

8th September, 1951.

My dear Horace,

You might like to have the reference to Sade's publication of 1948, namely "Énumération des Carrés latins. Application au 7<sup>e</sup> ordre. Conjecture pour les ordres supérieurs." Chez l'auteur, 14 Bd. du Jardin Zoologique, Marseille. Imprimerie du Pharo, 31, Rue Charras, Marseille.

His paper is quite opaque to me. On the other hand, the statement that his new square establishes a new domain is mistaken if I am right in asserting, as you will perhaps be able to verify, that your number 17, if transformed by the interchange in rows 3 and 4 of the contents of columns 1, 2, 6, comes to be one of Sade's set. The actual transformation procedure is easiest from the other side, i.e. starting with

A	B	C	D	E	F	G
B	A	E	F	G	D	C
C	F	D	G	B	E	A
D	G	A	E	C	B	F
E	C	G	A	F	D	B
F	D	E	C	A	G	B
G	B	F	D	A	C	E

~~the~~ D E F in the first and third rows.

It is to me a little surprising that the new total 16942080 contains  $2^{13}$  as a factor. There must presumably be some reason for this which involves the aggregate numbers in ~~sets~~<sup>sets</sup> of several different species.

*interchanging*

I hope you will write a note about all this.

Yours sincerely,

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