define themselves by starting with what they do, and then progressing to how they do it. For example, we could say that one reason the CAS exists is to provide continuing education, by hosting meetings like this one. This plays to the rational and analytical side of the brain, and is a natural and easy way to define the role an organization plays.

Sinek points out, however, that inspirational leaders and inspiring organizations start with “why?” rather than “what?” or “how?” He points to companies like Apple and Disney-, that aren’t really defined by their products, but rather by their deeper motivation. Apple is about “cool stuff”; Disney is about “family fun.” The question of “why?” plays to the instinctive, emotional side of the brain, where feelings such as loyalty and trust are formed. It is a harder, but more fruitful, way to define the role of an organization.

Sinek’s ideas are powerful and also worth your consideration.

The CAS Board committee ultimately came up with three reasons why the CAS exists.

**The first reason is to ensure that CAS members have the necessary specialized analytical skills and experience to develop and communicate sound advice**

## **relating to risks and uncertainties.**

This brings us back to Kurzweil and the future. We have made great progress in updating our education programs to address new techniques relating to predictive analytics, which is the current wave of change that is taking place today. Going forward, however, one of the primary ongoing challenges for the CAS will be to stay ahead of the technological curve. We were a bit slow in responding to predictive analytics; we will need to be quicker in responding to the next big change. The work of Kurzweil and other futurists are worth reviewing, as they give us a glimpse of what that next big change might be.

The change issue I have been discussing isn't limited to the tools and techniques we use in our analysis; it also includes big changes in the risks we are asked to evaluate. An example would be the sweeping introduction of driver assistance technology. Even if we don't get to fully autonomous vehicles for a while, we are certainly at the doorstep of widespread use of incremental assistance. This will change auto insurance in fundamental ways, altering driver behavior and the causes of accidents. It will also introduce a systematic element to the risk, as the cars will all be connected.

As I said, we have made great progress in updating our syllabus to address predictive analytics. Some of this has already been implemented, through the new Exam S, but stay tuned, as further syllabus changes are coming in this area.

In addition to addressing predictive analytics through changes to basic education, we have also created a new predictive analytics credential, the Certified Specialist in Predictive Analytics (CSPA), to be offered by our subsidiary, the CAS Institute (a.k.a. "iCAS"). This initiative was announced at last year's annual meeting, and I am pleased to report that we have made significant progress in developing the program for this credential, with a full rollout in 2017. There are sessions at this meeting where Bob Miccolis and others will be presenting the key elements of the program. We have also begun to hold briefing sessions with employers and are getting positive feedback on the program.

Our goal with the creation of the iCAS and the CSPA credential is not just to provide employers with a benchmark that demonstrates the skills and knowledge to perform effectively in the predictive analytics arena. We also recognize that practice communities play a central role in supporting education and career growth, and we are therefore opening membership in iCAS to interested data science professionals, so that they can begin building a community of specialists in this area. Because data science is so aligned with actuarial science, we expect that ultimately the iCAS data science community will sit alongside, and overlap, with the CAS actuarial community. This brings me to the second reason for the existence of the CAS.

## **A second reason the CAS exists is to foster a global community of casualty actuaries.**

There are two key words here: **global** and **community**. Fostering a strong sense of

community is perhaps the subtlest, but most important reason for the existence of CAS. It is an area where I think we have outperformed our peers, and I am hopeful that we will continue to do so. A strong sense of community is an essential element of a vibrant profession, as it facilitates a collaborative, collegial culture. Community is important partly because it fosters loyalty; I believe that our membership feels a strong sense of loyalty towards the CAS.

Building a strong sense of community is easiest when the members share common interests and work together on common problems. In contrast, a strong sense of community is harder to achieve where the professional and business interests of the membership are diverse. This is perhaps the reason why the CAS has been so successful: our members all share a common interest in property and casualty issues. Our meetings aren't cluttered with pension and life insurance, practice areas with which we have very little affinity.

Those of you who are new members may not yet feel this sense of community. I certainly didn't when I was a brand new CAS Associate. But in my experience, it builds over time as you attend more meetings, join committees and participate in other volunteer activities. Personally, I feel a strong sense of community here; many of my longest and strongest friendships are with people I have come to know through the CAS. We never had the same employer, nor did we ever live in the same neighborhood; the bonds between us are based instead on our role as casualty actuaries, facing a shared set of problems and issues.

Now I know that this is a highly analytical group, generally averse to the "soft stuff," so you may now be relieved that I will stop talking about community and related feelings.

Many of our members question the need for the CAS to be global and wonder what our global aspirations should actually be. These are good questions and deserve a thoughtful response. I'll start by relaying a conversation I had early in my presidency with the chief actuary of a large multinational insurer. We were discussing Latin America and the diversity of actuarial designations there. He expressed frustration at this situation and asked whether the CAS would support offering its exams throughout the region. From a talent management perspective, his preference would be to use our ACAS and FCAS designations to qualify candidates for hire or promotion, because they assure a level of capability and competence that he can rely on in hiring and promotion decisions.

In my view, the need for the CAS to be global is clear; and as the world continues to shrink the need to be global will increase. I don't advocate for a global CAS because I seek world domination; I do so in the belief that a global presence is important to many of our stakeholders now and will become important to many more stakeholders as we go forward.

I have just returned from a week in China, where we now have about 100 members. It is exciting to hear from members, students and academics how highly they value our designations and want to be part of our global community. They want to collaborate with us on research and education. We share common issues like usage-

based insurance, effective solvency regulation and expanding predictive modeling applications.

**A third reason the CAS exists is to assure that the profession is respected and trusted by all parties at interest, so that the parties will rely with confidence on the advice being offered.**

The perceptions of our stakeholders are critical to our success as a profession. First, all parties at interest must trust us, so that the parties will rely with confidence on the advice being offered. We must be perceived as ethical. Our advice must be perceived as an objective assessment by a competent professional, supported by rigorous analysis and expert judgment, reflecting business acumen as well as technical expertise. The CAS (and the ACAS and FCAS designations) all serve as the tangible representation of our brand as specialist professionals; the CAS must therefore be vigilant regarding the brand attributes I have just articulated above.

The CAS maintains, monitors and continues to advance the CAS brand. Since brand attributes like trust are earned, the CAS does not generally promote these attributes directly; rather, members are encouraged to exhibit these attributes in all of their work. I think we are doing a good job here, particularly with the many outreach programs we have to employers, universities and other stakeholder groups. However, like a sentinel at his post, this work is never-ending.

From what I have said, I believe the case is very strong for the existence of the casualty actuarial profession and the existence of a professional organization to support the profession. However, it is not self-evident (at least not to me) that the existence of the CAS as a distinct independent organization is necessary. While this view will be blasphemy to some, I think we need to be open-minded on the subject, focusing on what is best for the profession. It is important to remember that the existence of the CAS is quite possibly an historical accident. [According to the long-standing though unverified legend](#), if the Actuarial Society of America (ASA) had not rebuffed the small group of workers compensation actuaries who were looking for a professional home in 1914, we would have ended up as a section within what would eventually become the SOA.<sup>1</sup>

Earlier in my remarks, I talked about the strength of the community that the CAS has fostered and the loyalty to the CAS among our members that are the envy of our peers. These are strengths that I would be unwilling to sacrifice in any potential restructuring of the profession. So any consideration of the alternatives to CAS independence should be limited to those under which our community remains intact. This would be a major challenge, but perhaps it is not an insurmountable one. I certainly don't have a solution, but I would encourage future leadership to give the question further consideration, with an open mind.

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Having had a year to recover from the surprise of being chosen to serve as your

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<sup>1</sup> The ASA and American Institute of Actuaries merged in 1949 to become the SOA.

president, I want to express my deep appreciation for the honor you have accorded to me.

I've had a great time serving as president, and a large part of the pleasure has been the opportunity to work with, and get to know, a great leadership team including the CAS Executive Council, the Board of Directors, and the senior CAS staff. They are a hard-working group of individuals, thoughtful and also fun. Their contributions are an integral part of our success.

I'd also like to thank all who volunteer their time and effort on committees and task forces. Other organizations are envious of the level of volunteerism the CAS achieves every year. Our volunteers are our life blood, making great things happen across a variety of areas.

I'd like to offer a special thank you to Cynthia Ziegler, our executive director. Her dedication to her job is evident every day, and her thoughtful advice, drawing upon a wealth of association management experience, has been invaluable.

Finally, I need to thank my wife, Gail, for her patience and understanding as I served the CAS this past year as president and last year as president-elect. Throughout the year she has been a good sport about the travel and endless conference calls. I promise that I will now spend less time in my office.

So in closing, I want to offer best wishes for continued success to all of you, and the CAS, and my successors in CAS leadership.

Thank you.