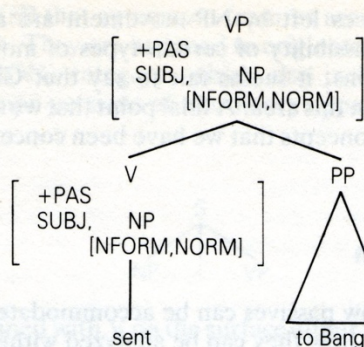


## ESSAY :

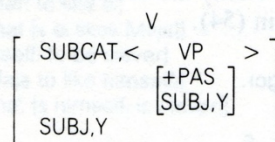
Is science the only reliable way to understand the world?

(56)



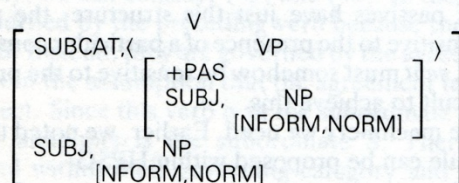
All we need, then, is some way of ensuring that the higher VP [SUBJ, NP[NFORM, NORM]]. We can do this by assigning *was* to the following category:

(57)



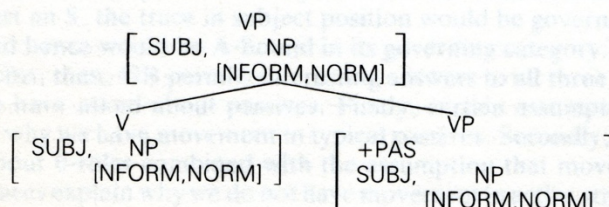
The important point about this category is that the SUBJ feature with value of SUBCAT has a variable as its value and the main SUBJ feature has the same variable as its value. When *was* appears in a tree, the Subcategorization Principle will ensure that the category within the SUBCAT list is identical to the complement and hence that it has the same value for SUBJ complement. In the present case, this means that the variable will be instantiated as NP[NFORM, NORM]. Since we have the same variable as the value of the main SUBJ feature, this too must be instantiated as NP[NFORM, NORM]. Hence, we will have the following category in the tree:

(58)



If *was* is [SUBJ, NP[NFORM, NORM]], the head-complement rule will ensure that the higher VP is as well. Hence, we will have the following structure in the middle of the tree:

(59)



If it's green it's biology, if it stinks it's chemistry, and if it doesn't work it's physics. 😏

# Scientists say the chicken came first - but they're just eggheads

The 'which came first' conundrum has been solved at last. Or has it?

- William Skidelsky , *The Observer*, Sunday 18 July 2010

Last week, it was claimed that one of the oldest conundrums known to man had been laid to rest, when scientists at the universities of Sheffield and Warwick announced they'd found evidence that the chicken really did come before the egg. A study into how chicken eggs are formed discovered that a protein found in the chicken's ovaries, ovocledidin-17, is vital for shell production. According to the researchers, this means the chicken must have come first.

Is there anything more to this than an entertaining news story? Perhaps not because, as one of the scientists involved in the study conceded, there were other types of egg-laying species that pre-dated chickens, and these didn't necessarily produce their eggs the same way. Just because a hen is needed to produce a chicken egg, this doesn't mean a dinosaur egg couldn't once have existed without a tyrannosaurus. Besides, the theory of evolution has long since rendered the chicken-egg dilemma something of a non-mystery anyway: once you allow species adaption to enter the equation, it is fairly straightforward to see how a new egg-laying species might come about.

Yet the fact that the puzzle, understood literally, is a non-mystery doesn't really matter, because its true significance has always been more metaphorical than scientific. As the ancient philosophers who first formulated it understood, it was a way of pointing to the mystery of first causes – of what created the universe, and how that entity might have come into being. And the puzzle remains useful today as a shorthand for any type of situation in life where causes can't be disentangled.

For instance, many people might reasonably ask: "Is my life a mess because I am unhappy, or am I unhappy because my life is a mess?" Where such uncertainties remain, we'll always have recourse to the chicken-and-egg conundrum, whatever the latest scientific research says. (335 words)

~~Science explains the world because~~

~~It can also explain the world because~~

~~Moreover, science helps us understand the world because~~

$\neq$

True, science isn't always reliable

But science play does play a major part in our understanding of the world

However, it is not the only one

**Useful quote :** “Science never solves a problem without creating ten more” (George Bernard Shaw)

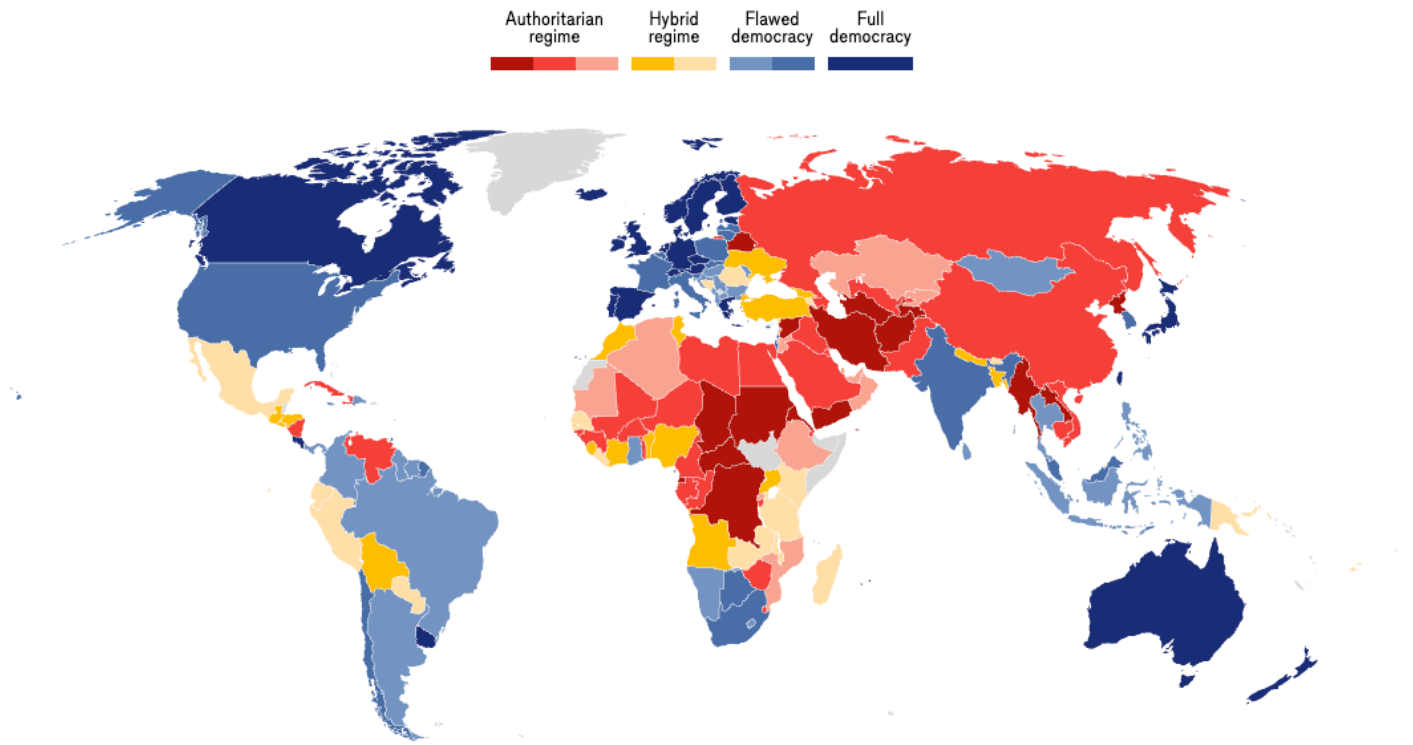
## **VISUAL DOCUMENTS:**

- Describe the document
- Explain what it means
- Critique/Analyze/Comment on the document









Global Democracy Index, The Economist, February 2025

<https://www.economist.com/interactive/democracy-index-2024>