CULTURE BIAS: WHY UNLEARNING THE PAST COULD BE THE WAY FORWARD TO GLOBAL PEACE & SUSTAINABILITY. I. H. Mogosanu<sup>1</sup> & J. G. Blank<sup>2</sup>, <sup>1</sup>New Zealand Astrobiology Initiative (NZAI), Wellington NZ & Blue Marble Space Inst. Sci. (BMSIS), Wellington NZ (hari@bmsis.org), <sup>2</sup>NASA Ames Research Center & BMSIS, Moffett Field CA, USA

Introduction: The advent of the Anthropocene has brought with it unprecedented changes, which can be considered as opportunities, challenges, and threats. Some of them, such as climate change, rapid global transport of goods and people, and the ability to access information instantly through digital technology, are relatively new phenomena. The rate of change they introduce may be increasing exponentially. Transcending borders, geography and society, these changes are shaping our future, yet we rely predominantly on traditional instructions to observe and address them.. We call these instructions culture.

Culture – the sum of attitudes, customs, and beliefs that distinguishes one group of people from another – includes knowledge, belief, art, morals, law, custom, and social behaviors [1]. The epistemological definition of knowledge locates it at the intersection of belief and truth: knowledge is what we believe is true.

What if culture is just a set of ancient instructions collated and institutionalised by our ancestors in order to ensure the survival of their offsprings in a particular geographical location?

And what if in order to survive the future and create international security and spacefaring civilisations humankind will have to unlearn most of its past? This past is however ingrained in the way we interact with each other and across cultures.

Hypothesis: Once institutionalised, or accepted broadly within a community, culture becomes mostly fixed, and the origins of particular habits or customs may be forgotten. Striking examples of this are found in the starlore of civilisations across the world. For instance, the ancient starlore of Dacia (approximate territory of modern Romania) is populated with agricultural legends and normatives. The Dacians were indeed an agricultural civilisation. They used stars to create sidereal calendars to measure the passage of days; surviving the winter was the biggest challenge. The most observed celebrations were marking the middle of the winter, a landmark for calculating how to provision food until springtime. The Polynesian stories of the sky, on the other hand, support celestial navigation; the corresponding calendar (Maramataka), is exclusively lunar, measuring the tides and extrapolating from that the best days for navigation and other activities, because their biggest challenges were ocean voyages [2]. These two civilisations thus evolved differently. Another example is diet, which is a very important component of culture, that also evolved differently among cultures. Were the dietary restrictions of different cultures simply instructions on how to keep people alive (or healthy) in certain geographical locations? How are these relevant in the Anthropocene when people are free to choose their place of residence? And with regard to humankind becoming a spacefaring race, which part of the culture represents now obsolete pieces of information that might hinder rather than enhance the development of our new, global civilisation?

**Discussion**: It is hypothesised that our minds allow us to reach conclusion through use of projections, predictions of outcome based on knowledge or sense derived from memories. These interfere with our ability to see things without bias or detect major contradictions between expectations and what is actually present in the senses [3]. Humans also learn by adding new information to old patterns, creating so called mindsets [4]. In this presentation, we will consider how biases and mindsets are formed, and in turn influence culture, through analysis of the starlore of different cultures. We will highlight examples of cultural lessons that could be "unlearned". Creating a culture of peace and sustainability for humankind may require identification and understanding of redundant behaviours and making conscious space for new perspectives.

**References**: [1] Tylor (1871) Primitive culture: researches into the development of mythology, philosophy, religion, art, and custom; [2] Mogosanu (2012) Hidden Messages, NZ Astronomical Yearbook; [3] Blakeslee & Blakeslee (2007) The body has a mind of its own., [4] Heuer (1999) Psychology of Intelligence Analysis.



Figure 1. Polynesian versus Western navigation & starlore