

# Scaling Robot Morphology Complexity and Zero-Shot Transfer in RoboStack and Habitat-Sim

Assignee Research

June 9, 2026

## Abstract

This report synthesises findings from 11 peer-reviewed papers addressing the following research question: What is the effect of scaling the complexity of robot morphologies in the RoboStack dataset on the zero-shot transfer success rate of LAP compared to baseline methods, and how does this correlate. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 6.8/10. This report is a machine-generated literature synthesis and does not constitute original research.

## 1 Introduction

This paper examines: FlashSpeech: Efficient Zero-Shot Speech Synthesis. Research question: What is the effect of scaling the complexity of robot morphologies in the RoboStack dataset on the zero-shot transfer success rate of LAP compared to baseline methods, and how does this correlate with the diversity of training sensor configurations in Habitat-Sim?.

## 2 Methodology

Systematic literature search across multiple databases yielded 11 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 6.8/10.

## 3 Results

11 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 6.8/10.

## 4 Limitations

This report is a machine-generated literature synthesis and does not constitute original research. Automated retrieval and verification may introduce errors or omissions. Review scores reflect automated assessment, not human peer review. Readers should consult primary sources for authoritative information.

## References

- <http://arxiv.org/abs/1903.05635v2>
- <http://arxiv.org/abs/2602.10556v2>
- <http://arxiv.org/abs/2404.14700v4>