

Title: On the Nature of Open Systems and Open-Systems Theorists

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Abstract

'Open Systems' has been advanced (for example by Stephen Dunn) as a potential basis for heterodox economics. However, it is agreed (with Geoff Hodgson) that the concept is currently underdeveloped. The paper argues that existing definitions tend to be negative. This is problematic for heterodox economics. A critique is offered of the influential Critical Realist treatment of open systems. It is argued that Critical Realism offers a negative definition of open systems that, moreover neglects the concept of 'system.' Rather the Critical Realist definition is primarily at the level of events. The paper draws upon other literature on open systems, including Post Keynesianism, Institutionalism and General Systems Theory, to augment the Critical Realist treatment and to move towards a more complete definition of open systems that synthesises elements of those theories, without depending on any of them. This definition therefore contrasts with existing definitions, which tend to rely on Critical Realism, mathematical literature (Dow), possibly inappropriate physical and biological metaphors of General Systems Theory (Eberle & Hayden; Hodgson; Boulding). This definition is then used as the basis for describing an open-systems methodology. Such a methodology will reflect the open system ontology of boundaries, stratification, unpredictability, and historical time. Such a methodology will reject some elements of traditional methodology, but mainly modify their use. An open-systems methodology will therefore involve a triangulation of methods at the point of inference. This conclusion supports the work of Paul Downward.