

Thinking about AI through a Peace Justice Equity lens

July 2026

Melissa Clark-Reynolds
melissaclarkreynolds.com

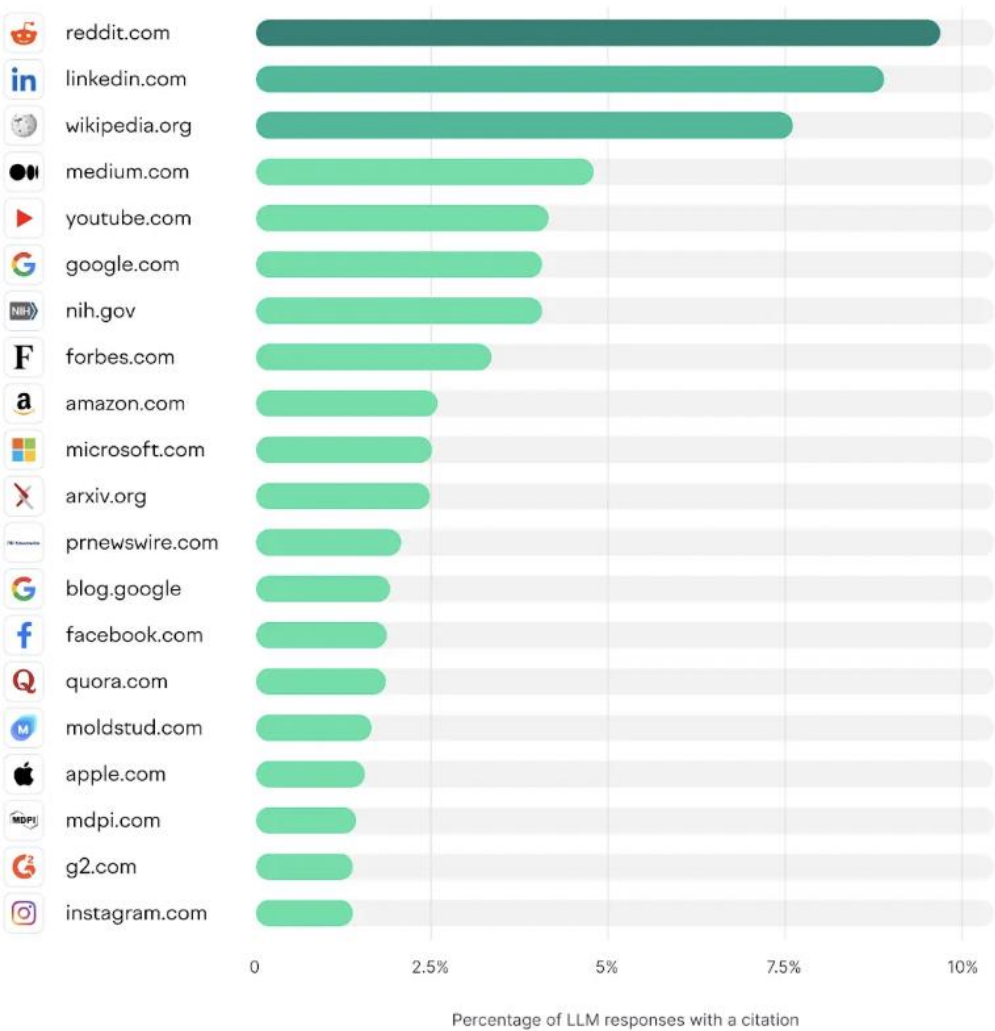
As Futurists we look for signals – small,
often weird things.... We then try to
understand where they might lead ten
or more years down the road.

Marina Gorbis, IFTF

What is an LLM?

- A **Large Language Model** is a neural network **trained to predict the next word** (technically, "token") in a sequence, given everything before it
- It learns **statistical patterns of language** — grammar, facts, reasoning-like structure, style — by training on enormous volumes of text
- What looks like **reasoning or understanding** is, mechanically, extremely sophisticated **pattern completion**

Top Cited Domains on LLMs (ChatGPT, Google AI Mode, Perplexity): October 2025



Based on a Semrush study of 230K prompts conducted in October 2025

Why now? Convergence

- **Architecture** Google (2017) researchers created the Transformer, allowing parallel vs sequential word word weighting
- **Data** sheer volume of stuff on the internet
- **Compute** Video Game GPUs got cheap and powerful enough to train models at unprecedented scale
- **Energy** Relative to income, power has reduced in cost (Solar)

Over 50 years of Research

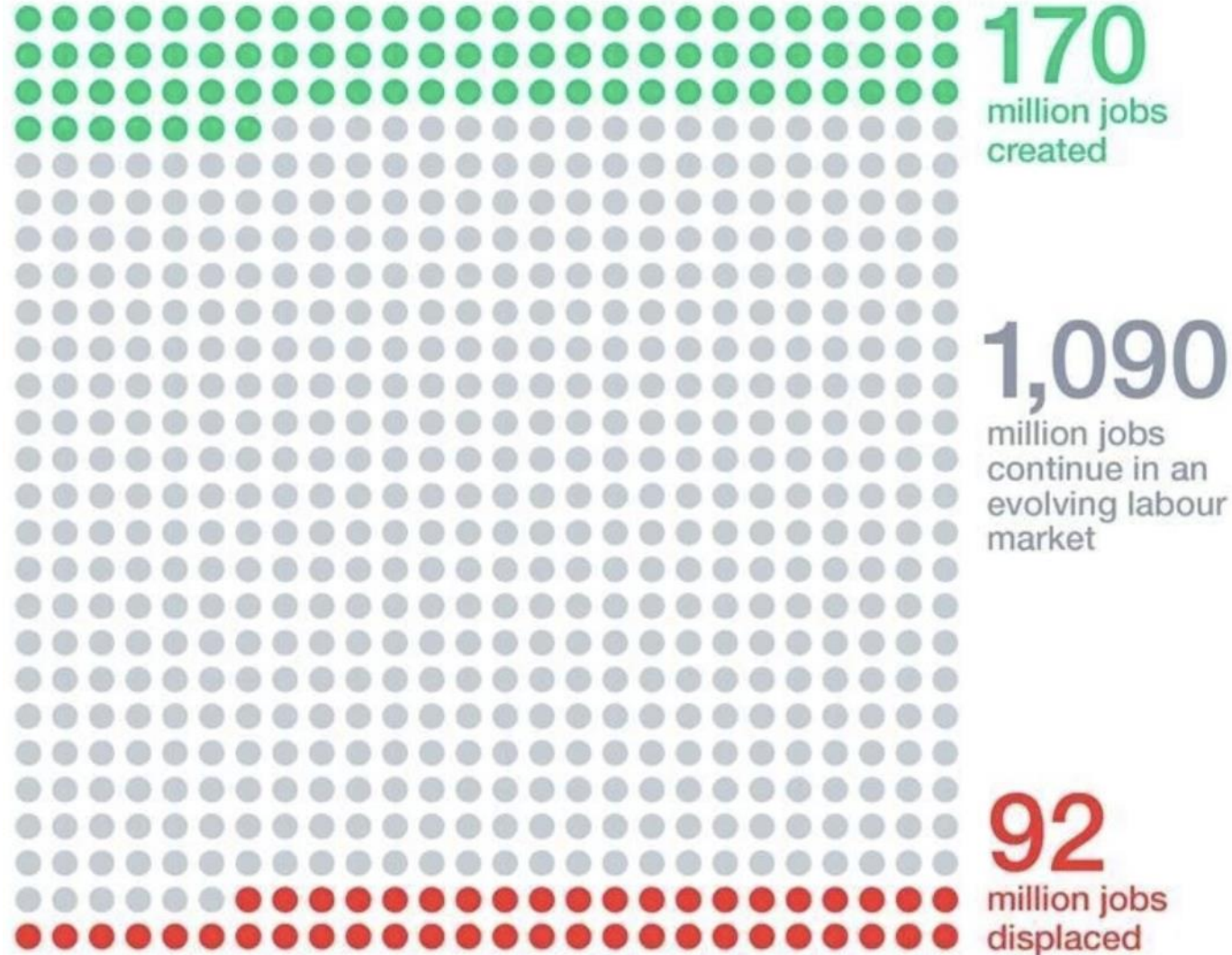
- **1950s–80s Symbolic AI:** hand-coded logic and rules; brittle, couldn't handle ambiguity or the real world's messiness
- **1980s - 2000 Expert systems boom:** rule-based systems for narrow domains (medical diagnosis, insurance etc.)
- **1950s–2000s Connectionism/neural networks:** the older, biologically-inspired idea that AI should learn from data rather than be programmed
- **2012 Deep learning breakthrough:** ImageNet competition shows deep neural nets dramatically outperforming other approaches on image recognition once given enough data and compute (the moment connectionism won)
- **2013–2019 Reinforcement learning triumphs:** DeepMind's AlphaGo (2016) and successors show RL-trained systems beating humans at tasks assumed to require intuition, not just calculation
- **2017 onward Transformers + scale → LLMs:** the current generation, built on that older connectionist foundation, but at a scale nothing before could reach

Next?

- **World Models** - systems that learn to predict how a physical or simulated environment changes over time, rather than predicting the next word in text
- **Smaller, efficient models**
- **Reasoning/"test-time compute"**
- **Continuously Learning Models**
- **Neurosymbiotic AI**



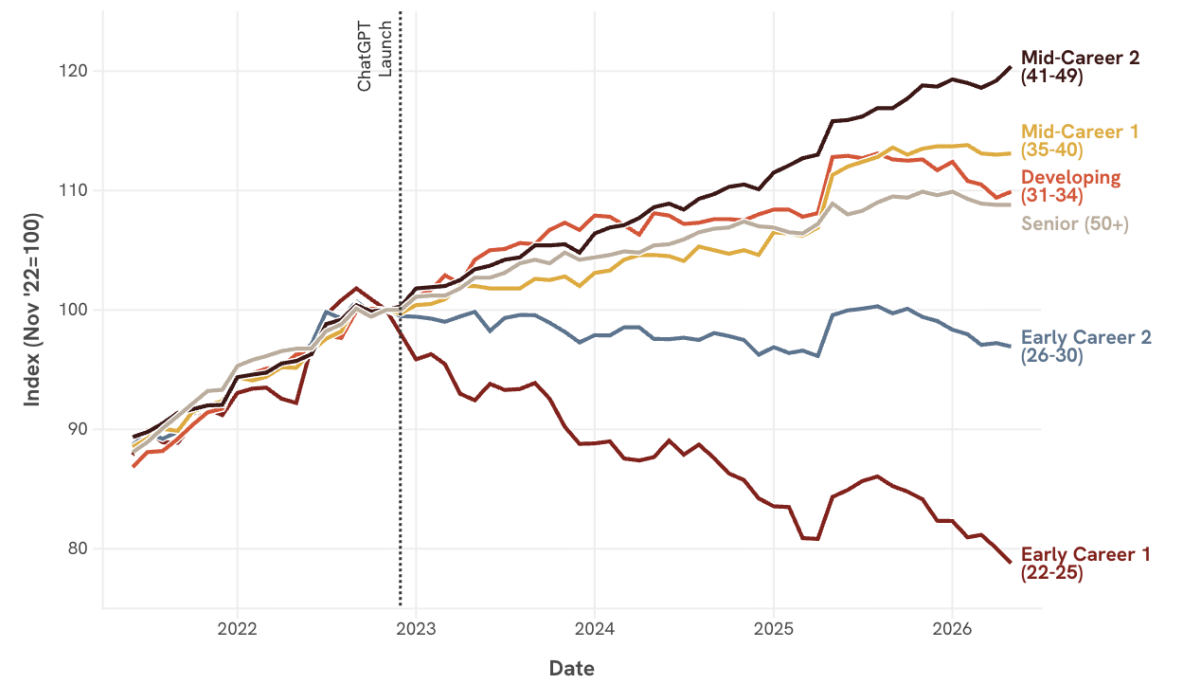
Total job growth and loss



Source: World Economic Forum, (2025), *Future of Jobs Report 2025*.

Software Developer Employment Index in Canaries Sample by Age Group ?

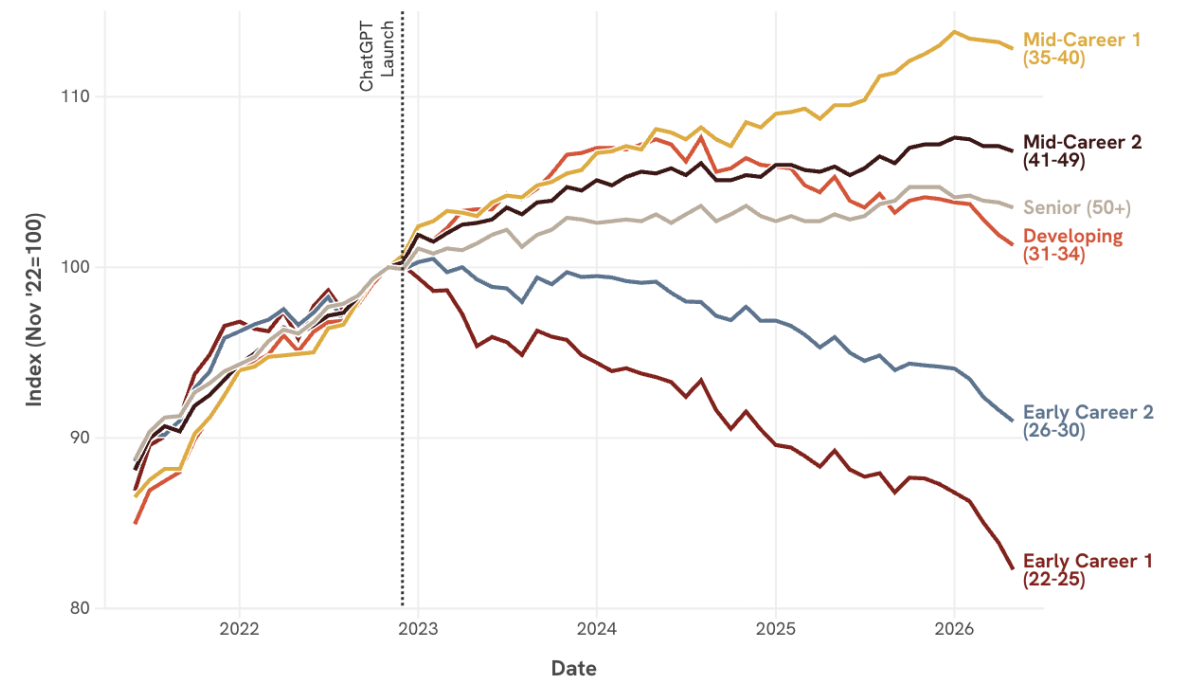
Software developers land in the most exposed occupations group. We see large declines for early-career workers (22-25), modest declines for the next-youngest groups, and expansion for the remaining age groups. Data



Source: [Stanford Digital Economy Lab](#), [ADP Research](#) • Results use a five-year balanced sample of firms using ADP payroll services and include all workers matched to an occupation code. Stanford Digital Economy Lab ADP Research

Customer Service Representative Employment Index in Canaries Sample by Age Group ?

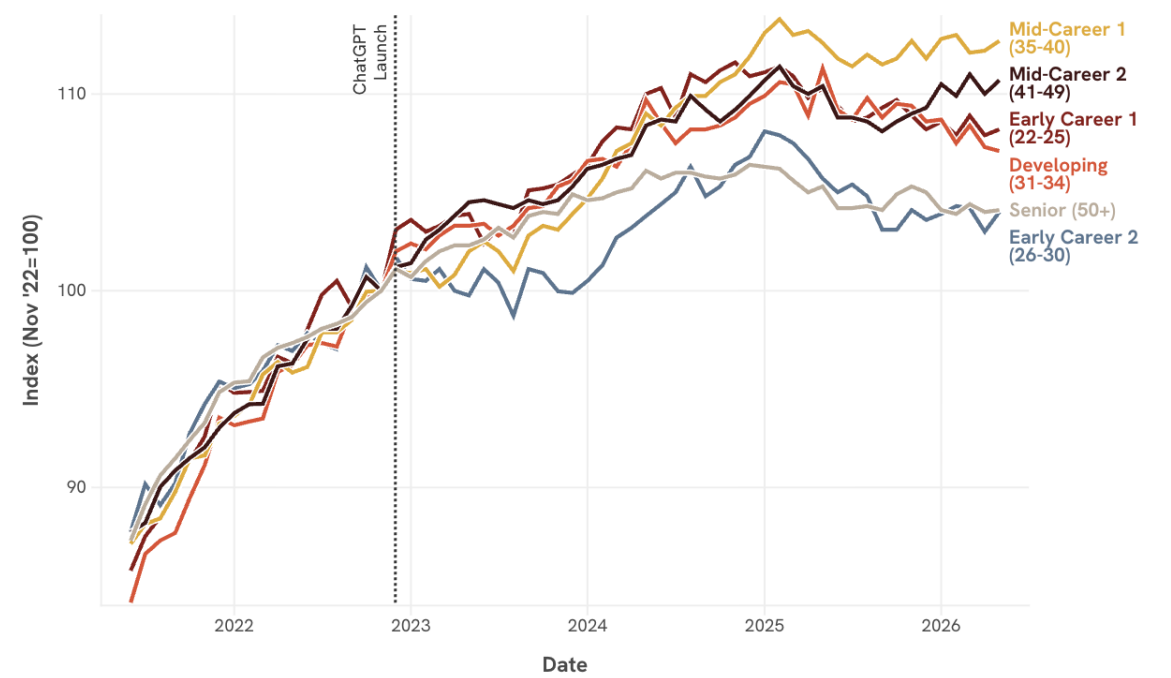
Customer service representatives are also assigned to the highest exposure group, and they indeed see similar trends to software developers: noticeable declines for the first two age groups, with expansion for the remaining age groups. Data



Source: [Stanford Digital Economy Lab](#), [ADP Research](#) • Results use a five-year balanced sample of firms using ADP payroll services and include all workers matched to an occupation code. Stanford Digital Economy Lab ADP Research

Stock Clerk Employment Index in Canaries Sample by Age Group ?

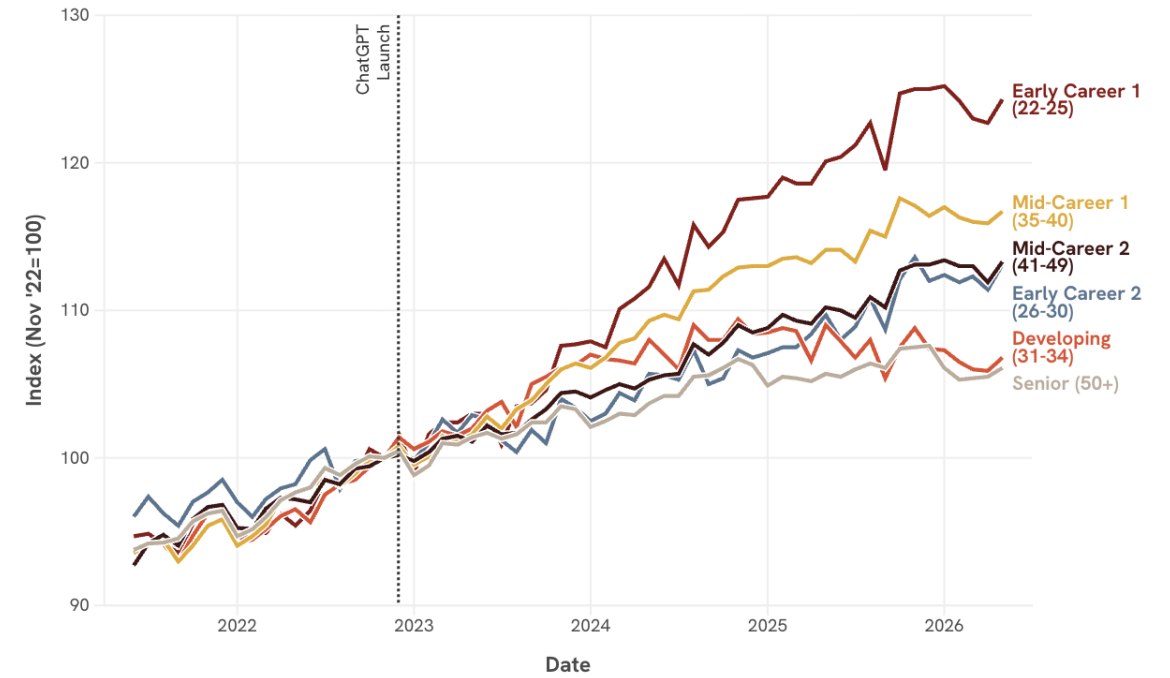
In contrast to software developers and customer service representatives, stock clerks fall in the second least exposed occupation group. There is little relationship between age and employment trends. Data



Source: [Stanford Digital Economy Lab](#), [ADP Research](#) • Results use a five-year balanced sample of firms using ADP payroll services and include all workers matched to an occupation code. Stanford Digital Economy Lab ADP Research

Home Health Aide Employment Index in Canaries Sample by Age Group ?

In contrast to software developers and customer service representatives, the relational and physical work of home health aides is minimally exposed to AI under most exposure frameworks: this cluster of occupations spans the least and second least exposed groups. Early-career workers (22-25) now see larger employment gains than the other age groups. Data



Source: [Stanford Digital Economy Lab](#), [ADP Research](#) • Results use a five-year balanced sample of firms using ADP payroll services and include all workers matched to an occupation code. Stanford Digital Economy Lab ADP Research

Local -Makarewa Datagrid facility

- \$3.5bn, 280MW facility - NZ's second-largest single electricity user after Tiwai Point, with *consented rights* to draw over 600,000 litres of groundwater a day (they prefer rainwater and cool ambient air).
- The Green Party has just called for a one-year moratorium on hyperscale consents pending national rules.

Empire of AI? Colonialism & Extraction

- Data
- Poor labour conditions
- energy and water from communities with no say
- capital that concentrates power in a handful of firms.

Pope Leo's Encyclical's frame is human dignity, not technophobia

- *Magnifica Humanitas* explicitly treats **AI as a tool** that is "far from morally neutral"
- warns against chatbots and automation ***exploiting people's need for human relationship***
- Warns against an "***eclipse of the sense of what it means to be human.***"
- **Employment**
- **Civilization of love?**
- **War & autonomous weapons systems**

Mana Motuhake

- Scraping of Te Reo
- Protecting Mātauranga Māori
- NZ government reliant on foreign- owned, located clouds (AWS, Microsoft Azure, Google Cloud)
- US trade deal – NZ biometric data

Developing benchmarks in artificial intelligence



Nov. 14, 2024, 9:08 p.m.

Te Hiku Media has created a dedicated Māori language benchmark for natural language processing (NLP) and speech recognition systems. In this episode of Haukāinga, we hear from Chief Operations Officer Suzanne Duncan about her paper, 'Fit For Our Purpose, Not Yours', which highlights how mainstream benchmarks do not meet Māori communities' needs, because they lack cultural relevance and fail to capture the distinct features of the Māori language.

Most NLP benchmarks are based on data from dominant languages, and the existing ones draw from sources like Wikipedia, which do not include important Māori concepts and terms, such as 'marae' and 'tangihanga', and do not reflect Māori language structures or cultural views. This disconnect means these tools do not work effectively.

Te Hiku Media developed a benchmark based on native speakers in their community, with additional benchmarks for speakers from Kura Kaupapa and adult second-language learners. This approach ensures the benchmark represents a wide range of speakers and that the tools will serve the entire community.

"It's our language, and we're not prepared to compromise anymore," Duncan says.

Duncan explains that the project is more than just building better language tools; it also empowers Indigenous communities to control their language benchmarks. Te Hiku Media hopes to set a model for other Indigenous communities to create language tools that reflect their unique languages and cultures, contributing to digital sovereignty and revitalising more Indigenous languages.

with them now with the direct photography.



anti-Māori ward billboards



Extension of Property Rights

- Who owns my image?
- What can it be used for?
- What about my biometrics? (nb US trade deal)

“There is no one who shuns the desire for peace, yet not everyone is willing to practice justice... But perform the works of justice, keeping in mind that justice and peace have embraced; they are not at odds with one another. Why do you set yourself against justice? Here, for example, is justice telling you not to steal, but you pay no heed; not to commit adultery, and you turn a deaf ear; not to do to others what you would not want done to yourself; not to say about your neighbour the things you would not want said about yourself... Do you therefore wish to attain peace? Then practice justice!” St Augustine



Kia ora

Melissa Clark-Reynolds
melissaclarkreynolds.com

melissa
CLARK-REYNOLDS