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April 8, 1996

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Dear Peter Wakker and Peter Fishburn:

Thank you for the reprint of your beautiful article "The ...Independence... for Preferences" and for Peter Wakker's kind note.

My own sensitivity to "independence" was because in non-stochastic preference I was always against it. So my nose always smelled something special whenever it was nominated to me. In the stochastic context, I was overeager to resent it and never listened to Dalkey as carefully as I should have. Savage, and not Friedman-Savage, shook my dogmatism. Von Neumann and the other guy I considered a backward progress. I found "Johnnie"'s unwillingness to deign to discuss the issue unadmirable. I was confident (*over* confident?) that Malinvaud would find the catch he did find.

After all in 1950 I showed that

$$(p_1x_1 + p_2x_2)^{1/2} (p_1x_1^{-1} + p_2x_2^{-1})^{-1/2}$$

the Ysidro function (F.Y. Edgeworth's middle name) was reasonable but could never be put into the *associative mean* form

$$f^{-1}[p_1f(x_1) + p_2f(x_2)]$$

Actually, I rediscovered the concept of the associative mean and submitted an article on it to the *Bulletin* of the Math Society. A gentle referee said, "Good stuff, but already in Nagumo, Kolmogoroff, and Hardy-Littlewood-Polya." The way of the autodidact is hard!

Georgescu-Roegen, in the *Southern Economic Journal* c. 1952 gave topological conditions that implied those of Debreu (1960) but which held for $n=2$ as well as for $n \geq 3$. Later in connection with duality theory, Houthakker and I separately invented some old and new wheels; *threeness* and *twoness* made for some differences if memory serves. My sporadic sorties into

Known before
in web theory

Drs. Peter Wakker and Peter Fishburn
Page 2
10 April 1996

axiomatizing thermodynamics deduced *conservation of energy* from Aczel-type associative-mean observable tests.

Science is always the work of a committee -- like the truly beautiful camel of Darwin-Wallace.

Appreciatively,



Paul A. Samuelson