

SYMMETRY AND BROKEN SYMMETRY... THERE AIN'T NUTHIN ELSE!

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Award: Nobel prize, 2006.

From the moment of birth our eyes are bombarded with images and small children must learn from scratch how to interpret them. This incredible feat seems to be easily accomplished by almost every child.

Almost certainly the first thing they see for any significant period of time is their mother's face, which has arguably the most fundamental symmetry (C_{2v}) with a plane of symmetry... i.e., the left hand side mirrors the right hand side ... more-or-less! This is the basic symmetry of almost all animals. All patterns involve some sort of symmetries and it is clear that not only are symmetries deeply fundamental to the structure of the Universe and the objects in it but symmetries resonate strongly with the senses of not only humans but almost certainly the senses of animals also.

There is probably no aspect of human creativity that does not involve some symmetries or broken symmetries. This presentation consists of a subjectively personal tour through a scientific and artistic world in which symmetries (or patterns) of almost every kind are to be found at every street corner.