Causality γ is introduced as ratio of direct and inverted independeces:

$$\gamma = \frac{i_{Y|X}}{i_{X|Y}}, \ 0 \le \gamma < \infty.$$

The cause *X* and the effect *Y* are called observables, for which $\gamma < 1$. This formal definition of causality coincidences with intuitive one in all obvious situations and can be used in unobvious ones. In addition its has advantage of quantitative measure over intuitive qualitative one. On this definition the method of causal analysis, taken wide employments in application, is based. If for arbitrary designates observables *X* and *Y* proved to be γ >1, it simply means that *Y* is the cause, *X* is the effect. Cause $\gamma = 1$ corresponds uncausal (adiabatic) dependence *X* and *Y*. It is important to note, that even in utmost cases ($\gamma = 0$ or ∞), inverted (it is synchronous) influence of the effect on the cause always exists. In this sense, language of the causal analysis is adequate to one of action-at-a-distance electrodynamics (reaction of the absorbers owing to Wheeler-Feynman advanced field comes to the source synchronously with emission in it). In its turn, action-at-a-distance electrodynamics plays key role in interpretation of nonlocality (by J.C. Cramer).

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