

## Addendum to "The lattice variety $\mathbf{D} \circ \mathbf{D}$ "

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In our paper, this Journal, vol. 51 (1987), pp. 73–80, the Corollary to Theorem 4 in Section 3 (referred to in the Introduction) was inadvertently left out.

*Corollary.* Let  $P$  be a set of odd prime numbers. Let  $\mathbf{M}_P$  denote the set of all modular lattices not containing any finite projective geometry over  $GF(p)$  as a sublattice where  $p \in P$ . Then  $\mathbf{M}_P$  is a lattice variety closed under gluing. There are continuumly many distinct varieties of the form  $\mathbf{M}_P$ . Thus, there are continuumly many lattice varieties  $\mathbf{V}$  such that  $\mathbf{V} \circ \mathbf{D}$  is a variety.

*Proof.* R. Freese (see reference [1] in our paper) proved that, in the class of modular lattices, any finite projective geometry over  $GF(p)$  is projective. It follows immediately, that  $\mathbf{M}_P$  is a variety, and  $\mathbf{M}_P$  obviously determines  $P$ .

$\mathbf{M}_P$  is closed under gluing. Indeed, if  $L$  is formed by gluing  $A \in \mathbf{M}_P$  and  $B \in \mathbf{M}_P$  over  $S$  ( $S$  is a dual ideal of  $A$ , and an ideal of  $B$ ) and  $L$  contains the finite projective geometry  $G$ , then we can assume that the zero,  $0$ , of  $G$  is in  $A - B$  while the unit,  $1$ , of  $G$  is in  $B - A$ . If two of the atoms of  $G$  are in  $B$ , then so is their meet,  $0$ , a contradiction. So all but one of the atoms of  $G$  must be in  $A$ , and then so is their join,  $1$  a contradiction. Thus  $\mathbf{M}_P$  is a lattice variety closed under gluing, and by Theorem 4 of our paper,  $\mathbf{M}_P \circ \mathbf{D}$  is a variety. This completes the proof of the Corollary.

We would like to point out a misprint: in Section 4 (p. 80), "Theorem 4" should read "Theorem 5".

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