

## A RARE ACCIDENT

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Notwithstanding the great efforts made during the past decade to explore the domain of modal systems between S4 and S5, it may not be very unusual that new systems are continually discovered. Neither may it be extraordinary that one such new system is discovered independently by two different authors. It seems however, to be a rare accident, indeed, if two authors independently discover one and the same system by means of different proper axioms and each decides to give his system one and the same name.

In [3], I had considered among others a new modal system which results from appending to S4 the following substitution instance of the proper axiom, **L1**, of S4.04:

$$\mathbf{L1.2} \quad (Lp \supset Lq) \supset (LML(Lp \supset Lq) \supset L(Lp \supset Lq)).$$

In view of the deductive relations existing between this system and the remaining systems between S4.4 and S4, I came to designate it 'S4.03'. About half a year after the submission of my paper to this Journal, I learned to my surprise, upon studying the July 1977 issue, that the very same name had meanwhile been used by G. N. Georgacarakos in [1] to designate the (equally new) system which results from appending to S4 the following weakening of the proper axiom, **F1**, of S4.3.2:

$$\mathbf{I1} \quad L(Lp \supset q) \vee (LMLq \supset p).$$

The aim of this note is to show that Georgacarakos' S4.03 and my S4.03 are one and the same system.

The following straightforward derivation shows that, in the field of S4, **L1.2** inferentially entails **I1**:

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|--|-------------|
| (1) $LMLq \supset LMLLq$   | S4°         |
| (2) $LMLLq \supset LML(Lp \supset Lq)$   | S2°         |
| (3) $\neg p \supset (Lp \supset Lq)$   | S1          |
| (4) $\neg(LMLq \supset p) \supset (LML(Lp \supset Lq) \wedge (Lp \supset Lq))$ | (1)-(3), PC |