

# Fermat to Clerselier

Sunday, March 3, 1658

SIR,

I received your letter<sup>1</sup> with the two copies of the writings of M. Descartes on the subject of our old quarrel.

I would very much like, Sir, to satisfy you punctually in your desire that I remake my earlier responses which are lost;<sup>2</sup> but since I naturally hate anything that is in the least offensive to the truth, and since it would be as difficult for me to straighten up this old work as it would be for a painter to remake an earlier portrait of me using my present face, I thought it were better to write you a new letter containing my reasons for opposition, both old and new, and that is what I will be working on for the next eight days.<sup>3</sup>

I agree with you regarding the printing;<sup>4</sup> it will be necessary to change the more offensive and sour terms, but otherwise to make no great change, and that I leave to you. Monsieur de Carcavi will no doubt provide you with my treatise *on maxima and minima*; he has it in any case, that is both with and without demonstrations, and since it is a question of instructing or disabusing the public, it would be good to insert in your collection a letter of M. Milon or some other of your famous geometers who would clarify the thing and who prepares readers to understand the last letter of M. Descartes,<sup>5</sup> in which he wrote (as you will see) that he was satisfied with my geometry.

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<sup>1</sup>Now lost.

<sup>2</sup>At this time, Clerselier was compiling the collected works of Descartes for publication, and had asked Fermat for assistance with some of the letters. Fermat misinterpreted Clerselier's request, believing that the original letters from Fermat to Descartes had been lost, and that Clerselier was asking Fermat to rewrite the letters.

<sup>3</sup>See the next letter to Clerselier – Mar. 10, 1658.

<sup>4</sup>It was Clerselier who arranged the publication of the works of Descartes.

<sup>5</sup>Descartes to Fermat, July 27, 1638.

On the question of Dioptrics, I must protest to you, without any feint, that I hope I am wrong; but no matter how I look at it, I can only convince myself that the reasoning of M. Descartes is a demonstration, or nearly so.<sup>6</sup> In eight days I will send you a letter which will clarify all my doubts on this matter. And I am with all my heart, Sir, Your very humble and very obedient servant,

FERMAT.

Toulouse, 3<sup>rd</sup> of March, 1658

I have postponed this letter, which has been ready to send to you since last week, since I believed that M. Digby, through whom I took the liberty to write you, will no longer be returning to Paris. You will therefore receive the two together, and, if the second is a little too long, rest assured, Sir, that I took pains to shorten it, and that I could have said much more than I have. I will add to it one day, if the geometers of Paris support the demonstration of M. Descartes.

By looking at the responses that M. Descartes made to me, it will not be difficult for you to divine what I had said to him, and my next letter will contain just about that.<sup>7</sup>

Please send me your writings when you would like; I am not in a rush.

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<sup>6</sup>“Demonstration” had a different connotation at the time, implying that Descartes simply demonstrated that his conclusion resulted from his assumptions, without being true.

<sup>7</sup>That is, his next letter (of March 10), will be an attempted rewriting of his original argument to Descartes.