# A Vector Symbolic Approach to Scene Transformation

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**Presentation Abstract Summary** Visual scene transformation is fundamental to vision both from a theoretical and neurobiological perspective because it is necessary in order to construct robust internal models of the world. However, existing approaches to model complex scene transformation fall short in both their interpretability and scalability. As a first step towards building a theory of complex scene transformations, we demonstrate that the formalism of vector symbolic algebra is a powerful and well-motivated modeling tool in this domain. Our work highlights the simplicity and interpretability of connectionist models that incorporate vector symbolic algebra and suggests ways they might be used to analyze scene transformation.

**Paper Upload (PDF)** submission_spencer_kent.pdf

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### Keywords

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