

The Crabtree Foundation: Australian Chapter 47th Annual Oration

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Joseph Crabtree: More than an Influencer of His Time

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Madam President, Elders and Scholars, it was an honour to have been invited to deliver, eventually, the 2021 Oration, the first in the Athenaeum Club of Melbourne.

It could well be that this club, founded in 1868, was influenced by Joseph Crabtree himself. In her 2009 oration, *Joseph Crabtree: his club and his college*¹, Orator Stevenson asserts that Crabtree, with John Murray, was instrumental in establishing the original Athenaeum Club in London in 1821.

But it was not for me to tease out any tantalising relationship as I had already opened the trapdoor to my expedition into the labyrinthine Crabtrove before this transfer of patronage.

The enormity of my task was daunting: 67 annual Orations delivered by the Founding Chapter at University College London (UCL) since 1954,² and this the 47th since 1975.

The exceptional scope and scale of Crabtree's intellect, precocity, inventiveness, and virtuosity have been revealed through the scholarly erudition of the orators. He can, in summary and inadequately, be described, as polymath and adventurer extraordinaire.

Where does one begin to shed new light on the significance of his achievements, and his influence - by inspiration or association - on the trajectory of the life of noteworthy others of his time?

Fortunately, I had benefited from the foresight of Immediate Past Chair Dr Bryony Cosgrove, who had invited Scholar Kieran Thompson – graciously, though firmly wielding the cudgel - to prepare a CV of Crabtree's exploits revealed in this Chapter's Crabtrove. At the Dinner of 2020 – the year of COVID-19 - it was presented with a concertina flourish by the said Scholar, with acclamation, the one and only of the year.

Needing some reassurance about the ability to pass time gainfully under stringent COVID restrictions, I decided it might be profitable to merge the Australian document with the corresponding CV prepared by UCL.

The merged CV became the foundation document for my preliminary research, although indeed a secondary source. It became clear that I would have to apply

qualitative methods to the plethora of assumptions, inconsistencies, omissions, and contradictions that came to light as I progressed in my analysis. It also became clear that I would have to adopt the Crabtreean equivalent of cherry-picking the Orations themselves, to guide me towards the culmination of this discourse.

Increasingly I realised that testing the assumptions – even creeping assumptions, Living Burden - and filtering fact from fiction, or fake news as we would refer to it now, was going to be an intensive task requiring an eclectic and interdisciplinary approach.

But in an enlightened COVID-ean moment, I thought that perhaps by attempting to unravel the complexity and validity of *what* Crabtree's influence had been, the *How?* of his prowess might be revealed.

This became my challenge - I could say torture - for the solitary confinement that lay ahead.

As the Zoom gloom waxed and waned, the value of this approach became evident: I would be able to formulate an hypothesis based on my findings, that future scholars would be left to dispute, refute or support, should new evidence arise.

A rather lengthy introduction I am aware, but necessary to set before you the context and my frame of reference.

And now to my findings: what did emerge from the merge?

It was noticeable that there were periods of frenetic Crabtreean activity, also remarked on by AUS-Orator Philip Law as early as 1989³, interspersed with lesser times of dormancy, or even disappearance, on which I will endeavour to shed light.

Crabtree's beginnings were purported by the inaugural Orator, Professor James Sutherland in 1954, to have been in Chipping Sodbury in 1754.⁴ Amongst Sutherland's many literary achievements and professorships he was the recipient of a knighthood of the realm,⁵ rumoured at the time to have been due to his excellence in Crabtreean scholarship.

I say purported deliberately because there is no actual record of Joseph Crabtree's birth extant. I had applied the 5 rigorous genealogical standards of proof, but no convincing evidence came to light that Crabtree was of Chipping Sodbury, nor even fathered by Jean-Jacques Rousseau - a claim put forward on flimsy evidence in the UCL oration of 1995.⁶

I did find several Josephine CRABTREES, though, but further north.

However, as we are all aware, absence of evidence is not evidence of absence.

Of potential significance was my discovery that there are many Sods in that region - Chipping Sods, Old Sods and Little Sods, but no Crabtreean Sods. I learnt that there is at present a bus service from Chipping Sodbury, serving these villages, along Cribb's Causeway, a former turnpike road used by stagecoaches in the 18-19C.⁷

Cribb's Causeway? That intrigued me. Was the palaeography faulty? Could there have been an error in transcription when adjusting the timetable of stagecoaches to that of the motorised buses? Could it be that Cribbs Causeway had at one time been Crabs Causeway?⁸

Perhaps Joseph Crabtree was born somewhere there after all. Perhaps his mother was en route between two of the Sods and so shaken by the experience that it precipitated her son's breech birth 'somewhere'. ...but... perhaps not.

A few words in passing about stagecoaches: the average daily mileage in those days was a rattling bone-shaking trip of 60-70 miles - about 5 miles per hour,⁹ often at night to avoid highwaymen and paying for accommodation.

It was not until the mid-1830s that scheduled stagecoaches had doubled the distance and speed they could travel, because of improvements in engineering and road building – though not for once, attributed to Crabtree. Nevertheless, it still took 4½ days, for example, to travel from London to Manchester (about 350km). By comparison, it now takes 3-4 hours by car, or about 60 minutes by plane.

Sailing, boating or even horse-drawn barging between the Sods and elsewhere, were not readily available options. The railway-building mania of the Industrial Revolution did not catch on until the mid to late 1800s, including its patchwork development in Europe and beyond.¹⁰ AUS-Orator Hudson did mention, however, that in 1829 Crabtree had envisioned the Echuca to Chipping Sodbury Railway without a single curve.¹¹ Unsurprisingly, nothing came of it.

I leave you with those seemingly meandering thoughts on travel in that era, the significance of which might dawn later.

Back now to reconnect with Crabtree's beginnings.

It was left to Ian Marshall, in his 2005 AUS-Oration to challenge the assumed place of origin of Joseph Crabtree.¹² His Oration was titled *McCrabtree*, so it won't strain anyone's mental capacity to make a connection between the title and the country of Crabtree's supposed birth.

English, Scottish – why not Welsh?

It just so happens that in her 2004 Oration, Dr Griffiths declared that her research, and I quote, '*shows beyond doubt that Crabtree was a true Cymro - a Welshman with a*

bardic heritage', and that he was informed of this by his father Llewellyn.¹³ But – again, a genealogical brick wall.

In my search for meaning, another Crabtreean and genealogical guiding principle came to my befogged pandemic mind. *Only connect*', *Only connect*'¹⁴, or joining the dots in the current vernacular.

If there is speculation about Joseph Crabtree's birth, could I at least confirm his death - the other bookend to life? Significantly, that too was not to be achieved.

Genealogical skills to the fore, I had searched *Find a Grave*¹⁵ and other repositories of records in cyberspace, but in vain. For those new to Crabtreeana, it has been generally accepted that Joseph Crabtree died and was buried in Haworth, Yorkshire, whilst visiting Charlotte Bronte in 1854 – the centenary of his assumed birth.¹⁶

Charlotte would die of tuberculosis the following year – the last of her 5 siblings who died of the same disease. All, bar one, were buried in the family vault in St Michael and All Angels Church, which became known as the Bronte Church¹⁷, not as some had advocated, the Crabtree Church.

After all, there was only one of him - wasn't there?

Diseases other than TB were rife in that area.¹⁸ In 1849, the Bronte's father, Patrick, who was the parson, requested that Benjamin Herschel Babbage visit Haworth to record its Sanitary facilities for the General Board of Health. Benjamin was the son of the Charles Babbage, mathematician, referenced by AUS-Orator Jim Breen in 2018.¹⁹

Babbage's report in 1850 makes grim reading, but I will risk your displeasure or distaste after such an enjoyable dinner, by rattling off some figures to support my line of reasoning.

Average life expectancy in Haworth in the first half of the 19C was about 25 years; nearly 42% of children died before the age of 6. There were 69 privies in the whole of the village – one to every 4½ houses - which meant sanitary conditions were appalling.²⁰

What is more, the geology and terrain meant that drainage from the privies, and seepage from those of the over 40 000 decomposing bodies that were higher up the slopes, contaminated open drains and drinking water in the village below. Typhus, dysentery, and cholera were endemic, which of course meant that the cycle of birth, contamination, death, burial, and decomposition, was perpetuated.

One of the decrees of Benjamin Babbage (*no recommendations in those days*) was that gravestones were not to be laid flat as they were limiting the growth of shrubs and trees which would otherwise help with drainage and decomposition.²¹

Many of the existing gravestones were hoisted up, and some were damaged beyond repair, including many bodies. Eventually, a new cemetery had to be provided, but too late for any re-interment of a Crabtree.

...and the relevance of this contextual information? At the risk of the obvious – which might be necessary at this time of night - could this account for the absence of a gravestone and body of Joseph Crabtree?

Or could no trace of Crabtree have been due to the loss of parish records when Patrick Bronte's successor had all but the tower of the church demolished and rebuilt?²²

I do feel obliged to say that a contrary explanation was offered by AUS-Orator Tim Smith in 2015.²³ He proposed, as a probability, that Crabtree spent his last years in genteel retirement in Melbourne, maybe in the Savage Club, until his death.

With no firm bookends to the life of Joseph Crabtree, I returned to my task, looking for patterns in the available data for the intervening 100 years, as scientists do.

As I again pored over the eclectic Crabtree, several strands or threads began to emerge genie-like from the pandemic miasma, that shaped my relentless questioning – a recurring disorder of researchers.

The conundrum of time and place surfaced. *How* could it be that Crabtree was reportedly in several locations – often distantly spaced and without the means of rapid transport – in such short, or even overlapping, spans of time?

I will provide one example from the many to illustrate my point. Let us consider the 5-year span of 1768 to 1773.

In August 1768 at the age of 14, Joseph Crabtree was said to be on Captain Cook's *Endeavour* as flute boy, voyaging round Cape Horn, arriving in Tahiti in April 1769.²⁴ (The ship returned to the home port in 1771, but no mention of flute boys or Crabtree.)

But in 1769, he was said to be dallying in Chipping Sodbury with milkmaids in the company of Cowpox Jenner²⁵ when not waving daffodils at the Welsh. And, in a noticeable shift of character, he was also to be found in Newington Green, North London, in the sophisticated company of Richard Price, a Fellow of the Royal Society and a Welsh dissenting minister, though not of the same ilk we ourselves have experienced in recent times.²⁶

Tiring of adolescent exploits, in 1772, aged 18, Crabtree was alleged to have been involved in numerous taxing and time-consuming activities:

- his ingenuity was being tested in a series of significant inventions;²⁷
- he managed to slip in a trip to Rome at the behest of the Pope, taking on the persona of Giuseppe Maria Silvestri as a secret agent, a profession he pursued life-long according to Orator Gee.²⁸

- Enjoying being someone he was not, he boarded Captain Cook's *Resolution* as Thomas Perry, helping to test a chronometer to unlock the mysteries of longitude and time.²⁹ The voyage ended in 1775, but with no mention of Perry.
- Still in 1772, he was reported as travelling to Egypt and the Sudan in search of the source of the Nile, as well as exploring the glaciers of Mount Kilimanjaro.³⁰

It is no wonder, according to AUS-Orator Burr ridge, that while recuperating at Oxford the year after such an arduous year, he resorted to inventing - *or venting I suggest* - the expletives 'bastard' and 'bugger'.³¹ Though maybe, according to AUS-Orator Paul Rodan, he was preparing for opening a brothel in Boston the following year.³²

You can see my dilemma, Elders and Scholars, which I think has now become yours. A complexity of puzzles and inconsistencies, disappearance from the records, discrepancies, and even duplicitous dealings, had to be accounted for - or dismissed.

My overarching question, though, remained: if all reported were the case, *how* might Crabtree have accomplished such feats?

A timely COVID-era moment of enlightenment infiltrated my mind before I could be whirled into a vortex of despair.

Memorable moments from the various Annual Dinners surface now and again, but seldom those emanating from the Living Burden. But...credit where credit is due.

A passing remark made at last year's Annual Dinner by our Burden - who does take his duties seriously - offered cautious exploration. It referenced the ever-shrinking Likeness of the Likeness over time, possibly accounting for its eventual disappearance. Could this be a metaphor for Crabtree himself - disappearing through the wormhole of space and time?

'*Only connect, only connect*', reverberated yet again... echoed by '*explore the context, explore the context*' - a significant genealogical principle also shared by Hon Sec A'Vard, and not to be ignored.

As we know, the lived experience of time – the concept of Kairos or qualitative time - is different from quantifiable or Chronological time - and, Chairman Comte, even Metronomic time.³³

As our esteemed President foretold in her prescient opening remarks last year, '*time is [an] interesting concept – we live through it or perhaps by it – but it remains elusive. We can lose it or find it depending on temperament or indeed age or imagination. But sometimes it is only with time, in good time, that we can find truth*'.³⁴

Emboldened by such an insightful and authoritative assertion, I continued in my search to find truth – though replacing 'good time' with 'pandemic time'. Pandemic time is a

newly experienced distortion of time that is now the subject of a germinating field of research.³⁵

At this juncture, and without apology, it is necessary to take a brief sortie into the generally warped understanding of the physics of time.

In his Oration of 1984, *Joseph Crabtree: the Einstein connection*, AUS-Orator Dr Francey stated, and I quote, 'to Crabtree, Newton's word was law, and he took it upon himself to be guardian of the law'.³⁶

Newton's Laws related to Absolute time and Absolute Space, which, he argued, existed without reference to anything else.³⁷ To cut a long and convoluted story short, Crabtree was so impressed that he supposedly invented a Newtonian Absolute time watch which, and I quote, '*could turn half an hour into ten minutes [and vice versa] any time he felt like it*' – a mechanical 'something' that could manipulate Time.³⁸

What then of the post-Crabtreean connection to, and influence on Einstein?

Francey reported that Einstein came across the patent for the Crabtreean time-manipulator during his period of intellectual activity in the early 20th C. Apparently, this concept of time dilation and time contraction sowed the seeds for Einstein's phenomenal understanding of time as an illusion: time slows down or speeds up depending on how fast you move relative to something else – according to sequential, chronological time, that is.

Space and time are interwoven seamlessly into a single space-time continuum – events that occur at the same time for one observer could occur at different times for another.³⁹

Wunderbar! Einstein had arrived at his enlightened Theory of Relativity!

Adrenaline coursing for a change, I was on the edge of another thought experiment.⁴⁰ By extrapolation - of the non-mathematical kind - could another continuum – that of science fact and science fiction - offer further insight into Crabtree's abilities?

Selective in my pickings, I compiled an assortment of science fiction of Crabtree's time that might prove fruitful, such as Louis Sebastian Mercier's 1771 publication, *Memoirs of the Year 2500*; Washington Irving's *Rip Van Winkle* of 1819; Charles Dicken's *A Christmas Carol*, of 1843.⁴¹ And for good measure, I added, HG Wells, *The Time Machine*, of 1895, and Catherine Webb's 2014 publication, *The First 15 Lives of Harry August*.

I looked for patterns in characteristics and contexts shared by the fictional protagonists.

So it was with a series of burning questions that I turned my attention back to interrogate the Crabtrove. To my astonishment, and satisfaction, similar patterns emerged.

I will only summarise the outcomes of my questioning having demonstrated the meticulous nature of my methodology. I do need to gain momentum towards the denouement of my findings.

We all alter our shape and personal identity to varying degrees to accommodate the others' view of oneself – identity is often performance where one adapts the public self to circumstance and masks the private self.⁴² We are all chameleons in one way or another⁴³, and the evidence put forward suggests that Crabtree was an expert.

How did the pseudonymous Crabtree present himself?

Reports abound that he pretended to be someone else, perhaps for altruistic purposes, but also for nefarious purposes, and military and amatory exploits. For example, he was said, at her seductive bidding, to have attempted to poison the husband of Constance Mozart, Wolfgang Amadeus, disguised as Joseph Primus.⁴⁴

Mention has been made of Crabtree's adoption of new persona - think of Thomas Perry and Giuseppe Maria Silvestri. Additionally, he was known under the name of 'Burke' when attending Eton aged 16; 'Batty' when 25 and getting to know Goethe in Germany; 'Berti' in Portugal when 33, and on occasions in his 50s as 'James Blackett'. And these are only the Bs in the alphabet of his alter egos.

Was he merely mistaken for someone else? After all he was, according to AUS-Orator John Salmond, a look-alike, or Doppelganger, of George Washington, taking his place from 1789-1797⁴⁵, though sighted elsewhere during that period.

No facial recognition technologies – or augmented reality - at that time; nor had the International Association of Facial Super-Recognisers⁴⁶ been instituted to verify any deception in the appearance of a Joseph Crabtree by any other name.

What could account for the multiplicity of sightings? I delved into the labyrinth of the Crabtrove once more.

Such intense speculation was in danger of triggering my pandemonia again - but I detected an aura beginning to envelop me, keeping it at bay. It morphed into the shape of a goddess, a goddess of heroic endeavour and wisdom personified – Athena herself.

I discovered later that since the Renaissance, Athena had become the international symbol of wisdom, strategic warfare, the arts, and classical learning,⁴⁷ qualities undoubtedly shared by Joseph Crabtree, some would say.

Were there other parallels between them? I found there were.

Crabtree, supposedly, was born by breech birth in unusual circumstances - Athena too, but from the forehead of her father, Zeus. Her persona was believed to have merged with that of the Roman goddess Minerva.

Could this be another attribute of Crabtree? Was he able to merge and alter his persona to become someone else?

I was again reminded of Madame President's oration in which she compared the inestimable Likeness to the likeness of a flea, indeed Blake's *The Ghost of a Flea*, first proposed by Orator Spencer in 1956.⁴⁸ Not exactly flattering, but certainly a figurative metaphor.⁴⁹

That reminded me that a few years ago, the *New Scientist* reported the discovery of a nematode worm that lives in figs. It is able to develop into five versions of itself.⁵⁰ And we know transmogrification occurs in the life cycle of frogs and butterflies. I am not suggesting that this was the case with Crabtree, only pointing out that in the natural world there is much we can learn from.

I could feel my temperature rising, my thoughts becoming ensnared in the tangled web of pandemia. Was it the cumulative effect of the hand sanitisers, or was it Athena prompting wild thoughts?

I had to find my rational other-self again.

With some specialist knowledge of Molecular biology, my thoughts turned to the possibility of the cloning and replication of Crabtree. I discovered that Professor Latchman, a geneticist and molecular biologist, had raised this in his 1997 Oration, but dismissed, as this branch of biotechnology had not been conceived in Crabtree's time.⁵¹ Dolly, the cloned sheep, was not born of three mothers until 1996.⁵²

Somehow the concept of confused identity toyed with my mind, though it did eventually enable me to tease out from the Crabtree the final strand: the idea of fluidity of personal identity⁵³ as a spectrum or non-binary continuum, in which one mode of existence merges and morphs into another and recurrently back again.

Could this thought experiment help solve the vexed question of Crabtree's appearance?

We are all on a voyage of discovery, including of our sexual and gendered identities.⁵⁴ Anchoring one end of the continuum, is the weight of an abundance of assertions of paternity attributed to Crabtree, for example, in 1788, John Payne Collier, the Shakespearean critic and forger⁵⁵; the French artist, Eugene Delacroix in 1797⁵⁶, and in 1799, Jose de la Luz y Caballero, a Cuban philosopher and educator.⁵⁷ In 1815, Augusta Ada Byron, later Lovelace, mathematician and first computer programming nerd^{58, 59}

If indeed they were his offspring Crabtree would have established significant genetic lineages that would influence successive generations.

Fanny Crabtree, Crabtree's sister - if there were one - was alleged -in 1777 - to have impersonated her brother on occasions, and perhaps permanently from 1800.⁶⁰ There are accounts of the dismemberment of Crabtree in 1816, whether by accident or design, and a re-membered reversal at aged 78 in 1832.⁶¹

What could be construed from this? Could these be incipient manifestations of a Josephine Crabtree?

So it was with considerable expectation that I speed-read Professor Martin's Oration of 2018, *Crabtree: Evidence from the Autopsy*.⁶² Disappointingly, no information came to light to support or refute my nascent notion.

What happened, then, to the aspiring trajectory of gender fluidity? Sadly, destination - as yet - unknown...

Advanced warning, Madame President: what follows will undoubtedly test the credulity of many, wake up some, and even cause conniptions in others.

I have applied rigorous research methodology to this labyrinthine endeavour: I have drawn together the strands of the extraordinary fabric of Crabtree's unravelled life and times.

Through enlightened analysis of the Crabtree, judicious pruning and testing assertions, I have revealed the absence of authentication of his birth and death; elucidated his mastery and manipulation of time; explicated his capacity to be in different places at the same time, frequently embodied in assorted persona, to arrive at my hypothesis.

If Joseph Crabtree were able to have achieved what he is alleged to have achieved when and where, then there is only one plausible explanation as to how he accomplished it.

Joseph Crabtree was more than an influencer of his time: he was, and is, a shape-shifting, gender-bending, regenerative time-lord.

Anne Semple ~~Feb 2024~~ March 2021

ENDNOTES

- ¹ Stevenson, Rosemary. (2009), *Joseph Crabtree: his club and his college*, UCL
- ² Sutherland, James. (1954), *Homage to Crabtree*, UCL
- ³ Law, Philip. (1989) *Joseph Crabtree and Historical Hazards*, AUS
- ⁴ Sutherland, James. (1954) *Homage to Crabtree*, UCL
- ⁵ Ibid
- ⁶ Foreman, Michael. (1995) *Crabtree Facing Both Ways*, UCL
- ⁷ Chipping Sodbury to Cribbs Causeway: <https://www.rome2rio.com/s/Chipping-Sodbury/Cribbs-Causeway>, Accessed 16 Feb 2021
- ⁸ Cribbs Causeway: https://en.wikipedia.org/wiki/Cribbs_Causeway, Accessed 16 Feb 2021
- ⁹ Johnson, Ben. *The Stagecoach*, in Historic UK, <https://www.historic-uk.com/CultureUK/The-Stagecoach/>, Accessed 16 Feb 2021
- ¹⁰ Railroads and the Development of the Idea of Europe - Brief History of Railroads in Europe: <https://europeanrailroads.blogspot.com/2011/07/brief-history-of-railroads-in-europe/> Accessed 16 Feb 2021
- ¹¹ Hudson, Nick. (1983) *Joseph Crabtree - Ingenieur Extraordinaire*, AUS
- ¹² Marshall, Ian (2005) *McCrabtree*, AUS
- ¹³ Griffiths, Toni. (2004) *Crabtree and the Bardic Heritage*, UCL
- ¹⁴ Harte, Negley. (1988) *Crabtree and political arithmetick*, UCL
- ¹⁵ Find a Grave: <https://www.findagrave.com/cemetery/2258321/st.-michael-and-all-angels-churchyard> Accessed 16 Feb 2021
- ¹⁶ Tattersall, Arthur. (1978) *The Cleansing of Crabtree*, UCL
- ¹⁷ Haworth Village: History http://www.haworth-village.org.uk/history/church/bronte_church.asp Accessed 16 Feb 2021
- ¹⁸ Ibid
- ¹⁹ Breen, Jim. (2018) *Joseph Crabtree – The Father of the Computer*, AUS
- ²⁰ Sanitary Report on Haworth, Home to the Brontës: <https://www.bl.uk/collection-items/sanitary-report-on-haworth-home-to-the-brontes#> Accessed 16 Feb 2021
- ²¹ Ibid
- ²² The Haworth Church Website: <http://www.haworthchurch.co.uk/history/> Accessed 1 Feb 2021
- ²³ Smith, Tim. (2015) *Crabtree and his encounters with Antipodean Pettifoggers*, AUS
- ²⁴ Freeman, Richard. (1975) *Crabtree Comes of Age: Crabtree and country Matters*, UCL
- ²⁵ Cosgrove, Bryony. (2011) *Crabtree – Purveyor of the Daffodil as a Tool of Seduction*, AUS
- ²⁶ Richard Price, a Fellow of the Royal Society: <https://royalsocietypublishing.org/doi/10.1098/rsnr.2019.0052> Accessed 16 Feb 2021
- ²⁷ Rowe, Peter. (1980) *Crabtree the Engineer*, UCL
- ²⁸ Gee, Fred. (1984) *The Secret Life of Joseph Crabtree*, UCL
- ²⁹ Charlwood, Don. (1976) *Crabtree: The Obscure Decade and After*, AUS
- ³⁰ Kershaw, Peter. (2004) *Joseph Crabtree – a product of the Little Ice Age*, AUS
- ³¹ Burrige, Kate. (2014) *Joseph Crabtree – Rogue Lexicographer – Wild Etymologist*, AUS
- ³² Rodan, Paul. (2002) *Crabtree in the Colonies: The Emerging Truth*, AUS
- ³³ Repp, Bruno. H. (1999) Detecting deviations from metronomic timing in music: Effects of perceptual structure on the mental timekeeper, <https://link.springer.com/article/10.3758/BF03211971> Accessed 16 Feb 2021
- ³⁴ O'Brien, Angela. (2020) *The Mnemonic Cake: What Proust Owes to Crabtree*, AUS
- ³⁵ Wetsman, N, 15 Dec 2020 Science – *the Pandemic Ruined Time*: <https://www.theverge.com/2020/12/15/22167586/pandemic-time-perception-2020-covid> Accessed 16 Feb 2021
- ³⁶ Francey, Logan. (1984) *Joseph Crabtree: the Einstein connection*, AUS
- ³⁷ Newton's Views on Space, Time and Motion in Stanford Encyclopaedia of Philosophy: <https://plato.stanford.edu/index.html> Accessed 16 Feb 2021
- ³⁸ Francey, Logan. (1984)
- ³⁹ Taylor Redd, Nicola. (2017) *Einstein's Theory of General Relativity* <https://www.space.com/17661-theory-general-relativity.html> Accessed 16 Feb 2021
- ⁴⁰ Stanford Encyclopedia of Philosophy: <https://plato.stanford.edu/entries/thought-experiment/> Accessed 16 Feb 2021
- ⁴¹ Works of fiction and a filmography: https://en.wikipedia.org/wiki/List_of_time_travel_works_of_fiction Accessed 16 Feb 2021
- ⁴² Mackay, Hugh. (2020) *The Inner Self*, McMillan, Sydney, Australia, p14
- ⁴³ Larrett, W.H.A (1981) *Crabtree and Germany: Chameleon meets chameleon* UCL
- ⁴⁴ Foreman, John. (1989) *Chameleon Meets Chameleon*, UCL
- ⁴⁵ Salmond, John. (1994) *Crabtree in the Whitehouse*, AUS
- ⁴⁶ Association of Facial Super-Recognisers: <https://www.associationofsuperrecognisers.org/> Accessed 16 Feb 2021

-
- ⁴⁷ Britannica, Athena – Greek Mythology: <https://www.britannica.com/topic/Athena-Greek-mythology> Accessed 16Feb 2021
- ⁴⁸ Spencer, Terence. (1956) *The Iconography of Crabtree*, UCL
- ⁴⁹ O'Brien, Angela. (2020) *The Mnemonic Cake: What Proust Owes to Crabtree*, AUS
- ⁵⁰ Shape-shifting worm creates five different versions of itself, 15 Jan 2016 : <https://www.newscientist.com/article/2073487-shape-shifting-worm-creates-five-different-versions-of-itself/>
- ⁵¹ Latchman, David. (1997) *Brother Crabtree*, UCL
- ⁵² University of Edinburgh, Centre for Regenerative medicine: <https://dolly.roslin.ed.ac.uk/facts/the-life-of-dolly/index.html> Accessed 16 Feb 2021
- ⁵³ Merchant, Nilofer. *Identity is a Fluid Social Construct*: <https://medium.com/@nilofer/identity-is-a-fluid-social-construct-e6e81a389c7c> Accessed 16 Feb 2021
- ⁵⁴ Harvard Health Publishing, Gender fluidity: What it means and why support matters <https://www.health.harvard.edu/blog/gender-fluidity-what-it-means-and-why-support-matters-2020120321544> Accessed 16 Feb 2021
- ⁵⁵ Johnson, Michael. (2011) *Crabtree's change of tack or scraps from beneath the high table*
- ⁵⁶ Chada, Jagjit. (2016) *"Midas, Transmuting All, Into ... Paper": How Crabtree Won the Napoleonic Wars*, UCL
- ⁵⁷ Miller, Nicola. (2014) *Gloria in absentia: images of Crabtree in South America*, UCL
- ⁵⁸ Breen, Jim (2018)
- ⁵⁹ Tattersall, Arthur. (1978) *The Cleansing of Crabtree*, UCL
- ⁶⁰ Latchman, David. (1997)
- ⁶¹ Tattersall, Arthur. (1978)
- ⁶² Martin, John. (2018) *Autopsy of Joseph Crabtree*, UCL