Corollarial Reasoning

It now appears that there are two kinds of deductive reasoning, which might, perhaps, be called explicatory and ampliative. However, the latter term might be misunderstood; for no mathematical reasoning is what would be commonly understood by ampliative, although much of it is not what is commonly understood as explicative. It is better to resort to new words to express new ideas. All readers of mathematics must have felt the great difference between corollaries and major theorems, although these words are not sharply distinguished. It is needless to say that the words come to us, not from Euclid, but from the editions of Euclid’s elements. The great body of the propositions called corollaries (all but 27 in the whole 13 books) are due to commentators, and are of an obvious kind. Kant’s characterization of all deductive reasoning is true of them: they are mere explications of what is implied in previous results. The same is true of a good many of Euclid’s own theorems; probably the numerical majority of the whole 369 of them are of this character. But many are of a different nature. We may call the two kinds of deduction corollarial and theorematic.


References: NEM 4:1

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