Van den Broeck *et al.* Reply: Although we fully agree with the technical calculations and the results presented in the preceding Comment [1], we do not agree either with the interpretation or with the conclusion. First, it is quite natural that the introduction of extra additive noise has the effect to reduce or even completely remove the parameter region in which a symmetry breaking ordered phase appears. In particular, this has already been discussed in the context of our model [2] in [3]. Our main point is, however, that by varying a single parameter, namely, the noise intensity of the multiplicative noise, one obtains the entrant and reentrant transition. Obviously it means that this noise possesses an order-inducing component, which, as explained in detail in [4], can be related to the Stratonovich drift contribution, on top of its normal "themal-like" role. The "intensity" of both these aspects changes as one varies the noise intensity. Second, the separation into the additive and multiplicative components, which is proposed in [1], does *not* correspond to a separation of these two aspects. Indeed the statement that the additive component is responsible for the reentrant transition is in contradiction with the very Fig. 1 of [1]: For a fixed value of the additive noise intensity σ_A below its critical value σ_{A_c}, one observes both the entrant and reentrant transition as one increases the intensity of the multiplicative noise σ_M. Hence, the purely multiplicative noise incorporates both order-inducing and order-destroying features. This is also documented in a recent paper [5], in which we show the existence of a reentrant phase transition in the time dependent Landau Ginzburgh model as one varies the intensity of a purely multiplicative noise of the form $x\xi_M$. Finally, we want to stress a subtle difference between the original model, proposed in [2], and the model studied in [1]. Our model displays what we call a pure noise-induced phase transition, which is defined, in analogy with pure noise-induced transitions [6], as follows. Consider the evolution equation $\dot{x} = f(x) + g(x)\xi$. If ξ is a Gaussian white noise, ξ can take, in the course of its realizations, any real value λ. The models of interest to us are those for which the steady state equation $f(\overline{x}) + g(\overline{x})\lambda = 0$ has a unique solution $\overline{x}(\lambda)$ for any value of λ. In other words, the realizations of the noise never take it to a region in which the model has a built-in instability or multistability. This condition is satisfied in the original model [2], with $f(x) = -x(1 + x^2)^2$ and $g(x) = 1 + x^2$, but not in the case discussed in [1] where $g(x) = x\sqrt{2 + x^2}$.

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Received 5 November 1996 [S0031-9007(97)02485-X]
PACS numbers: 05.70.Fh, 02.50.Ey, 47.20.Hw, 47.20.Ky

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