

All of these metrics . . . have severe shortcomings . . .
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Ever since Galileo discovered the stars of Jupiter and Isaac Newton watched an apple fall from a tree, our world has been planned, constructed, managed and monitored by mathematics – as a more valid method than speculation or imagination would allow. This has come to the fore when, during the current pandemic, numbers, rates, percentages fill the media while calculus projects what our future will be.

Charles Dickens was much aware of this transformation of modern culture when he wrote his novel *Hard Times* – and he wasn't happy about it. In this novel Thomas Gradgrind represents the champion of this new "validity". Dickens describes him as *a man of facts and calculations. A man who proceeds upon the principle that two and two make four, and nothing over, and who is not to be talked into allowing for anything over . . . With a rule and a pair of scales, and the multiplication table always in his pocket . . . ready to weigh and measure any parcel of human nature and tell you exactly what it comes to. It is a mere question of figures, a case of simple arithmetic.*

In a classroom he singles out a girl (whom he calls "girl number twenty") and asks her to define a horse. She knows a lot about horses, being the daughter of a circus horse trainer. But the word "define" baffles her. So Gradgrind calls on a teacher's pet to do so and he recites: *"Quadruped . . . Forty teeth, namely, twenty-four grinders, four eye-teeth, and twelve incisive . . . Age known by marks in mouth."* Thus (and much more . . . "Now, girl number twenty," says Mr. Gradgrind, "You know what a horse is."

Gradgrind runs his own household accordingly – to be correct – and so his daughter Louisa is put under this regimen into her early adult years – when one day she falls apart and confronts her father (and for Dickens she could be the voice of modern civilization): *"Father, you have trained me from my cradle . . . I curse the hour in which I was born to such a destiny . . . How could you give me life, and take from me all the inappreciable things that raise it from the state of conscious death? Where are the graces of my soul? Where are the sentiments of my heart? What have you done, oh, Father, what have you done, with the garden that should have blossomed once, in this great wilderness here?" She struck with both her hands upon her bosom.*

Of course that's quite a charge to lay upon Gradgrind's creed of mathematics – for math in the context of other human qualities is a gift that makes us human as well. But Dickens had hard feelings about the direction modern science and technology was moving. And it would take a book – as it has already many times – to detail the damage as much as the benefits that have derived from what we call progress.

But Jesus says in today's Gospel: *I will not leave you orphans; deprived of wonder. I will not leave you to be confronted by a landscape gone barren for want of love as much as reason. I will send you a Paraclete, the silent but eloquent voice of God's Spirit to be with you – to give you voice (as the Spirit gave Louisa a voice) to remind us of the depths from which all things have emerged – holy, not to be profaned.*

Geoff Wood