

Margaret Anderson (00:00):

Good afternoon, ladies and gentlemen. Now I hope we're beginning bang on time. According to my watch, we are. Can I do the usual reminder please? And remind everybody to turn off their mobile phones and pages if you haven't already done so or to switch them onto silent. I'm Margaret Anderson from the history trust of south Australia. And it's a great pleasure today to welcome professor Ian McCalman to Adelaide. And to what I think is his first attendance at the Adelaide festival of ideas. Now you'll know his biography from the book, but if I can briefly summarize having been given stern instructions from one of our participants this afternoon in as a professorial fellow and the AARC Federation fellow at the university of Sydney, he's a cultural historian with a broad interest in 18th and 19th century European history, and a more particular interest in popular culture in intellectual history and not entirely by contrast, I think he would argue what he describes succinctly as low life.

Margaret Anderson (01:02):

Not that there's any intention to suggest that Darwin was low life. He also has an active interest in the uses of history in the different media. And he's participated in a number of projects in that light, in film exhibitions, in museums and other multimedia. He's worked with the BBC, the ABC and the history channel and with a range of museums in Australia and overseas. One of those projects was a re-enactment series of Cook's first voyages, but it's his most recent book that we're going to hear about today. And this is his contribution. Here it's in the book shop. I urge you to have a look for it, his contribution to the plethora of publications, which have come out in this year because of the rather extraordinary coincidence of the bicentenary of Darwin's birth and the sesquicentennial of the origin of species. It's a group biography biography that has been widely praised for the fresh perspective. It brings to the Darwin story, which is something of a feat. I think you'll agree. And the insights it offers into the evolution of those theories developed by Darwin. He argues in association and collaboration with a group of others. Ian's topic this afternoon is Darwin's Armada pushing the intellectual boundaries from academe to trade book and TV series. Will you welcome Ian please? [inaudible]

Ian McCalman (02:35):

Thank you very much, Margaret. And thank you very much friends from Adelaide coming out on a windy Sunday afternoon to, to hear me. I'm very privileged. Pardon me. If I, I do have a bit of a frog in my throat. I only arrived from the UK last night and picked up something on the plane, not swine flu. Charles Darwin's funeral took place at Westminster Abbey on Wednesday, the 26th of April 18, 82, 20 years earlier, the press had taunted him as the devil's disciple. The scientist whose theory of evolution had eliminated the divine creator and turned man into the cousin of a monkey. Now the pal mal Gazette spoke for all in calling him the greatest Englishman since new is more than 2000 mourners at the Abbey made up a who's who of the Victorian establishment? So many had applied for admission cards that the undertakers were hard pressed to complete the preparations.

Ian McCalman (03:45):

The body had arrived at eight o'clock the evening before, after a long slow horse-drawn passage from the village of down to Westminster accompanied for the entire 16 miles by an IC drizzle, the coffin was carried into the dim lamplight of the Abbey's chapel of Saint faith to perch like a small wooden ship in dry dock awaiting its lost forage. As the bill told noon, the Queens chaplain in ordinary Canon George Prothero opened the ceremony with a song. I am the resurrection glossing over Darwin's well-known skepticism about life after death. Darwin did not hold with the idea of a divine designer. He believed only in nature's implacable laws of chance struggle change survival or extinction. Man was one fortunate

product of that ceaseless historical process, 10 pallbearers, Bob, the coffin slowly up the nave to its resting place beside the statue. So Isaac knew among the dignitaries three ordinary looking middle-aged men gripped the handles.

Ian McCalman (05:05):

Thomas Henry Huxley biologist age 57 was tall and thick set with a big light nose and heavy side whiskers next to him or botanist Joseph Dalton, hookah age 65, spectacle, stooped, and slight with a fine rust of hair looking rather like a lion past his cadaver face striding at the rear came zoo geographer, Alfred Russell Wallace, age 59, thin tall and wirey with glinting spectacles and a heavy white beard. Then the coffin sank from sight and Charles Darwin set out on his last voyage to meet the earthworms. He'd been so recently studying. He expected no immortality, but the commemoration this year of the bicentenary of his has resounded all over the world. How is it though that these three particular naturalists Huxley, hookah and Wallace came to be carrying diamonds coffin? In essence, they were his most intimate friends, his closest intellectual collaborators and his fiercest advocates, all three recognized that this funeral was perhaps the last and greatest symbolic battle in a war they'd been fighting for 20 years.

Ian McCalman (06:29):

It had been a fierce unremitting public campaign in defense of Darwin's theory of evolution by natural selection against a host of scientists, philosophers, clergyman, politicians, and others who found its irreligious implications unacceptable by extension to there's was a fight for the kind of non theological fact gathering and lawmaking mode of science that Darwin represented Huxley known as Darwin's bulldog was a biologist paleontologist and social philosopher among many other things. He'd been tireless in taking Darwin's ideas out to the public and in extending the implications of evolution to other spheres of science culture and social thought, botanist and bar geographer was the man whom Darwin called my public and my judge and whom he depended on for crucial knowledge of Australia and the Southern hemisphere Wallace. So geographer and, and naturalist was Darwin's Prue Knight who in 1858 had arrived independently at the theory of natural selection while on the island of [inaudible] in the Malay peninsula, it was his discovery that go with golden Darwin into writing and publishing the origin of species because Darwin had not then made his ideas public, the generous young naturalist, Wallace accorded, all priority and fame to the older man Wallace thought of himself as merely a gorilla chief of the evolution war.

Ian McCalman (08:18):

While Darwin, he said is the great general who can maneuver the largest army and lead on his formation to victory. [inaudible]

Ian McCalman (08:30):

The Wallace used a military metaphor, a maritime one would have been equally at what had brought these four very different figures together in the first place. Was there separate participation as young men in daring scientific voyages of exploration to the Pacific Indian and Antarctic seas and to the Southern lands of Australia and New Zealand, new Guinea, Southeast Asia and Antarctica, Darwin hookah and Huxley had served their informal scientific apprenticeships on British Naval survey ships, respectively the beagle from 1831 to six, the Airbus from 39 to 43 and the rattlesnake from 46 to 50 Darwin traveled in a private capacity as the captain's naturalist companion while and Huxley were lowly assistant surgeons, surgeons, Knight, Wallace, the poorest of all voyaged as a zoological collector in

native prowls and canoes up and down the Amazon from 1848 to 52. And then around the Malaya archipelago for more than 14,000 sea miles, between 1854 and 62, 2, well four experienced their Southern journeys as transformative of their career.

Ian McCalman ([10:00](#)):

Yes, the scientific ideas, their personal lives and their characters. In Darwin's case, we tend to overemphasize the importance of the Galapagos component of his vehicle, of his beagle voyage at the expense of what went after is less heralded voyaging among the island laboratories and continents of the Pacific and Indian oceans produced a luminous and often underestimated phase of theorizing. This would help to shake him from his Orthodox belief, that species with a fixed products of multiple divine creations, and it would contribute to new understandings of human societies and ecologies during the 1850s, while living the life of an ailing hermit a down house, 16 miles from London, Darwin consciously recruited hookah, Huxley and Wallace as friends and collaborators, without them, it is doubtful whether he would have published his theory in his own lifetime fear of the personal scientific and social opprobrium that evolution would bring on his head had made him so obsessed with accumulating definitive evidence that he was bogged down in an elephant teen manuscript called natural selection that actually never did get published ill and reclusive.

Ian McCalman ([11:27](#)):

As he was Darwin realized that he desperately needed a cohort of intellectual supporters whose expertise could help him refine his theory whose social unorthodoxy could reinforce his own and who were ultimately willing to fight the master Ray of opponents and whom he knew his heretical theory would generate. And of course, all the four voyages were drawn together to each other, by the common memories of hardship and pleasure in the Southern oceans. It was a rough secular Freemasonry that bound them together as shipmates well salted in early life, as Huxley put it out of their Southern adventures, 10, their lack of social pretension, their interlocking scientific interests and their common participation in Darwin's evolution war. It was the training ground for the fleet captains of Darwin's army, Amanda.

Ian McCalman ([12:31](#)):

Well, that was a brief pricey of my recent book. Darwin's Armada that Margaret so kindly flourished for you to go out dash out and buy. It's been published by different presses in Australia, Britain and the United States as a trade book, sometimes known also as a crossover book. That is to say, it's a history aimed at a general educated readership rather than a specialized academic one. It's also the basis for an international TV series called Darwin's brave new world, which is due to be screened in Australia in three parts in October on ABC television. Well, a number of miles, academic friends are puzzled as to why I've chosen to go down this trade book and TV route. They argue that the pressures of commercialization for such works into fatal compromises. They're dumbed down, they become mere stories. They say devoid of analysis. They abandoned originality in preference for known and predicted plots. They favor sensation and romance over complexity. And and if you like sensibility, no academic, for example, is more criticized or even derided in by his peers than the popular British American historian and TV pundit Simon. Schama, what's more, he's become a billionaire on his on his private work, which is a faith clearly worse than death. And to be avoided by all academics.

Ian McCalman ([14:27](#)):

These criticisms are not without foundation. My last trade history book called in Australia, the seven ordeals of count Kelly Ostrow ran into many of these problems that I've just described. It's eight Thor deal really became dealing with the editors, the PR people and marketing people in the world's largest publishing house in the United States. Although I'm proud that that book has gone into 14 languages. Now, I must admit that the publishing program process was mostly miserable. My editor in New York, couldn't get it into his head, that the book wasn't a novel he, in fact, he constantly described it in all of our correspondence as your novel, and he couldn't understand it. Why wouldn't change the facts or direct quotations in order to improve the story. He just thought I was being stubborn. The marketers also changed the title to the last Alchemist at title.

Ian McCalman ([15:32](#)):

So original that the last time I looked on Google, there were at least three other books by the same title them perhaps the worst indignity that they tried to inflict on the book was a cover picture, which was supposed to represent count Kelly Ostrow. It had a, an elderly magician with wisdom face, and kind of curly beard like Merlin and a wizard's hat. I tried to point out that Kelly Ostrow, who's almost certainly the greatest con man in history actually looked and behaved more like Tony soprano than Merlin. This was a man who managed to con Casanova twice and Catherine, the great and Marie Antoinette among another a cast people.

Ian McCalman ([16:28](#)):

I also have to say that it almost, it almost became a film with Miramax. And although I would have loved the the, the payment that the script that I saw that they were going to, that they were going to film was so excruciating that I would never have lived at Donna where I had to go and live in the Riviera. So why then did I risk trying to write another trade history in Darwin's Armada? Well, first and foremost, I did. So because I believe that the historian's most precious and powerful tool is the ability to tell fresh stories about the past that speak to us in the present.

Ian McCalman ([17:13](#)):

In fact, I above all would want to be described as a storyteller, but unfortunately, narrative is sadly out of fashion. In, in historical academe, we favor a kind of more sociological and arcane form of analysis, and often one that the general public finds opaque using words. So it seems to me a kind of new priest. Yeah. Believe that stories are the most important way we connect with each other in this world. They connect and can connect across the boundaries of nation class, gender. And I want to be a historian that reaches out beyond his own specialized cast. I truly believe that we should embrace and if necessary reform rather than abandon the forms like the trade book and the TV history.

Ian McCalman ([18:16](#)):

And I have to say that in writing Darwin's Armada, the reverse of my previous experience has been true. My Australian editor with penguin demanded more, rather than less science, he never asked me to dumb anything down. He simply asked me to clarify it, which is of course, a salutary thing to have to do. Neither did he, during the bicentenary of Darwin, try to force me towards a more Orthodox interpretation or more Orthodox pieties. He was delighted that the book gave equal time to what, for the general public or the unknowns of hookah, Huxley and Wallace.

Ian McCalman ([19:05](#)):

And he also was delighted that Australia or Australasia became an as important a part of the evolution story south America, or the Galapagos, my title Darwin's Armada, if not, the subtitle has also been retained by all the three different publishing houses. They've all delivered covers that I'm not ashamed of, although they did insist on the old Darwin, you know, bearded Darwin instead of the young vigorous Darwin of the beagle days, we leave it at that. And I have to say that the copy editing of Darwin's Armada was the most rigorous I've ever experienced far more rigorous than any of the famous academic presses that I've worked within the past and making the TV series has also been a really positive experience for a start. It was collaborative from beginning to end, we started to work on the TV series at the same time as I started to work on the book.

Ian McCalman ([20:16](#)):

So the book and the TV series went hand in hand, they, they informed each other throughout the whole process. We'd meet once a week in a nurse, can bill one bar, the producer sometimes with the script writer and others buy a bottle of red or two, and then spend hours arguing about the drafting, the testing of episodes, the, the, the different emphasis that was going to be put, and the trying to find way of expressing in visual terms, the kinds of things that one has been writing about in the Darwin story. It turned out to be in all honesty, one of the most exhilarating intellectual experiences, my life, this is a lot to do with the producer himself. And I think is a remarkable, a remarkable man. I believe that the result is a genuinely fresh, original and truthful. As far as we can go work of history.

Ian McCalman ([21:19](#)):

It speaks to us in Australasia, even though it is going to be shown on is there's a consortium that is German and, and Canadian and, and United States as well. It combines vivid episodes of docu-drama with interviews and discussions by contemporary scientists and philosophers. People like Dawkins. Of course, David Suzuki, Jared diamond, the great Darwin biographers, Janet Brown, James Moore, and many others above all the film conveys. It seems to me a holistic and human context for this major intellectual discovery. It shows how great science is never a truly solitary process. It's never made in abstraction from society. It's never free from human pressures of ego competition, envy, malice of love, compassion, all those, all those things. Genius does not float in from the heavens. It's shaped in the social, the world and Darwinian evolution, especially. So moreover the medium of the visual moving image also taught me something important about the evolution story that I've not previously realized in an age when scientists were expected to illustrate their works from the pre television age, where illustrations were a crucial part of the argument.

Ian McCalman ([23:00](#)):

The reason there is no illustration in the origin of species. There's one diagram there's no illustration is that Darwin could not find any pictures in his own time that did not mislead. All the illustrations of his day were encoded with the idea of creation. They assumed that species were static, permanent and divinely designed to fit particular niches birds, for example, was shown by gold as kind of Victorian nuclear families, mother, and father in their separate spheres, daddy being the breadwinner, mommy doing the nurturing, no breath of the struggle for survival, no breadth of the struggle over sexual reasons. Production moreover was Darwin. Let's think about this. How was he did to depict visually something that was not an event, but a process, something that was invisible in the present. It occurred only as he said in the mind's eye, not in the, not in the visible eye.

Ian McCalman ([24:16](#)):

It's a process that worked by my Newt variations over eons of time. How are we to illustrate something like that? And because of the film, I suppose, because of this visual medium I've become aware how innovative doll, Darwin, Huxley, and Wallace had been in trying to manipulate and adapt the visual traditions of their day, the use of cartoons or use of melodrama use of non-elite forms of visual culture, something that Darwin Darwin excelled at, and his little noticed, I think he would have loved to be able to have had moving images and CGI too, in order to support his arguments.

Ian McCalman ([25:06](#)):

When we think about some of the processes, which for which Darwin had to expend volumes in explaining, we were able to show visually in a matter of four or five seconds, just to give you a few examples. Darwin argued from the 1840s onwards about the affinity between the human hand about swim, a whales fin, and so on very complicated argument, which we using CGI can show in the film when he holds up his hand. And it turns into a bad swing when struggled. She tried to show the affinities between animal emotions and human emotions. He studied his children. As you probably remember to see how their emotions resembled those of the apes or the monkeys. In our case with the modern movie, we can show him looking at these children and their faces morphing into those of an ape and back to conveying a message visually that is very complicated to do by writing.

Ian McCalman ([26:22](#)):

This is I would argue only one of the insights that arose out of a process of trying to communicate a historical drama of ideas through the visual medium of TV or film rather than simply through a book. So in conclusion, I'd like to plead to my fellow academic historians, that if we're not to become extinct like other species before us, we must learn to adapt to the needs and tastes of the present and the future we must need. We must embrace and reshape the communicative moves of moods and processes of our time. We need to embrace and reshape the trade book, the TV doco, the video game, the blog, the history, even the dreaded Twitter, otherwise like the dinosaurs before us, which are surely perish. Thank you very much. [inaudible]

Margaret Anderson ([27:26](#)):

Thank you very much for that. Very engaging and erudite summary. Now we have 15 minutes, which is your opportunity to ask you in any questions that you may have for him, either about the paper, or I assume about the book. If you've already, now there's an invitation. We don't have a roving microphone in this room and we don't have microphones in the corners. So can I ask you perhaps to stand up and speak up with your questions one in the front here?

Audience member ([28:01](#)):

How because of [inaudible] cool,

Ian McCalman ([28:19](#)):

But Darwin himself wasn't taken to court. No, I mean, he feared that he would be, he feared that he would be prosecuted for blessed for me. And one of the reasons he delayed publishing for so long for 20 years is that, of course, a lot of working class agitators from the, from the charters period onwards were being prosecuted for blessed for me for saying exactly the same kind of thing that he was saying. He was terrified that he'd be seen as somebody who was subverting the whole stable order of society, as you know, he was a reclusive and gentle man, and he found this, he found the prospect of publishing. Absolutely terrifying. I mean, it's one of the reasons that he was so ill, so chronically ill throughout his

life because he just was appallingly frightened. But in the end, in the end, he, he did it. And I would argue in part because of the fact that he was supported by these young on four 30 blurs people like Huxley who were itching to get in there and have a Barney. Okay.

Audience member ([29:36](#)):

Time in Australia. Could you, could you tell us a little bit about the

Ian McCalman ([29:40](#)):

Thomas? Thanks. Great question. The funny thing is that people have misunderstood the Australian episode because Darwin was immensely homesick by the time he got here and he was down in the dumps and miserable, and he, he grumbled quite a deal about Australia. He didn't like convict. He didn't like the drought. He said immediately Australia never going to be as great as America because there's not enough water. He knew he knew what he was talking about. But in fact, in fact, there are, there are, I think there are two significant, very significant moments in Australia. And also of course, even more so in Cocos Keeling islands, which is part of Australia now, but on the mainland of Australia, one is this, this moment when he's just been, he sees a Platypus has just been shot. And he says, what's weird about this is this platter person is one complicated, extraordinary creature looks exactly like it from a distance.

Ian McCalman ([30:56](#)):

It looks exactly like a water rat. And it seems to have a similar place in nature, sort of ecological function as a water rat in England. Why on earth would they be such different, such different creatures? And he's lying. They're also looking at an ant lines nest and he notes the little sort of tunnel. And he notes. The ant line is on the surface. Identical does the same thing. It looks the same, except in Australia, it's smaller. And and in England, it's, it's different. And then he talks about parents as compared with English birds. So what's happening is, and he then says, look, I mean, either this has been made according to creationist theories, this has been, you know, done by two different creators. You know, I've got, you know, woken up in the Northern and the Southern hemisphere, or it comes out of a single mind.

Ian McCalman ([31:53](#)):

And by that he meant a single process. I'm an afterward, his parents were going to read this. So it's not overtly talking about materialism. It's the only moment that publicly, he writes about the origin of species until he publishes in 1859. It's a very significant moment. The other significant moment is when he comes across a group of young Aborigines and he, he says, well, first thing it says is these, these people are not as other, as the colonists, tell me there, there are other remarkable people, so to positive evaluation of them, but he did then go on to say, I fear for their very existence in the struggle against the species that has invaded this country in effect, because that species, the white man had is destroying the habitat of the Aborigines, the guns, the dogs are killing the kangaroos. The sheep are getting rid of the, the, the traditional environment.

Ian McCalman ([33:01](#)):

And in effect, I mean, he's not saying that the Aborigines are doomed. It's not a racial argument. He's saying that here, he's saying that the population is threatened because its environment is being changed by an invasive species. Now that's a kind of a foreshadowing of the theory, even more so in Cocos Keeling as a, that's another story. If you want to hear it, but in Coco's killing, essentially, he's interested in trying to find what creates a coral reef, the origins of coral reefs. And he also does a kind of ecological survey of the whole island. And he ends up as he's leaving, saying, look, here's the coral reef it's been

created by a tiny creature. That creature has brought about a new creation as a result of what the creature has done as the land subsides, the creature builds these great ramparts and those ramparts stand against the enormous forces of the sea. But he said their population is they're in a battle. A struggle for survival uses that exact struggle for existence with this population of corals against the sea, the sun, the fish, we have a kind of formal variation of the theories spelt out at COPAS Keeling supposedly you know, two years before you read Malthus. So I think that's really very significant. And people have MIS misinterpreted because he's grumpy about Australia is neither here nor there.

Audience member ([34:45](#)):

[Inaudible] No

Ian McCalman ([34:47](#)):

No, that's his grandson. Although he young, that's young oldest, young, oldest Huxley, there's a lovely letter to him from oldest to his granddad because he read Kingsley's the water babies and in their Kingsley's the water babies, he describes professor Huxley creating these, you know, sort of Darwinian creatures. And he writes this, this little Neff letter between them. I would also contend that brave new world is modeled on a wonderful lecture that grandfather Huxley T H gave at Oxford in 1893, in which he says, what would happen if we stop evolution effect. If we, if we, you know, build build a wall around it, like a gardener builds a wall around nature and then changes what happens inside of it. And he does a sort of hypothetical, brave new world. And I think all this was influenced by that to produce the book. So is there a question at the back? No.

Margaret Anderson ([36:02](#)):

In thinking about some of the arguments that you've been presenting in the way in which we sometimes think about the history of science as a series of almost amazing insights, to what extent do you think that evolutionary theory would have been written about had it not been for Darwin?

Speaker 4 ([36:21](#)):

Well, it was

Ian McCalman ([36:24](#)):

Wallace came up with the identical theory and in 1858, now evolution was around the problem. The difference is that nobody had produced or could have produced the mammoth amount of evidence as well as himself said, if I had, if I had published, you know, imagine if Darwin hadn't been around a, no one would have read it. Cause I'm you know, he was a working class boy educated and mechanics Institute who no one took any notice of. And the second thing is I'm unable to put any proof and the creationists would have blown me out of the water. The difference with Darwin was how incredible, the amount of evidence he had amassed in all fields of which the origin of species is only a tiny, I mean, it was meant to be an abstract of his ideas. Even though it's quite a solid book. So, I mean, you know, Darwin also then of course goes on to produce an enormous number of other books, including the descent of man and, you know, the influence of emotions. And so, you know, no question that he was a genius, but also evolution by natural selection was in the air.

Margaret Anderson ([37:42](#)):



Yes, oddly enough. I remember reading a fairly extraordinary debate in Perth, in the mechanics Institute of all things in the 1850s, before origin of species was published. And it was arguing in terms very similar to that. And if you think about Perth in the 1850s, it's hard to think of a more isolated little place on the globe. I was fascinated to think that those ideas were percolating around, I think, was there a question on here?

Audience member ([38:07](#)):

[inaudible] One thing that strikes me is when the humanities dropped the ball [inaudible] [inaudible] how would you run it...

Ian McCalman ([38:55](#)):

Oh, I think you're absolutely right, but I, I just don't know why we, why we really make such a fetish of, of being a paycheck or being specialized in our language. And I mean, you can see that in some ways it's been a, it's been an, an academic defense in the humanities against the fact that everyone can do it, or everyone thinks they can do it. I mean, anybody can write about history. Anyone can read a, a novel and do some criticism of it. Nevertheless, I think trained and specialist sensitive people can often do it rather better, but somehow or other we've been intent on imitating a kind of scientific or, you know, view view of the world. And then the net result is that, that as you say, we've located the territory, which is our natural territory you know, communicating with, with, with people.

Ian McCalman ([39:57](#)):

And you'll see most of the trade books in history are written by journalists or amateurs often very, very well, but you find very few academics. I mean, there are exceptions doing them if it's actually looked down on in the profession. And I mean, I, I can only do it because I'm kind of old and you know, can, can sort of more or less get away with it, but it's a genuine problem. I mean, I have to advise young scholars to be extremely careful about moving into the popular, popular area, because they'd probably be bypassed for promotion.

Audience member ([40:38](#)):

Just about you talked about a moving image as being more capable of conveying an idea quickly and suggested that a hand is turning into a bat swing is, but at the same time, if you watch ghost whisperer, a person's face continued into a demon space has absolutely no follow up on that. There's any truth. They have been popular in ever since early magic lantern, presentations, presenting scientific ideas, but what would you say about their capacity issue, the tray lines as much as true, and in context of your pushing intellectual boundaries from academics to TV series, when these tools getting into the wrong hands and conveying pantries justice.

Ian McCalman ([41:33](#)):

Absolutely. No question at all. I mean, in fact, you know, for many, many centuries people have worried about the visual mediums capacity to lie, it creates illusions. No, I mean, no question about it. It has to be done in collaboration with the word with, with ideas. All I'm saying is really, it has a certain congenial characteristic to portray movement and process, which is what evolution is. I mean the, the static nature of even photography is, was, you know, part of the problem that Darwin and co faced so that I just think it's, it's when, when used, well, it's remarkable when used you know, sloppily or in a, in a deceitful fashion it's as bad as any other in medium, if not worse. Yeah.

Margaret Anderson ([42:31](#)):

We probably have time for just one more question,

Audience member ([42:36](#)):

All the differences, the process of developing, moving in from all the differences in the process of writing.

Ian McCalman ([42:52](#)):

Yes. I mean, I think the central, the central importance of telling stories and telling stories in a way that is captivating without, you know, without, in any way, a dumbing down or distorting, what you're doing is a very great art. I mean, the novelists can teach us an enormous amount. They don't just, you know, novels have been crafted in the most complex way in order to grip and engage us in order to, to convey very, very complicated ideas in an accessible way. So I, I'm a great believer in the power of narrative, in the power of storytelling and in using literature as a model for trying to present stories in a compelling way without, and that's the key without distorting the primary sources. And I mean, I tried to say to, to my publisher in in the case of the Kelly Ostrow book look, this is a quotation, you know, this comes from somebody in the 18th century a spy or inquisitor wrote down these words and they allegedly came from the lips of Kelly Ostrow.

Ian McCalman ([44:14](#)):

I can't change them. He wanted me to change the word OS into dairy air because he thought it was extremely telling to, you know, going beyond what's necessary to put the word in it while unfortunately Kelly Australia used the, our center and worse. So it's this kind of you know, we are bound by the sources. We're absolutely bound by the evidence, but all of us shape the evidence in, in some form, some kind of plot. And so that's what I think that cause out of the academy much more than in it, the emphasis on how you communicate.

Margaret Anderson ([44:59](#)):

Thank you, Ryan. I think probably we're out of time. So it's been a fascinating discussion across a wide range, Darwin ideas, how we construct history, how we present history in public and all of the challenges involved in that. And Ian has excelled. I think in all of those fields, he's going on to have a conversation at three o'clock with a range of others in an interdisciplinary conversation, if that interests you. So you might like to follow the conversation in that way, but will you join me now by thanking you very much?

Ian McCalman ([45:35](#)):

[Inaudible] I'd just like to say thank you very much. And that we have a very famous man and we're honored to have in this, in this particular academy at the moment, Frank Fenner, all of us. So him a great deal and I'm honored. [inaudible].