

A Sudden Change of Light

Joshua Land

“For my thoughts are not your thoughts, neither are your ways my ways,” declares the LORD. “For as the heavens are higher than the earth, so are my ways higher than your ways and my thoughts than your thoughts.” —Isaiah 55:8-9

The prophet Joel speaks of a great invasion of locusts coming upon God’s people. In the first chapter, writing in the past tense, he details a vision of fields stripped bare, vines dried up, and days of famine and mourning. The vision is unmistakably one of divine judgment, God’s just response to human wickedness. (Indeed, the locusts pointedly echo one of the 12 plagues on Egypt recounted in the book of Exodus, manifestations of God’s wrath against Pharaoh for holding the people of Israel in captivity.) The invasion continues in the second chapter, which switches to the imperfect tense and replaces the locusts with a human army, a ruthlessly efficient force with the Garden of Eden before it and nothing but barren

wilderness in its wake. The scene is now one of apocalypse: “The earth quakes before them; the heavens tremble/The sun and the moon are darkened, and the stars withdraw their shining.”

But then Joel takes an unexpected turn. The prophet now calls his audience to repentance and proclaims a future day of restoration and prosperity. Curiously, the apocalyptic imagery does not disappear, but rather becomes subject to a new tone, as if a *sudden change in light* had transformed the book’s eschatological vision from an oracle of doom to a prophecy of salvation: “And it shall come to pass afterward that I will pour out my Spirit on all flesh; your sons and your daughters shall prophesy, your old men shall dream dreams, and your young men will see visions...”

What could be the reason for this apparent change of the divine heart, this unexpected convergence of justice and mercy? And what should one make of the martial images that precede it? Does Joel depict a literal foreign invasion, or is the army here merely a hypothetical one, some trick of the Hebrew imperfect tense, some evanescent vision fallen into the cracks between divine predestination and human reality? Or perhaps the prophet’s words could be intended as a metaphor for human sin, for the wanton destruction of God’s created order. Such are the challenges that await the interpreter of Joel.

Regardless, the locusts have had their say.

* * *

$$e^{ix} = \cos x + i \sin x$$

The preceding equation, known as Euler's formula, was discovered by the Swiss mathematician Leonhard Euler during the 18th century. For the less mathematically inclined among us, e refers to the base of the natural logarithmic function, \cos and \sin are the trigonometric functions cosine and sine, and i is an imaginary number defined as the square root of -1. x is a variable with a value of any real number. The formula can therefore be understood as depicting a relationship between two major branches of mathematics: trigonometry and analysis, with the concept of imaginary numbers serving as the bridge between the two. Or to put it another way, the formula connects the two parts of Figure 1 (opposite).

One immediately notices the contrast between the elegant (some would say *erotic*) curvature of the natural exponential (e^x) and logarithmic ($\ln x$) functions and the fixed, angular character of the triangle,¹ which remains encumbered by the demands of its own implacable Pythagorean logic, even as the e^x and \ln curves move freely toward infinity.² One must ask oneself, How can this be? What could possibly lie behind this mathematically predestined juxtaposition, *this mysterious convergence of forms*? What hidden logic dictates that there be any relationship between logarithms and triangles at all? (To say nothing of imaginary numbers!) Surely we are entitled to an explanation.

But of course, there's no questioning the math.

¹ Yes, I'm well aware that the sine and cosine functions can also be represented as curved lines, but this fact is not relevant to the present discussion and should be ignored.

² As my calculus professor once said, the \ln function is the one to take if you want to go to infinity *but take your time getting there*.

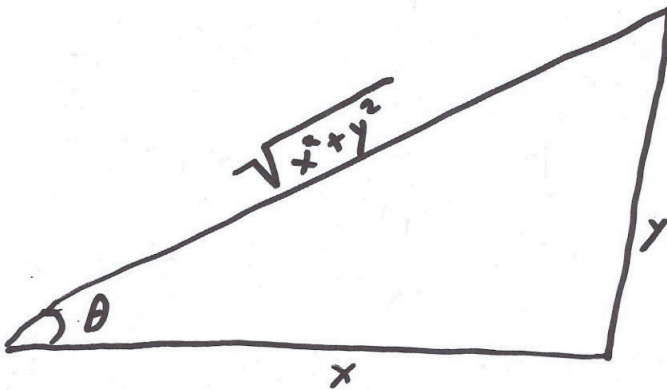
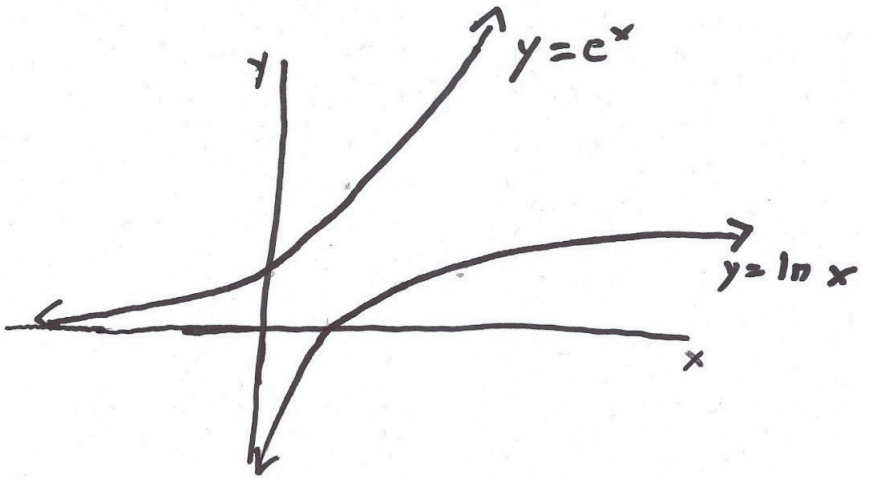


Fig. 1

* * *

Yet even now ...

He was no one in particular, a man like any other. By age 30, he'd grown weary of human beings and their folly and chosen to withdraw to a quiet place to pursue a life of contemplation. That is, to seek a new epistemology, an equation that would link together the variables of his existence.

Rising early one morning, well before dawn, he walks in dark trees, making his way through the darkness step by somnolent step, with only the faint scent of saltwater as a guide.

Fully awake now, finally, he looks back at the trampled weeds and dead branches behind him, illuminated by the first light of the rising sun.

The rest is commentary, vain nibblings at understanding.

A moment of total silence, and then a still, small voice:

I will restore to you the years that the swarming locust has eaten.