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# Corrigendum:

# On the relation of a distributive lattice to its lattice of ideals

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There are errors in my paper [1], Lemma 1 and from the end of Lemma 4 to the end of the paper.

LEMMA 1. *If $L$ is any finite lattice and $L$ has a point which is both join and meet reducible then $L$ is not weakly transferable.*

We replace Lemma 5 by the following sequence.

Let $a \in L$ be fixed of maximal height such that $\sum(J_a\psi) < \prod(M_a\psi)$ .

LEMMA 5. *If $H = \{x : x \nleq a\}$ , then*

$$\sum(J_a\psi) + \prod(H\psi) = \prod(M_a\psi) .$$

*Let $J(L)$ be the collection of join irreducibles of $L$ .*

LEMMA 6. *There is a $\psi_1' : J(L) \to L^*$ such that:*

(1) *$\psi_1'$ is order preserving;*

(2) *$x\psi \le x\psi_1' \in x\phi$ ;*

(3) *if $x \le a$ , then $x\psi_1' \le a\psi$ ;*

(4) *if $z \nleq a$ and $x \le z$ , then $x\psi_1' \le z\psi$ ;*

(5) *$\sum(J_a\psi_1') = \prod(M_a\psi)$ .*

THEOREM 3. *Let $L$ and $L^*$ be as before. If $L$ can be embedded in*

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*$T(L^*)$ then $L$ can be embedded in $L^*$.*

REMARK. The Theorem follows since Lemmas 5 and 6 allow us to obtain a new meet isomorphism $\psi_1$ such that

$$\sum(J_a\psi_1) = \prod(M_a\psi_1)$$

Further, this isomorphism has one less failure whose height is that of $a$ than did $\psi$.

## Reference

[1] Herbert S. Gaskill, "On the relation of a distributive lattice to its lattice of ideals", *Bull. Austral. Math. Soc.* 7 (1972), 377-385.

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