

Skyscapes, Cosmology and Archaeology

Defining Skyscape

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Cultural Astronomy and Astrology

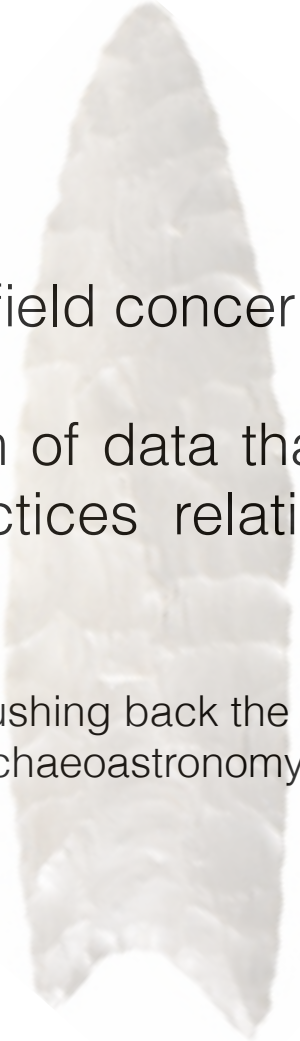


Cultural Astronomy and Astrology



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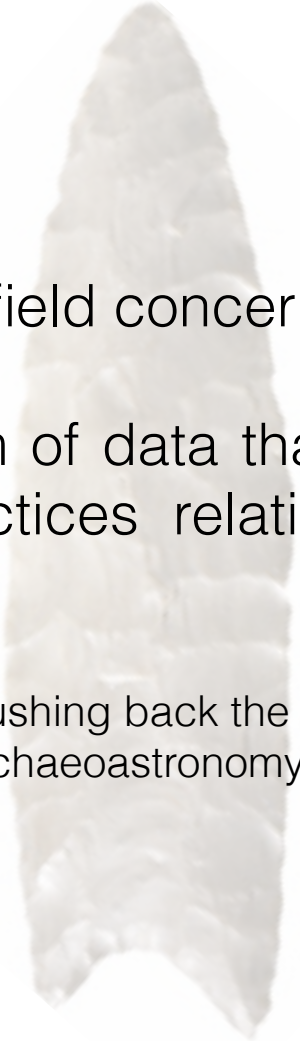




Archaeoastronomy is a field concerned with:

‘every conceivable form of data that might provide insights into thoughts and practices relating to astronomy in the past.’

— Clive Ruggles (2011) ‘Pushing back the frontiers or still running around the same circles? ‘Interpretative archaeoastronomy’ thirty years on.’ *Proceedings IAU Symposium 278*, p.1



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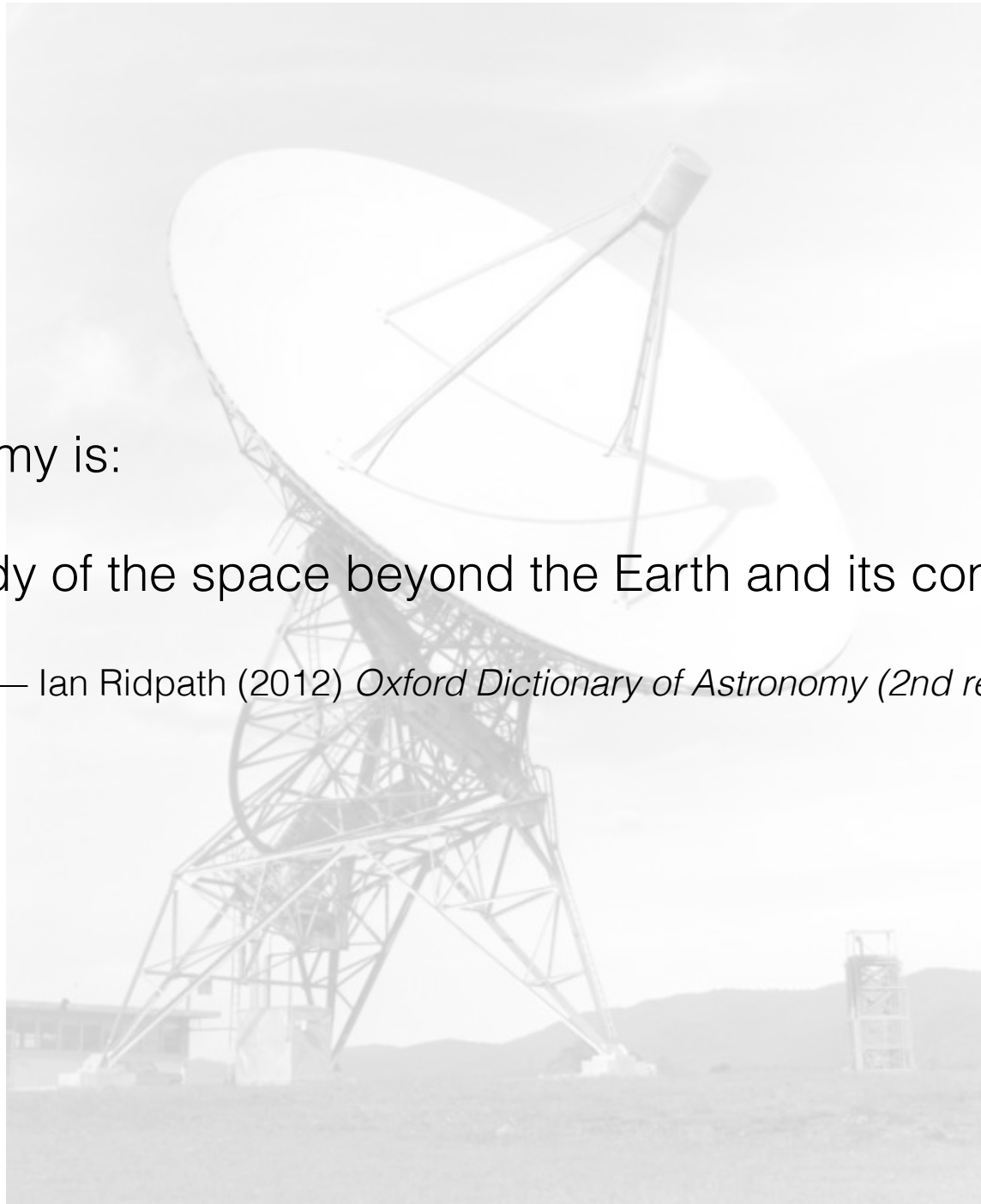
Can we talk of astronomy in the past? Of 'prehistoric astronomy', 'megalithic astronomy' or even 'archaeoastronomy'?

Is this influencing how archaeoastronomy (the discipline) is done? Is it influencing our theories and interpretations?

Astronomy is:

‘the study of the space beyond the Earth and its contents.’

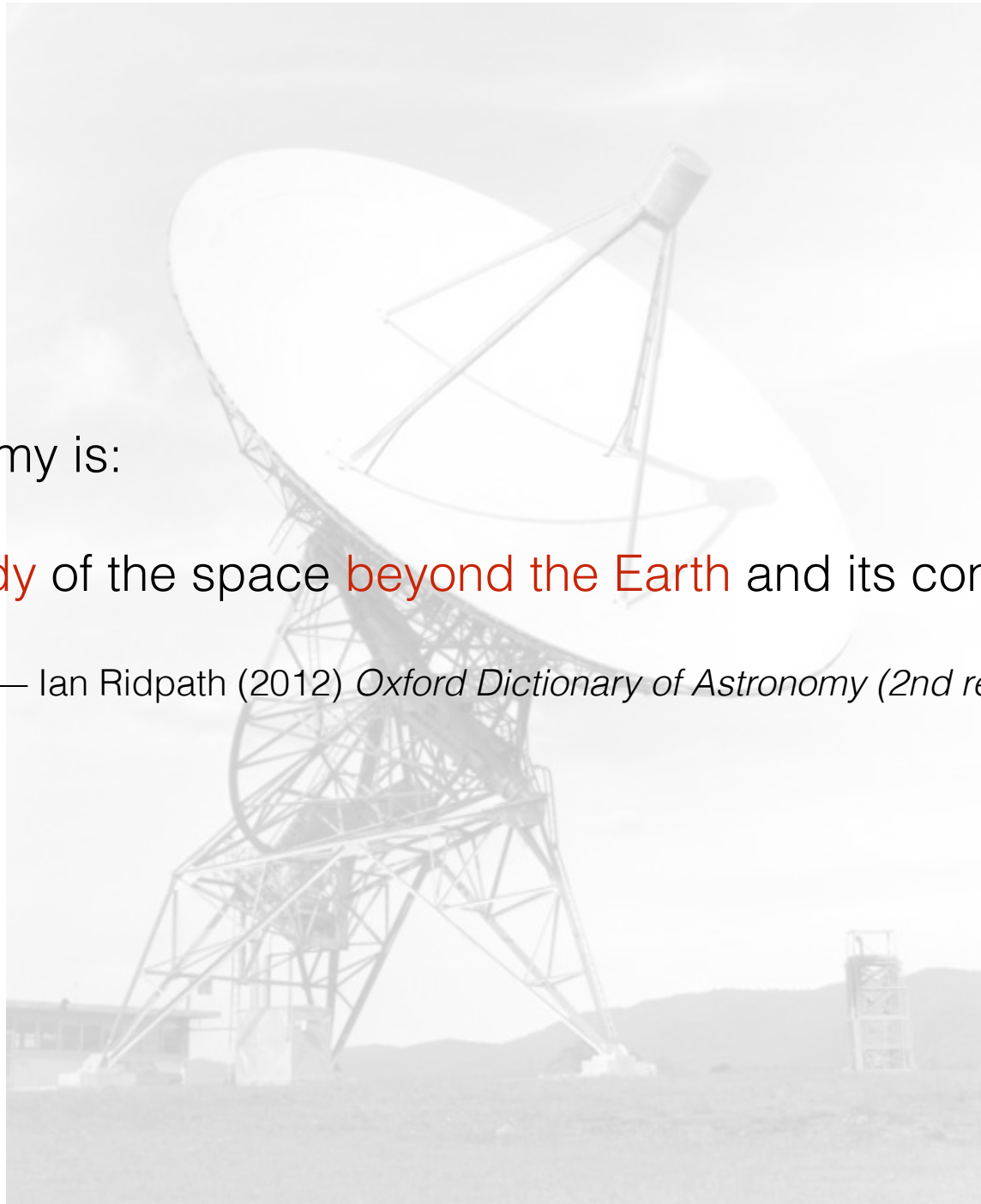
— Ian Ridpath (2012) *Oxford Dictionary of Astronomy* (2nd rev. ed), p.36



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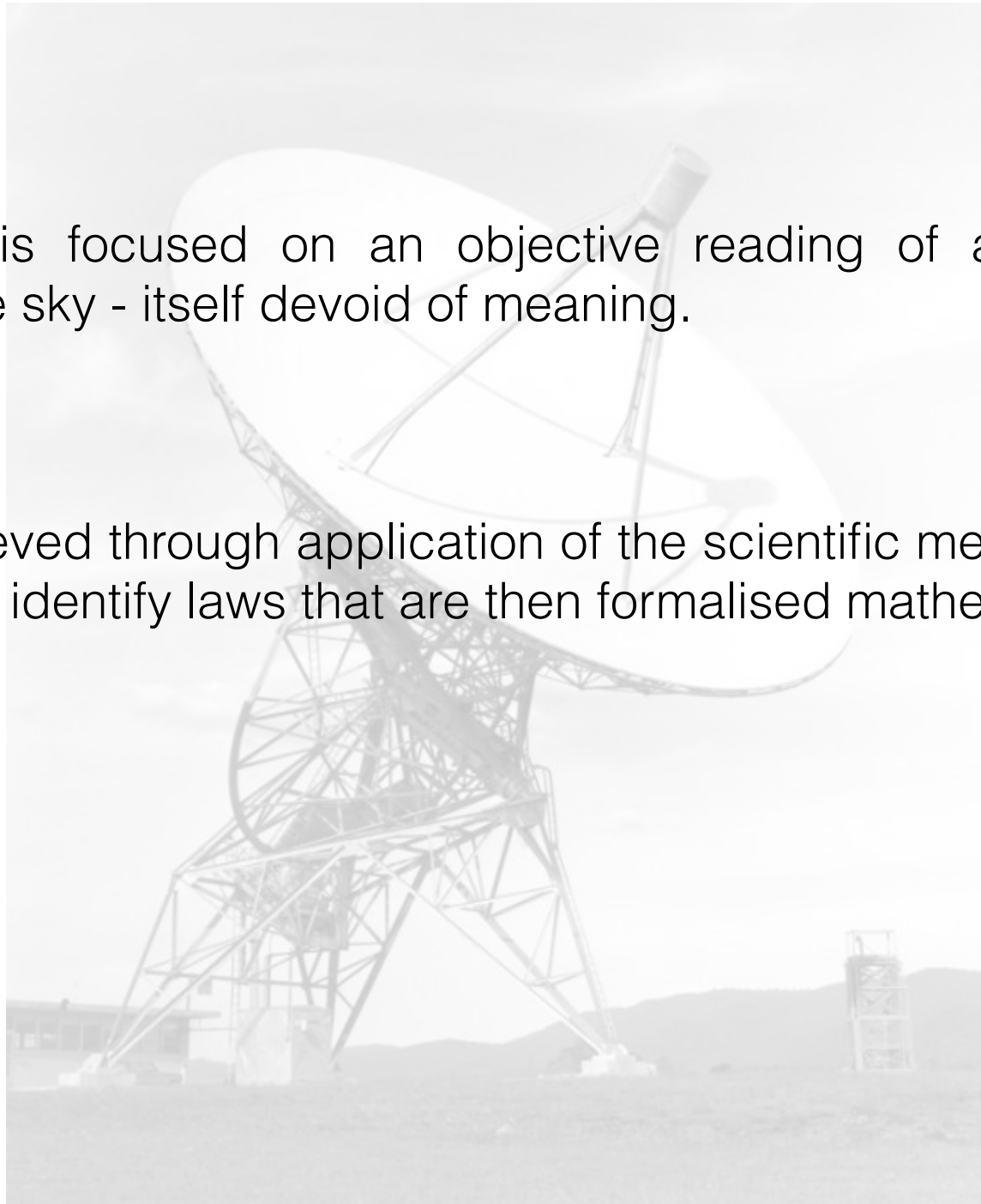
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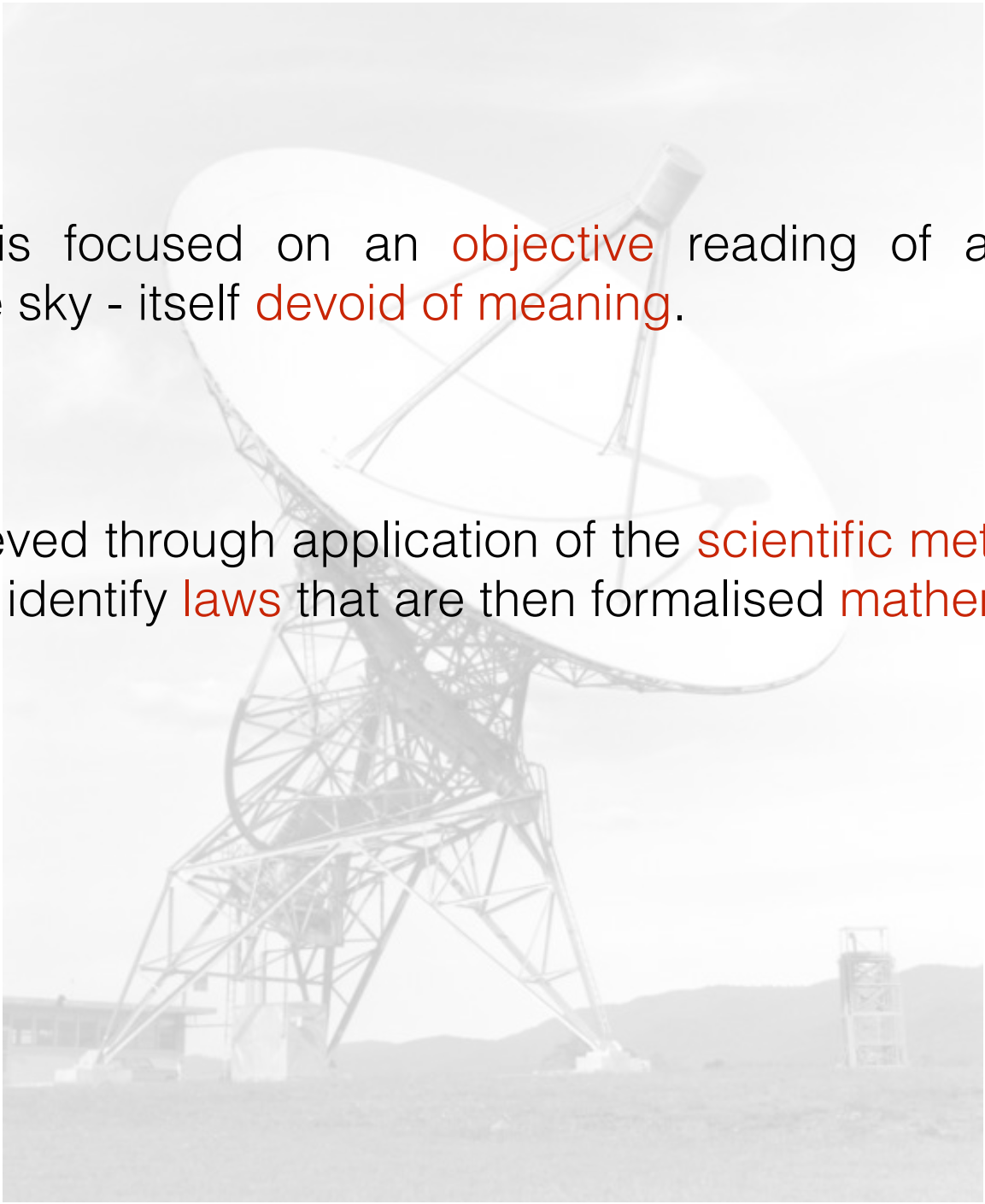
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Astronomy is focused on an objective reading of an external subject - the sky - itself devoid of meaning.

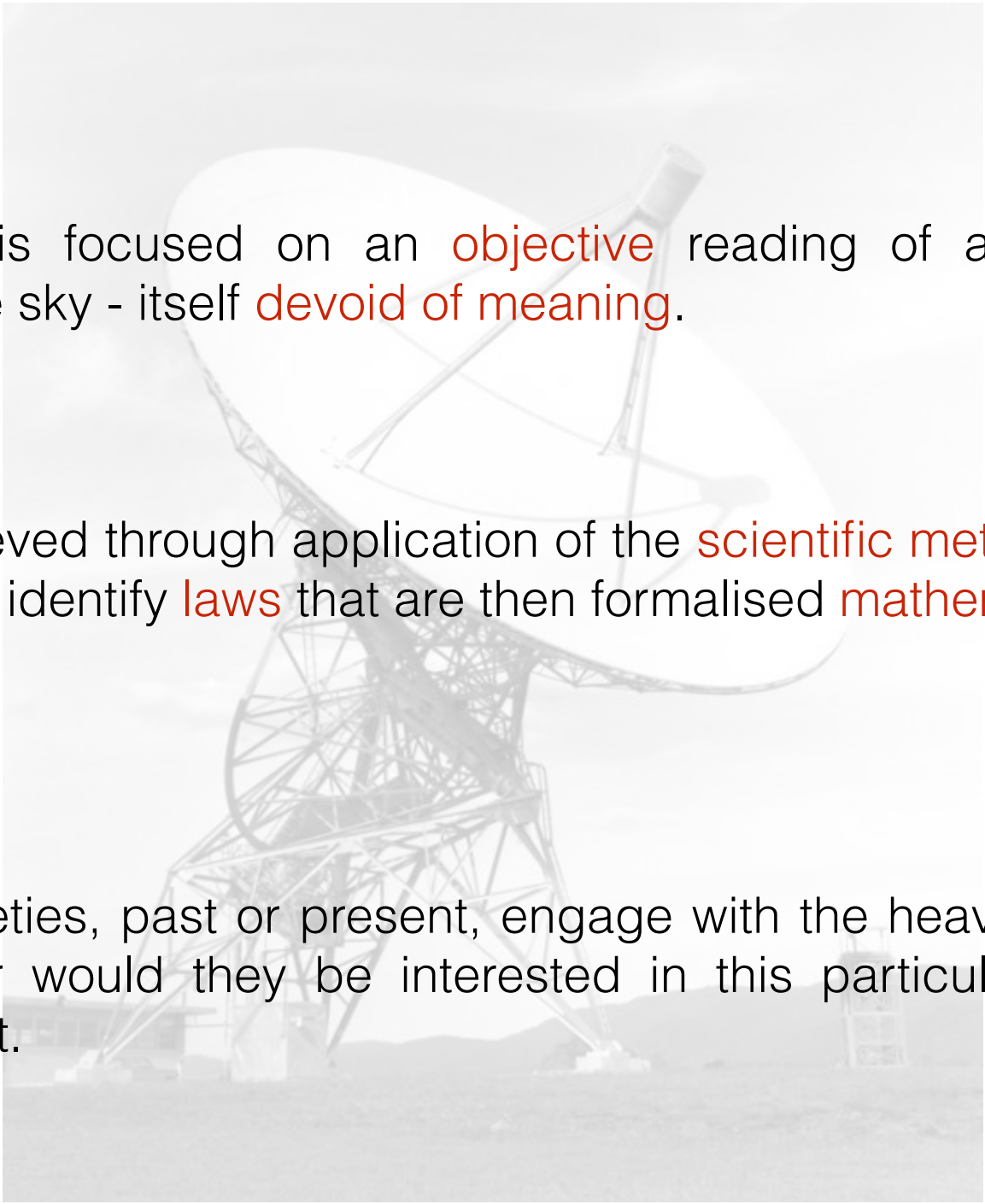
This is achieved through application of the scientific method alone, which helps identify laws that are then formalised mathematically.



A large radio telescope dish is shown in the background, mounted on a complex metal structure. The dish is white and curved, pointing towards the sky. The structure is made of dark metal beams and is situated on a grassy hillside. In the distance, there are more hills and a small building. The sky is clear and blue.

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This is achieved through application of the **scientific method** alone, which helps identify **laws** that are then formalised **mathematically**.

Not all societies, past or present, engage with the heavens in this manner, nor would they be interested in this particular form of engagement.

Contrast this with:

“There is no human society that does not somehow, in some way, relate its fears, concerns, hopes, and wishes to the sky ...”

— Nicholas Campion (2012) *Astrology and Cosmology in the World's Religions*. New York: New York University Press

For many societies “important celestial bodies are perceived as animate entities and their motions in the sky are described in terms of social relations [...]. Human societies often people their skies with supernaturals, ancestors or mythological heroes to whom they become related through family ties, mythological narratives, political alliances or power relationships.”

— Stanislaw Iwaniszewski (2011) The sky as a social field. *Proceedings IAU Symposium* 278, p.31

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Indeed, archaeoastronomy today is very much:

- mathematical
 - :: expositions are mathematical instead of experiential
- statistical
 - :: over-reliance on statistics, probability and patterns
- concerned with objective proof
 - :: as obtained via the use of statistics
- devoid of meaning
 - :: interpretations are shallow and hardly ever culturally contextualised

A background image of Stonehenge at sunset. The sun is low on the horizon, creating a bright orange and yellow glow. The silhouettes of the large stone structures are visible against the bright sky. The sun is positioned behind one of the stones, creating a lens flare effect.

- megalithic science

- :: science is the method of modern astronomy

- astronomer-priests

- :: astronomers are the professionals of modern astronomy

- prehistoric observatories

- :: observatories are the institutions of modern astronomers

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But what happens when we don't have (or know) *emic* terms, as in prehistory?



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But what happens when we don't have (or know) *emic* terms, as in prehistory?

A new term is needed, one that is **general** enough to encompass the **multiplicity of ways** people engage with the sky and the celestial objects.

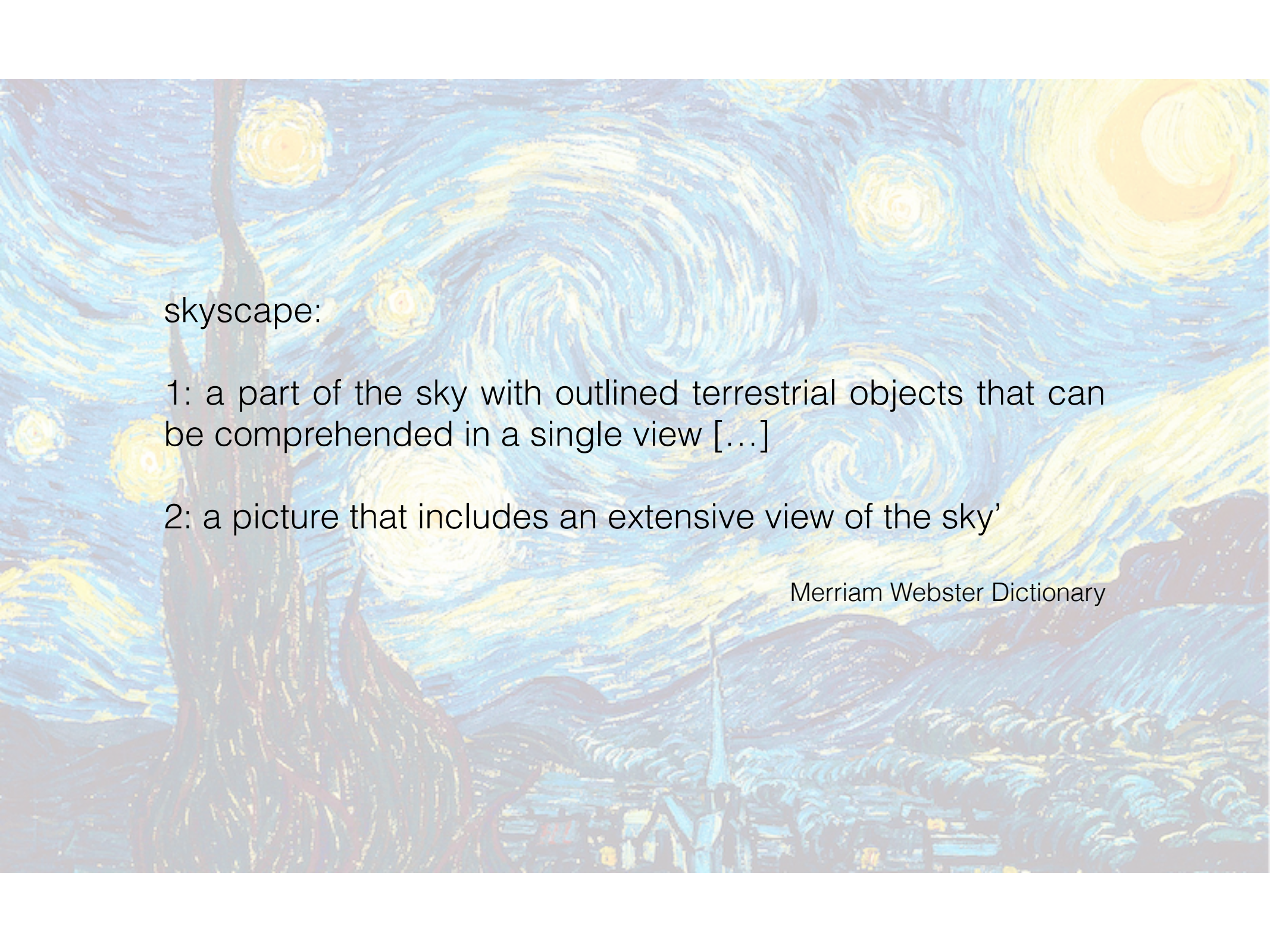
The aim should not be a simple relabelling, but to ensure that the field is permeated with:

- a stronger interest in **social** issues;
- **meaning** and **thick description**;
- **beliefs** and **practices**;
- methodological and theoretical **reflexivity**.

The background of the slide is a reproduction of the painting 'The Starry Night' by Vincent van Gogh. It features a swirling, turbulent sky in shades of blue and yellow, with a prominent cypress tree in the foreground on the left and a small village nestled in a valley below. The text is overlaid on the upper half of the painting.

Sophia Centre suggestion:

introducing **Skyscapes**

The background of the slide is a reproduction of the painting 'The Starry Night' by Vincent van Gogh. It features a swirling, turbulent sky in shades of blue and yellow, with a prominent crescent moon and several bright, glowing stars. Below the sky, a dark, silhouetted landscape is visible, including a large, gnarled tree on the left and a small village with a church spire in the distance.

skyscape:

1: a part of the sky with outlined terrestrial objects that can be comprehended in a single view [...]

2: a picture that includes an extensive view of the sky'

Merriam Webster Dictionary

The background of the slide is a reproduction of the painting 'The Starry Night' by Vincent van Gogh. It depicts a night scene with a turbulent, swirling sky in shades of blue and yellow, filled with bright, glowing stars and a large, luminous moon. In the foreground, a dark, silhouetted cypress tree stands on the left, and a small village with a church spire is visible in the distance under the vast, swirling sky.

What is a **Skyscape**?

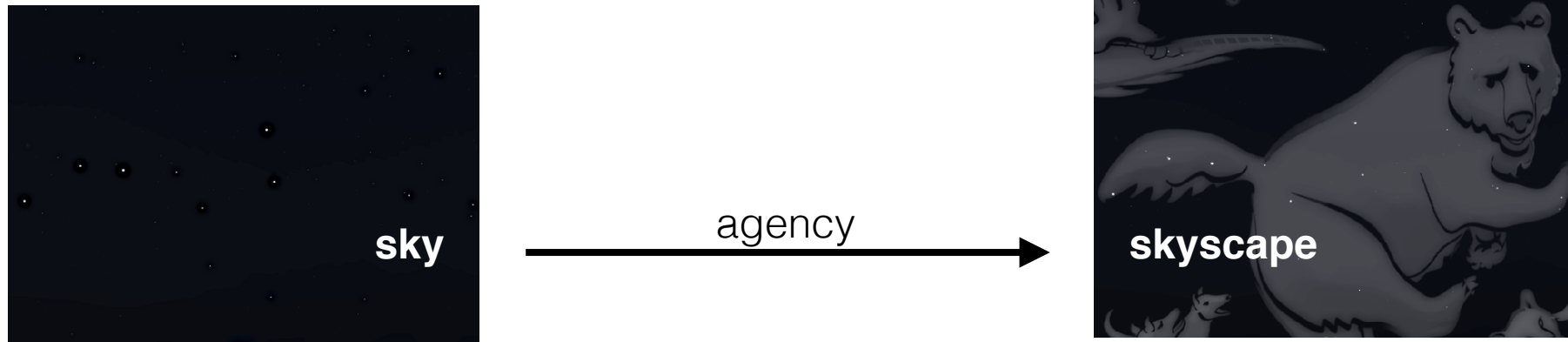
The background of the slide is a reproduction of the painting 'The Starry Night' by Vincent van Gogh. It features a turbulent, swirling night sky with a pale yellow moon and several bright, glowing stars. A dark, jagged silhouette of a cypress tree stands on the left, and a small village with a church spire is visible in the lower portion of the image.

What is a **Skyscape**?

‘skyscapes are indigenous conceptual frameworks that constitute a society’s understanding of the heavens and the celestial bodies and how they relate back down to human beliefs and practices, to their notions of time and place, to their structures and material remains.’

What is a Skyscape?

A skyscape is neither acultural, nor natural, nor anything else that doesn't involve agency.



Humans conceptualize skyscapes: they look up to the sky and derive or attach meaning to celestial objects; they correlate those objects with other aspects of social life; they create art to represent their own views of the celestial objects; they build monumental structures with alignments to them; they tell stories about them.

This is the view also expressed by Iwaniszewski (2011, p. 30) when he wrote that the 'sky is an aspect of the physical universe which is universally perceived by all humans, although **comprehended and structured in different ways**'; he simply didn't have a word for it yet.

What is a Skyscape?

Different societies 'see completely different skyscapes' even though they might see the same sky:



A skyscape would be **formed not only** of those constellations (in addition to other celestial objects), but **also of the socio-cultural elements** associated with them: stories and myths, agricultural or environmental cycles, art, structures that align with them, topographic features marking their risings and settings, etc.

The skyscape is meaning mapped into, or pre-existing in, the sky. Indeed, such a skyscape would be **part and parcel of a society's worldview**, of their cosmovision or cosmology, the part that specifically relates to the celestial objects.

What is a Skyscape?

There is a lot of good in this definition:

- (1) every society will have their **own version(s)** of a skyscape;
- (2) it highlights the **cultural, and therefore social, aspects** of the sky;
- (3) it puts **agency at the centre of the debate**, since it is through agency that skylscapes are constructed out of the 'raw material' of the sky.
- (4) it implies a level of **theoretical reflexivity**, as it demands that the scholar not only pay lip service to the socio-cultural context, but actually **attempts to contextualise any identified alignments or iconography of a celestial nature within the period and culture** – without this, one is not identifying a skyscape, but merely a celestial target of potential interest to that society.

What is a Skyscape?



Since its introduction in 2012 (2015 in print), some scholars have adopted the term to refer to either:

- the sky as part of the landscape,
- the union of sky and land,
- the intersection of sky and land (the horizon).

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Since its introduction in 2012 (2015 in print), some scholars have adopted the term to refer to either:

- the sky as part of the landscape,
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This is counter-productive and reductionist.

Not all societies conceive of the heavens in this way. To adopt one of these definitions we either bring new biases to our research, or lose generality of application.

Furthermore, where is the much needed reflexivity and thick description in these definitions? These definitions don't necessarily imply an engagement with the social aspects of culture.

What is a Skyscape?

Nevertheless, such a view of the skyscape betrays a lack of engagement with the **‘ontological turn’** that has been taking the humanities by storm.

This issue is endemic to all of cultural astronomy: our terminology, methods and interpretations all work under a **Cartesian substantivist ontology**, wherein reality is composed of a **single world (one nature), but many worldviews (many cultures)**, as Tim Darvill highlighted in his afterword to *Skyscapes*.

This is yet another western imposition, albeit one that operates at much deeper levels. We should therefore seek to reframe skyscape in a way that, at the very least, acknowledges that other societies can have different ontologies.

The Ontological Turn

Bruno Latour (1993) noted that the humanities in general, and anthropology in particular, have been concerned with **questions of knowledge**, of how societies arrive at and apply their views of reality, rather than **acknowledging indigenous thoughts for what they are: theories of reality, or ontologies**.

As Viveiros de Castro put it ‘the native’s discourse speaks about something else besides just the native, that is, his society and mind: it speaks about the world’ (2015, 53). This might seem like a subtle difference, but it has immense repercussions for anthropology. If ‘we are to take others seriously, **instead of reducing their articulations to mere “cultural perspectives” or “beliefs” (i.e. “worldviews”)**, we can conceive them as enunciations of different “worlds” or “natures”, without having to concede that this is just shorthand for “worldviews”’ (Henare et al 2007, 10).

As Henare et al put it, ‘if cultures render different appearances of reality, it follows that one of them is special and better than all the others [... and] that special culture is, well, ours’ (2007, 11). This ‘**wholesale conversion of ontological questions into epistemological ones**’ (Alberti 2016, 165), therefore, trivializes the ontological commitments of other societies, making them appear wrong, often explicitly, but always implicitly.

The Ontological Turn

The observations of the key scholars just mentioned, and many others who followed on their footsteps, have effected what has been described as an 'ontological turn' in the humanities. **Specifically within archaeology, some consider this a follow-up to post-processualism, others as a clean break.** Alberti (2016) provides a very recent, very thorough review of the various ways in which this turn has affected archaeology.

A key outcome of the ontological turn has been to question the ability of western ontology to explain reality, not only in general, but specifically, to explain the reality of other societies (Viveiros de Castro 2015, 293-4).

Western thought puts a strong focus on **Cartesian substantivist ontology**: the belief that reality is composed of two forms of substance, extended matter and unextended thought. It is this prime dichotomy that is behind the nature/culture split. Nature is constituted of matter, which is physical and can be studied objectively by the natural sciences. On the other hand, culture is seen to be composed of thoughts, themselves intangible and subjective, and their study is relegated to the humanities.

But culture can, and is, also expressed materially, as many anthropologists and archaeologists have been suggesting for a while (e.g. Henare et al 2007).

The Ontological Turn

Alternatives to such a substantivist ontology, which have been gaining credibility from both philosophical and anthropological corners, are the **relational ontologies**.

These theories of reality **put the focus not on substance but on the relations** established by the different things, regardless of whether they are composed of matter or thought. In other words, what makes a wrench a tool is not its substance – i.e. its material, shape and size – but the fact that it establishes a relation with us characteristic of a tool. The same substance, however, can establish a very different type of relation with a different society, say a prehistoric one, for which the wrench could be conceived as simply a blunt weapon, or a paperweight.

Since in a relational ontology the substance of things is not of primary importance, non-humans can establish relations with humans, among themselves, or with other non-humans, similar to the (social) relation humans establish among themselves. This lies at the core of the **“new” animism, where agency and personhood are extended to non-human things**. As Graham Harvey famously put it, ‘the world is full of persons, only some of whom are human’ (Harvey 2005, xi).

Animism demonstrates how blurred the nature/culture line really is and it provides, more than any other anthropological material, ‘models of relationality for archaeologists to interpret material patterning in the archaeological record’ (Alberti 2016, 170-171).

The Ontological Turn

So, how do we approach skylscapes ontologically?

Viveiros de Castro suggests that we must start with **treating indigenous ideas as concepts**, and follow through 'on the consequences of such a decision' (2015, 17). By concepts, the anthropologist here means that they are not evidence that non-western societies think differently, but that the content of their thinking is different, and that, therefore, the worlds they describe are different from ours.

Things are as much concepts as they appear to us as physical objects. They don't disclose themselves as perceptions but as conceptions (Henare et al 2007, 14), and therefore our experience of them can only be conceptual. Henare et al propose a return to things - the great promise of phenomenology, reconceptualised as an ontological enterprise. It is therefore in the things themselves that we should seek those other worlds, so alien to ours.

Because they are concepts, and hence intellectual, **they can only be tapped by conceiving them, that is by thinking them into being.** Our mission therefore is not 'trying to determine how other people think about the world [... but] how we must think in order to conceive a world the way they do' (Henare et al 2007, 15). **The relation between the scholar, and his world, and the society she studies, and its worlds, cannot be neglected or ignored.**

The Ontological Skyscape?

We can finally begin to conceive of an ontological definition of skyscape (work in progress)

A skyscape is a bundle of **things** about that part of a society's world(s) that **we** would refer to as the sky. We could refer to such *things* as celestial, as indeed we would, but we should bear in mind they are concepts. As concepts they are not bound by the constraints of our physical universe: they can have agency, they can see themselves as human, they reach out and touch other such *things*, celestial and non-celestial, establishing relations with them, creating a relational network, meshwork or entanglement.

The reference to *us*, or to *our* notion of *celestial* is **a constant reminder of the differing ontologies of the analyst and the analysed** - something often referred to as alterity. It acts as an *aide-mémoire* to the need for reflexivity which, as Alberti (2016, 174) put it, is part and parcel of what it means to be ontological.

Hence, the identification of the target of a structural alignment is nothing but the identification of a celestial object **for us**. It doesn't constitute engagement with the skyscape, in the ontological sense, for **it does not begin to conceive of the indigenous skyscape**. To be ontological, demands that we acknowledge and explore that alterity, for it is the fact that such a society establishes a social relation between the "celestial" *things* and their built environment, itself composed of other *things*, which separates our detached, objective world to those of the society who built the structure.

The Ontological Skyscape?

A point to bear in mind is that such **a skyscape is a construction for *us*, not necessarily for *them***. This ontological definition brings that to the fore, since the skyscape is just a bundle of concepts (where other bundles are possible!).

Therefore, as usual here, we need to constantly remind ourselves that a skyscape is a useful tool *for us*, since we are interested in a specific subject-matter, but *for the other* the world might not be so boxable.

Nevertheless, the celestial objects, as we call them, are **useful transcontextual referents** which we need in order to convey our own research to colleagues and the general public.

This is, therefore, a translation process between two ontological realities, *ours* and that of *the other* (the society that we are studying). But, unlike Iwanisewski's view that 'in order to adequately evaluate non-Western celestial lore we need to describe it in terms that are understandable to us' (2011, 30), to be ontological demands rather that we accept that a 'good translation is one that allows the alien concepts to deform and subvert the translator's conceptual toolbox so that the intention of the original language can be expressed within the new one' (Viveiros de Castro 2015, 58-59, emphasis original).

In Conclusion

In today's (very long, full of text) lecture we have:

- discussed the baggage carried by the anachronistic usage of *astronomy* to non-western societies;
- introduced the need for a theoretical rift that highlights the socio-cultural context of any form of engagement with the heavens, as well as the need for methodological and theoretical reflexivity;
- introduced a new term - *skyscapes* - and discussed 3 definitions for it:
 - a cultural one;
 - a sky + land one;
 - an ontological one (still in development).

The take-home message is simply that we **need to be reflexive**, to think about the biases and baggage that we carry to our research (whether it is the anachronistic usage of certain terms, or our own cosmological and ontological assumptions) **and we need to contextualize** our results and interpretations.

Without these two elements one cannot say one is doing **skyscape archaeology** (or other forms of skyscape research).



A handfuls of references on The Ontological Turn

Latour, Bruno 1993. *We Have Never Been Modern*. Cambridge, Mass.: Harvard University Press.

Viveiros de Castro, Eduardo 2015. *The Relative Native: Essays on Indigenous Conceptual Worlds*. Chicago: Has Books.

Henare et al 2007. *Thinking Through Things: Theorising artefacts ethnographically*. London: Routledge

Alberti, Benjamin 2016. Archaeologies of Ontology. *Annual Reviews of Anthropology* 45: 163-179. Available online: <http://dx.doi.org/10.1146/annurev-anthro-102215-095858>

Harvey, Graham 2005. *Animism: Respecting the Living World*. Kent Town, Aus: Wakefield Press