James Watson:

“Scientists and doctors are the people who are going to do the miracles of the future, let the lame walk, stop the cancers, restore sight. It’s all sort of within our vision. So I don’t worry, you know, that some people say we are ‘playing God’. But that’s an awfully good thing to do because people are looking for gods to do good things”

Leon Kass:

“Just as we must do battle with antimodern fanaticism and barbaric disregard for human life, we must avoid runaway scientism and the utopian project to remake humankind in the image of our choosing”
<table>
<thead>
<tr>
<th>“There is purpose, then, in what is, and in what happens in Nature.”</th>
<th>“Absolutely no human reason ... can hope to understand the production of even a blade of grass by mere mechanical causes.”</th>
<th>“We can allow satellites, planets, suns, universe, nay whole systems of universe[s], to be governed by laws, but the smallest insect, we wish to be created at once by special agent.”</th>
<th>“The time may hereafter arrive, in far distant years, when the population of the earth shall be kept as strictly within the bounds of numbers and suitability of race, as the sheep on a well-ordered moor or plants in an orchard-house”</th>
<th>“The science of life can be established only through experiment, and we can save living beings from death only after sacrificing others.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aristotle</td>
<td>Kant</td>
<td>Darwin</td>
<td>Galton</td>
<td>Bernard</td>
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</tbody>
</table>
“There is purpose, then, in what is, and in what happens in Nature.”

“Absolutely no human reason … can hope to understand the production of even a blade of grass by mere mechanical causes.”

“By now there exists an almost total consensus of informed minds that the essence of life can be explained by the same laws of physics and chemistry that have helped us understand, for example, why apples fall to the ground and why the moon does not, or why water is transformed into gaseous vapor when its boiling point is exceeded.”

“There are people [who] say, well, we’re playing god. And, you know, I have a straightforward answer: if we don’t play god, who will?”
Ancient Greece

Thomas Cole, *Dream of Arcadia* (1838)
Herodotus

Depiction of Herodotus from the late-fifteenth-century *Nuremberg Chronicles*, one of the earliest printed books in Europe
Raphael’s School of Athens (1509-11)
Democritus

As one of the leading Atomists, Democritus believed that everything was made up of indestructible and indivisible atoms. Change in the world resulted from the aggregation and disaggregation of these atoms. In this vision, reality is a lifeless piece of machinery and everything is the result of the unbreakable necessity.

Image from the *Nuremberg Chronicles*
Teleology / n.
Explanation of phenomena by the purpose they serve.

Aristotle (384 BC - 322 BC)
“There is purpose, then, in what is, and in what happens in Nature.”

Aristotle (384 BC - 322 BC)
Aristotle’s Cosmos
Teleology
Explanation of phenomena by the purpose they serve.
Teleology
Explanation of phenomena by the purpose they serve.

“Nature adapts the organ to the function, and not the function to the organ.”
— Aristotle, *De partibus animalium* (Concerning the Parts of Animals)
When Aristotle wrote:

“There is purpose, then, in what is, and in what happens in Nature”

He Did **NOT** mean

“All things happen for a reason,” much less “All things happen to serve the good.”
Where's the Purpose?
Where’s the Purpose?
WHERE'S THE PURPOSE?

DO YOU THINK THERE'S A GOD?

WELL, SOMEBODY'S OUT TO GET ME.
Where's the Purpose?

God at His computer
The rain does not fall so that crops might grow
When Aristotle wrote:

“There is purpose, then, in what is, and in what happens in Nature”

He Did **NOT** mean

“Everything happens for a reason,” much less “Everything happens to serve the good.”
The Roman Empire