



PUBLIC HEALTH

Scientific reductionism and social control of mind. Part I

Leonardo Viniegra Velázquez

Unidad de Investigación en Medicina Basada en Evidencias, Edificio de Hemato-Oncología e Investigación, Hospital Infantil de México Federico Gómez, Mexico City, Mexico

Received 21 April 2014; accepted 22 May 2014

Abstract The first part of this essay starts from the conventional premise of reductionism, which states 'the whole is nothing more than the sum of its parts'. According to scientific reductionism (SR), knowledge of the complex can only be achieved through simpler components, which means complex systems are explained by reduction to its most basic parts. Three kinds of SR are defined: ontological, theoretical and methodological. SR origins dwell within the efforts made by early humans to understand natural phenomena and its importance to survival. According to E. Morin, the reason behind SR being the favorite approach in science comes from the dysjunction, reduction, simplification and exclusion paradigm. The holistic approach as opposed to SR studies vital phenomena from the idea of complexity.

From this perspective, not only does SR have almost no relevance in the solution of humanity's greatest problems like society inequality, human dignity and environmental degradation, it also contributes to maintain the statu quo.

© 2014 Hospital Infantil de México Federico Gómez. Published by Masson Doyma México S.A. All rights reserved.

El reduccionismo científico y el control de las conciencias. Parte I

Resumen En esta primera entrega acerca del reduccionismo científico (RC) se parte de una definición convencional: «el todo no es más que la suma de las partes». El RC en las ciencias de la vida sostiene que el conocimiento de lo complejo debe ser, obligadamente, a través de sus componentes más simples, o que un sistema complejo solamente puede explicarse por medio de la reducción hasta sus partes fundamentales. Se distinguen tres tipos de reduccionismo: ontológico, teórico y metodológico. Los orígenes del RC se remontan a los primeros humanos en sus intentos de entender los sucesos naturales más influyentes y perturbadores para la su-

