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We may not be able to read our destiny in the cards, but we can foretell future events by playing with mathematical symbols: mathematics has *predictive* powers vis-à-vis our experience of reality. There are good evidences that mathematics is also *heuristically* relevant in science; that is, that we can find out how the world works by means of mathematical manipulations, independently of *observing* how it works. For the most part, mathematics is created without much attention to how the world is; the world, on the other hand, is what it is independently of our mathematical creations. How, then, is it possible that mathematics has *anything* to say about the world, let alone disclosing its innermost secrets? Often, great mysteries are born out of great prejudices or *idées reçues* that go either unquestioned or unnoticed. This is a case in point. The belief, so ingrained in us so as to pass for established truth, that the empirical world exists "out there", in itself, *given* ready-made as an object of inquiry, and that mathematics, a creation of man, *just happens* to be our best instrument to investigate it must be called into question if the usefulness of mathematics as a tool to explore physical reality ceases to be a mystery or a gateway to the mystic.

Since the usefulness of man-made mathematics in natural science is an unquestionable fact, one must consider with suspicion the belief that physical reality is something that we simply stumble upon *ready-made*. I propose an alternative view: nature, *as conceived by the empirical sciences*, is an *intentional construct*, a *mathematical* surrogate of perceptual reality devised for methodological purposes. This view, advanced most notably by the philosopher Edmund Husserl in his last published work *The Crisis of European Sciences and Transcendental Phenomenology*, but embraced by important physicists such as Hermann Weyl (who studied with Husserl), offers a natural, simple and historically well-founded naturalist solution for the problem of the applicability of mathematics in science (by "naturalist" I mean a solution that does not give man a privileged position in the natural scheme of things). Mathematics is applicable in science because the object of science is *not* reality as *perceived*, but reality as *conceived* – and only indirectly, via a relation of *approximation*, perceptual reality –, and our scientific *conception* of physical reality is mathematical through and through. From this perspective the mystery of the applicability of mathematics in science utterly vanishes, becoming nothing but an instance of the applicability of mathematics into mathematics itself, a much less momentous phenomenon (which however raises interesting logical questions).