



episode 9 (2018 September) *Gender, 'Race', and Astronomy*

Heather: Hello everyone! Welcome to the ninth episode of the RASC 150 History Podcast, in which we ask difficult questions, listen to the quality of the silences, and look with hope to the future. My name is Heather Laird, I am a Director of The Royal Astronomical Society of Canada, and my co-host is the RASC Archivist, Randall Rosenfeld. Say hello, Randall!

Randall: [some mumbled greeting, or other].

Heather: “Gender, 'Race', and Astronomy”—not easy topics to talk about. The written, and unwritten rules of power are coming more under scrutiny with the advent of Occupy, Idle No More, Black Lives Matter, #MeToo, and similar movements and initiatives. The issues which bring forth efforts to effect systemic change for the better seem remote from the history of the physical sciences, and the missions of scientific organizations to further research, and education and public outreach. In some ways they are; the negotiation, writing, and realization of the social contract has an immediate presence in the lives of most people which the contemplation of the universe lacks. In the contemporary developed world, astronomy and allied sciences can seem very removed from the pressing matters of everyday existence. Astronomy studies stuff in the vacuum of space, but the people who study it don't live there. Astronomers, citizens of the Republic of Letters, are also citizens *in* the world, and the conditions of everyday life affect them and their institutions as much as they affect anyone else.

Concerns of social justice are not new to astronomy, they antedate the rise of Black Lives Matter, and #MeToo. The first edition of Silvio Bedini's biography of the African-American astronomer of the Enlightenment, Benjamin Banneker, appeared in 1971. Banneker faced all the trouble you can imagine, despite support from some white colleagues. Vera Rubin's autobiography *Bright Galaxies, Dark Matters* published in 1997, told of the sexism she faced in her career. Frank Kameny, an astronomer dismissed from the U.S. Army Map Service in 1971 for being gay, was well-known for his efforts at advocacy spanning decades. And the sexual harassment scandal which brought down one of the American pioneers in

the exoplanet field broke two years before #MeToo. These examples could all too easily be multiplied.

Where we are today is not where we were 150, or 100, or 50 years ago. CASCA, the Canadian Astronomical Society, has a binding Ethics Statement which was passed by its membership in 2013. The RASC likewise has an antiharassment policy, which was adopted in 2015. It states: [quote] “*The RASC is committed to providing an atmosphere that encourages free expression and the exchange of ideas. In pursuit of that principle, the RASC is dedicated to equality of opportunity and treatment for all participants, regardless of sex, gender identity or expression, sexual orientation, race, national or ethnic origin, religion or religious belief, age, marital status, disabilities, or any other characteristic that is not related to scientific merit*” [end quote]. Well, and good. But we could coin the hashtag #RASCsoWhite. The diversity of our membership doesn’t reflect the diversity of the Canadian population. Of course, this is a work in progress. And it may always be so. Anecdotal impressions indicate that we may have more First Nations’ members than we’ve had in the past. Yet our membership remains overwhelmingly white, male, straight, middle class, and of a certain age.

Randall: We certainly recognize that there are serious difficulties in discussing difficult topics like “Gender, 'Race', and Astronomy” in a historical sense. Sources chronicling what happened may not survive. Or such issues may not have been recorded, either because they were not thought worthy or record, or those doing the recording may have been blind to the issues. The prejudices may be systemic, rather than consciously deliberate. And who should do the speaking for minorities? Can a member of a majority do that? Heather and I can’t fully speak for racialised, or LGBTQIA astronomers in their experience of astronomy in Canada.

There is very little surviving in our Archives which can give evidence of any of these issues arising over the course of our 150 years. Absence of evidence can be read in different ways. One of the effects of the absence of evidence is that this is going to be a short podcast, not because the subject isn’t important, but because the evidence is limited.

Possibly to be put on the positive side of the ledger is the apparent absence of any major sexual abuse scandal in our past, or a deliberate policy to exclude prospective members based on cultural origin, or sexual orientation. But such people may have pre-emptively excluded themselves.

There are some intriguing hints of past conditions and opinions in the Society, though, both positive—or at least neutral, and negative.

In his 1994 history of the Society, Peter Broughton reports an interesting statistic and trend. He write: [quote] “...women have always been active in the Society in every way...*The fact is, however, that women presently make up only about 8 percent of the total membership. Little has been done to understand the reasons for this small proportion, and no recent programs have been set up specifically to attract women to join the RASC. This is somewhat anomalous in the light of the Society’s commitment to public education and the efforts of educators generally to encourage female students to share in the enjoyment of science*”.

Heather: The statistics Peter reported are these: from 1893 to 1914 the proportion of female membership in the RASC varied from 9% to 19%, from 1931 to 1936 it stood at 16%, and from 1958 to 1990 it never rose above 10%. In other words, the RASC of 125 to 80 years ago was better at attracting and presumably retaining female members than it was in subsequent decades. It would be interesting to know why. And to know how present statistics compare.

Randall: We don’t have comparable statistics for cultural origin, or sexual orientation. A positive interpretation of that absence is that such data may not have been viewed as important to our predecessors, and that they made no organized or deliberate effort to keep the RASC racially pure or cisgendered based on data collection. Perhaps...It is more likely that the data was unrecorded because to do so in a cultural organization would have been considered socially unacceptable at the time. People could be excluded with other, subtler instruments. Which isn’t to say that they were. We just don’t know.

There are other indirect clues to attitudes, however. In the first half of the twentieth century the RASC, like other scientific organizations of the day with publishing programs, occasionally issued multi-part papers which had originally appeared serially in its *Journal* as monographs. Such series could also reprint works originally issued by other publishers, but deemed worthy of recirculation. One such work was Robert Grant Haliburton's *New Materials for the History of Man—The Festival of the Dead*, which we published in book form in 1920 (it first appeared five years before the Society was founded). Our edition of it starts with a brief biographical encomium of the author who had died in 1901, and justification for the reprint. What isn’t stated there is the author’s well-known vigorous anti-Métis, anti-French Canadian, anti-Catholic, and pro “Aryan northmen” stance, which he actively campaigned on. The content of his book is not untouched by such things.

Yet our leaders at the time thought it fine to reprint. What other attitudes might that suggest?

Another question to ask is: “Have we been fully welcoming to people who don’t look like us?”. The Canadian jazz legend Oscar Peterson was an amateur astronomer. He liked to do planetary observation with high-quality instruments. He was never a RASC member. Now, it’s possible he wasn’t into joining groups like ours. But the questions which arise unbidden are: “Why wouldn’t he want to join the RASC?”, and “What were we failing to offer to make joining attractive?”. And Oscar Peterson was apparently not a difficult person.

Heather: The story of “Gender, 'Race', and Astronomy” in the history of the RASC seems to be a story of silences. Naming and confronting those silences is useful. The questions they force us to ask of ourselves could make us more welcoming to our neighbours as we evolve as a Society dedicated to the advancement of astronomy & allied sciences.

Heather: Thanks to everyone who tuned in, and we hope you enjoyed this podcast. If you have any questions, please visit www.rasc.ca/rasc-2018-podcasts for contact details.

Our next podcast is scheduled for as soon as we can get it produced, and is titled Buried Treasure, Lost Treasure. Randall assures me that it’ll be like an Easter-egg hunt, except that some of what we’ll find will just be the wrappers.

Our sound engineer is Chelsea Body, and our theme music is by Eric Svilpis.