The book contains both the statistical basis and particular topics of the macroscopic theory of irreversible processes. The first part includes the appropriate averaging procedures and the effects of microscopic symmetries. In the second part a wide range of transport processes is treated. [The *SCI*® indicates that this book has been cited over 1,350 times since 1962.]

S.R. de Groot
Institute of Theoretical Physics
University of Amsterdam
Valckenierstraat 65
1018 XE Amsterdam
The Netherlands

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"Thinking about this work, I am inclined to see it as a link in a chain of scientific and personal development which I like to call: *'from micro to macrophysics.'*

"My first book, *L'effet* Sorer.,[1] contained the macroscopic theory of thermal diffusion, done in Amsterdam. Then I moved to Paris, where I made calculations on betaand gammarays, including angular effects, as observed in the emission by oriented nuclei. Later, in Utrecht, I started studying nonequilibrium processes. This resulted in my monograph: *Thermodynamics of Irreversible Processes.*[2]

"Then, together with a number of coworkers, in Utrecht, and later in Leyden, the study of irreversible processes was further diversified. This led finally to the book commented upon here. The *principles* include the derivation of L. Onsager's[3] (macroscopic) ic) property of time reversal invariance, stimulated by H.B.G. Casimir's[4] work and by critical remarks of E.P. Wigner.[5] Moreover, the (macroscopic) P. Curieprinciple was derived from the (microscopic) crystal symmetries. Furthermore, the 'entropy production' was evaluated. The statistical foundations are kinetic theory, fluctuation theory, stochastic laws, and causality conditions. The *applications* refer to transport phenomena, including electromagnetic, chemical, and acoustical processes. Perhaps the reason why the work is cited frequently resides in the fact that we tried to be comprehensive and original in the proofs, although we were in part influenced by predecessors such as J. Meixner[6-8] and I. Prigogine.[9] P. Mazur of Leyden, with his school, developed further the general treatments, such as fluctuation theory, in their widest sense.

"I myself, after having moved to Amsterdam, enhanced on the *trio:* (a) microtheory, (b) from micro to macrotheory, (c) macrotheory. This triplet led first to a monograph, *The Maxwell Equations;*[10] culminated in a book with L.G. Suttorp, *Foundations of Electrodynamics;*[11] and ended with *La Transformation de Weyl et la Fonction de Wigner.*[12] The same threelevel setup characterizes still other work, originated from a defiant remark of C.E. Uhlenbeck ('Can you still prove Onsager relations in relativity, where time plays its refined role?'). This led to many papers on relativistic transport processes and finally to a book with W.A. van Leeuwen and Ch. G. van Weert: *Relativistic Kinetic Theory. Principles and Applications.*[13] It contains an explanation by W.P.H. de Boer, L.J van den Horn, and myself[1,4] of the separation of matter and antimatter in the primordial (first ten seconds of the universe) neutrino gas, the latter studied as incited by T.D. Lee and M. Ruderman."

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