## Appearance Shock Grammar for Fast Medial Axis Extraction from Real Images Supplementary Material

Charles-Olivier Dufresne Camaro<sup>1</sup>, Morteza Rezanejad<sup>4</sup>, Stavros Tsogkas<sup>1,2</sup>, Kaleem Siddiqi<sup>4</sup>, Sven Dickinson<sup>1,2,3</sup>

<sup>1</sup>University of Toronto, <sup>2</sup>Samsung Toronto AI Research Center

<sup>3</sup>Vector Institute for Artificial Intelligence

<sup>4</sup>School of Computer Science and Centre for Intelligent Machines, McGill University

{camaro,tsogkas,sven}@cs.toronto.edu, {morteza,siddiqi}@cim.mcgill.ca

We include several additional examples from the BMAX500 dataset to highlight the benefits of using the rules of a shock grammar in unsupervised medial axis extraction from real images. Here we show the ground truth medial axis (left), our new ASG result (middle) and the AMAT result after post-processing (right). For both the ASG and the AMAT we use our histogram of intensity cost function. The ASG generally gives smoother, more complete medial axes that are also more consistent with the underlying region textures.



Figure 1: Qualitative results. Left to right: Ground-truth (1 annotation), ASG result, AMAT result.

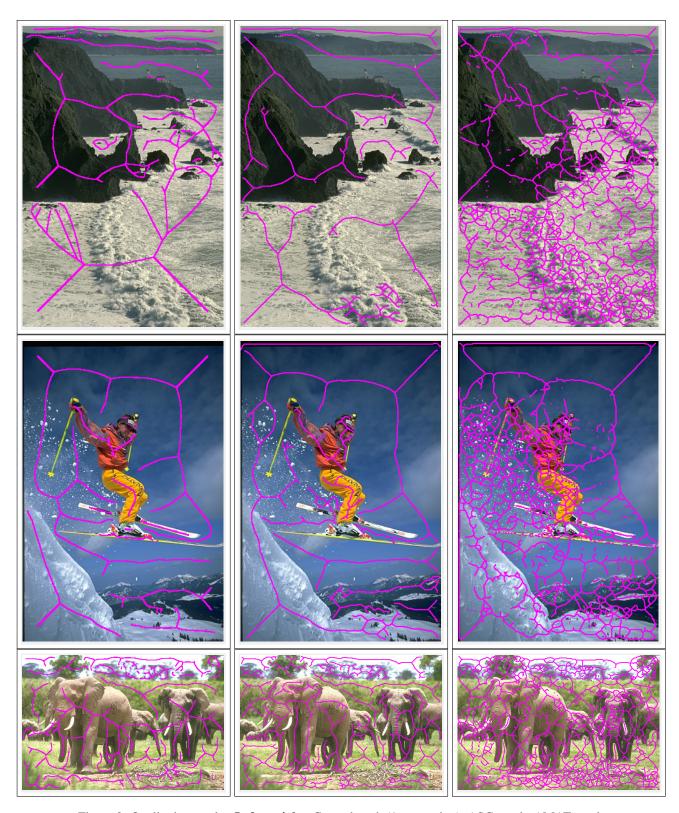


Figure 2: Qualitative results. Left to right: Ground-truth (1 annotation), ASG result, AMAT result.

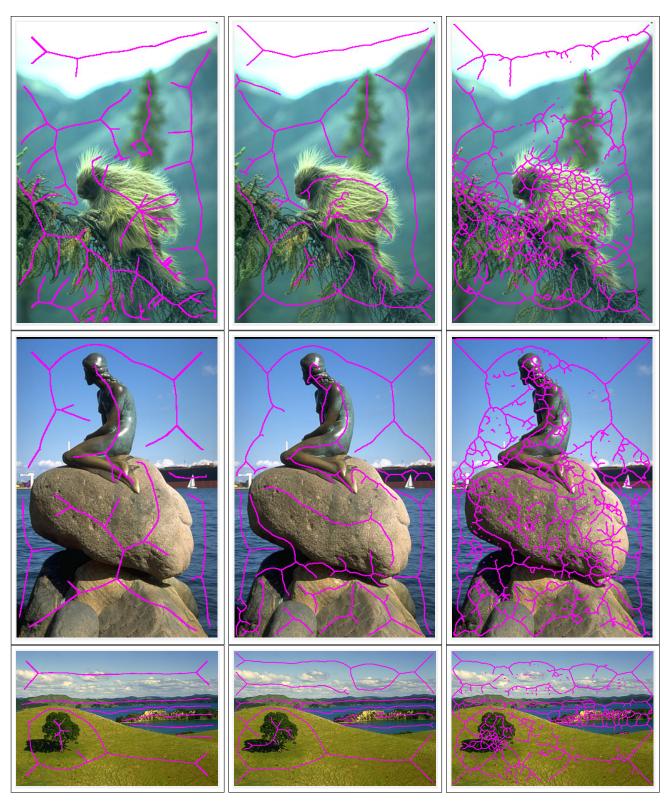


Figure 3: Qualitative results. Left to right: Ground-truth (1 annotation), ASG result, AMAT result.

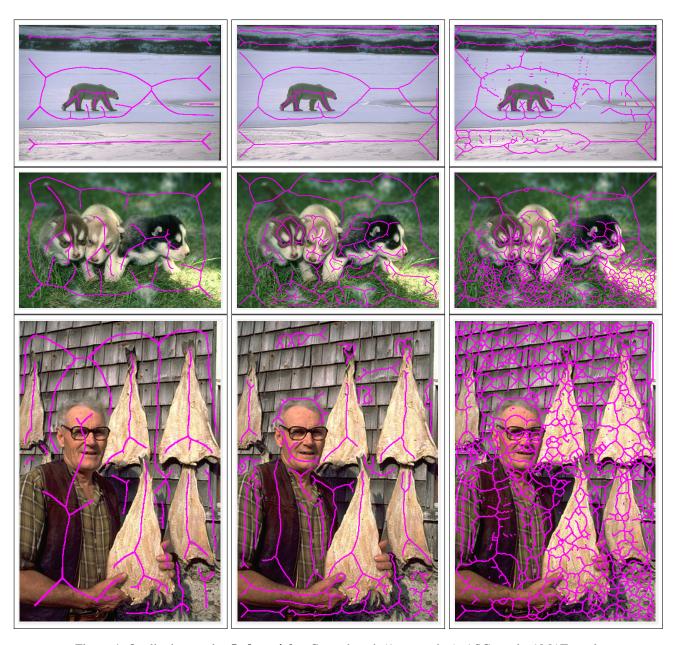


Figure 4: Qualitative results. Left to right: Ground-truth (1 annotation), ASG result, AMAT result.



Figure 5: Qualitative results. Left to right: Ground-truth (1 annotation), ASG result, AMAT result.