

GENERATING A PERSPECTIVE IMAGE FROM A PANORAMIC IMAGE BY THE SWUNG-TO-CYLINDER PROJECTION

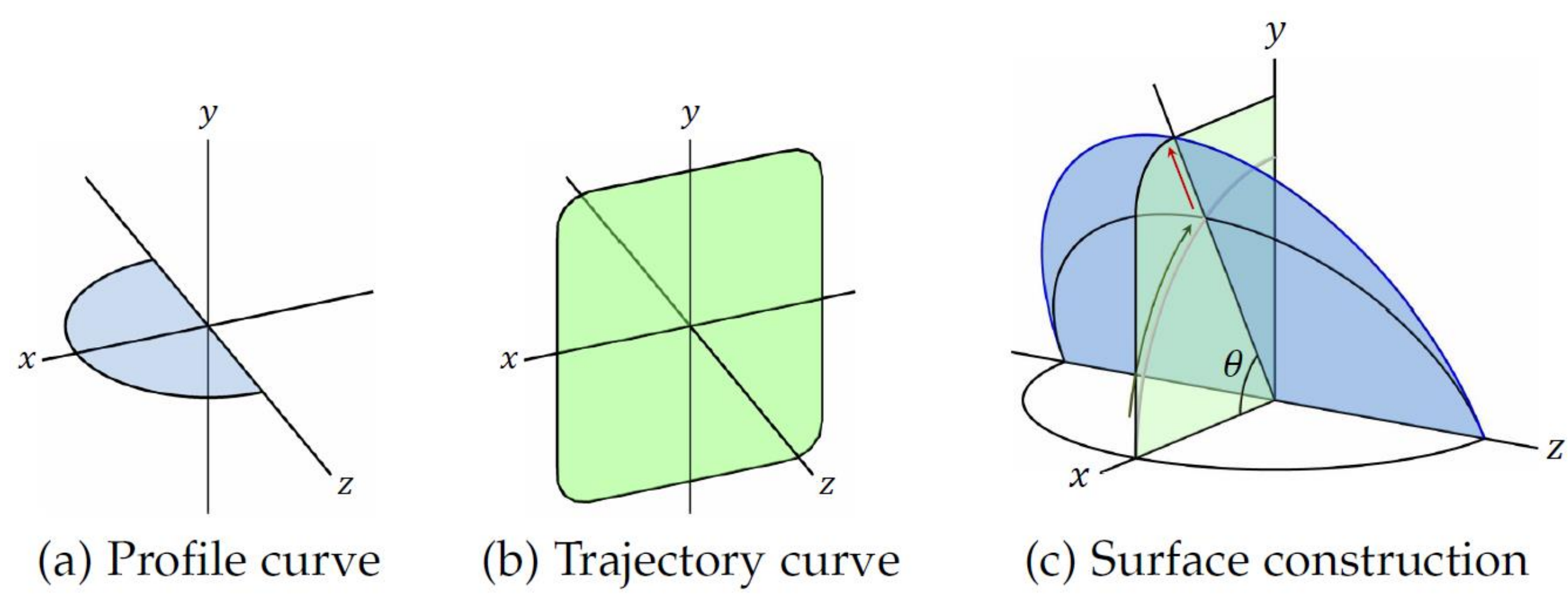
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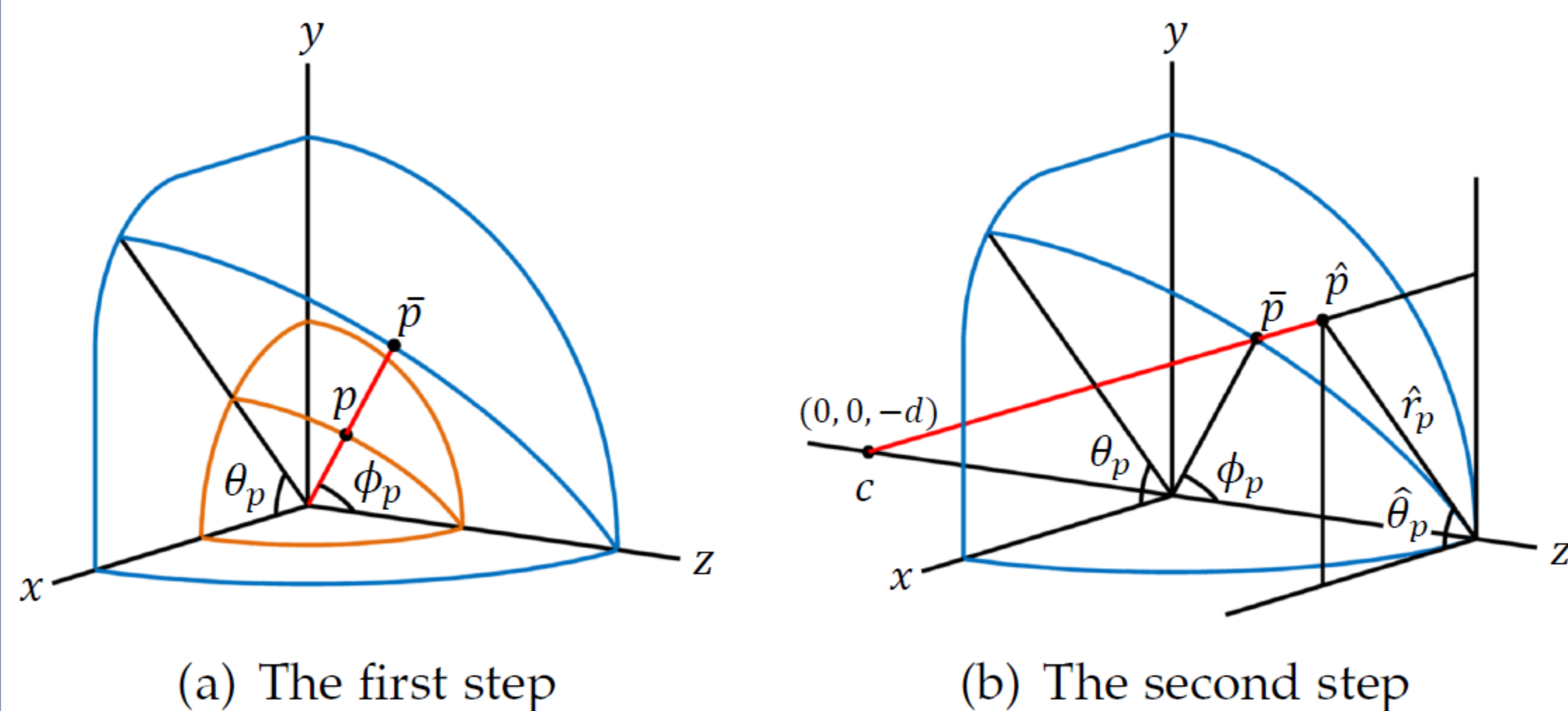
Introduction

This paper extends the swung-to-plane projection model so that it can work for viewing full 360 spherical panoramas.

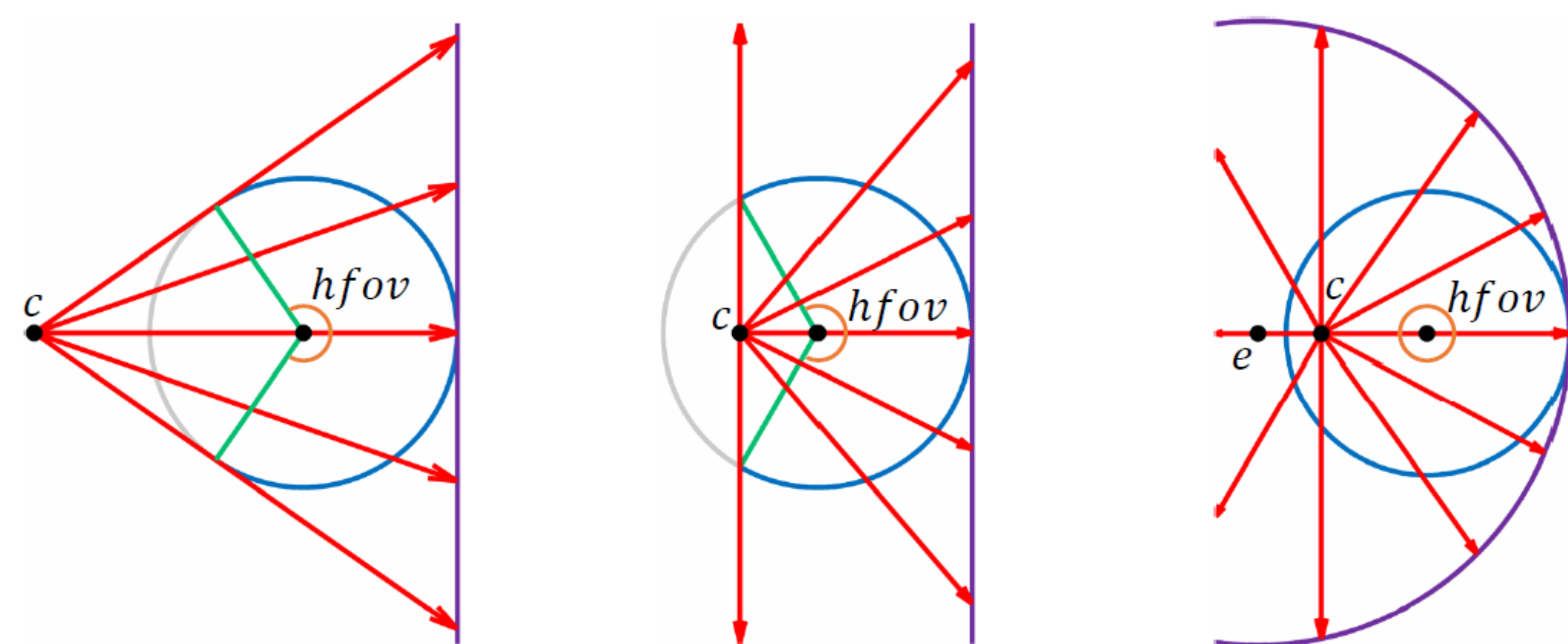
Swung-to-plane Projection



Swung surface

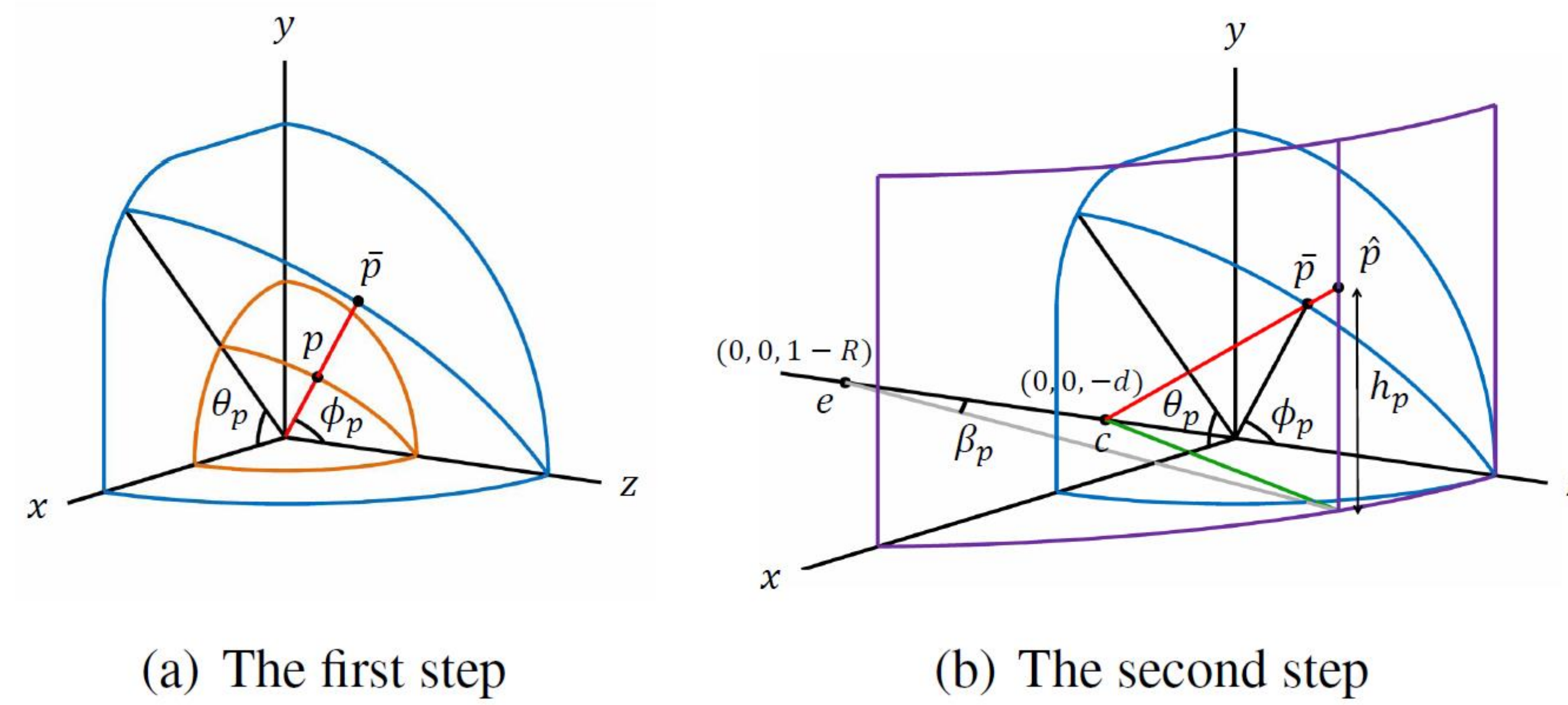


Swung-to-plane projection

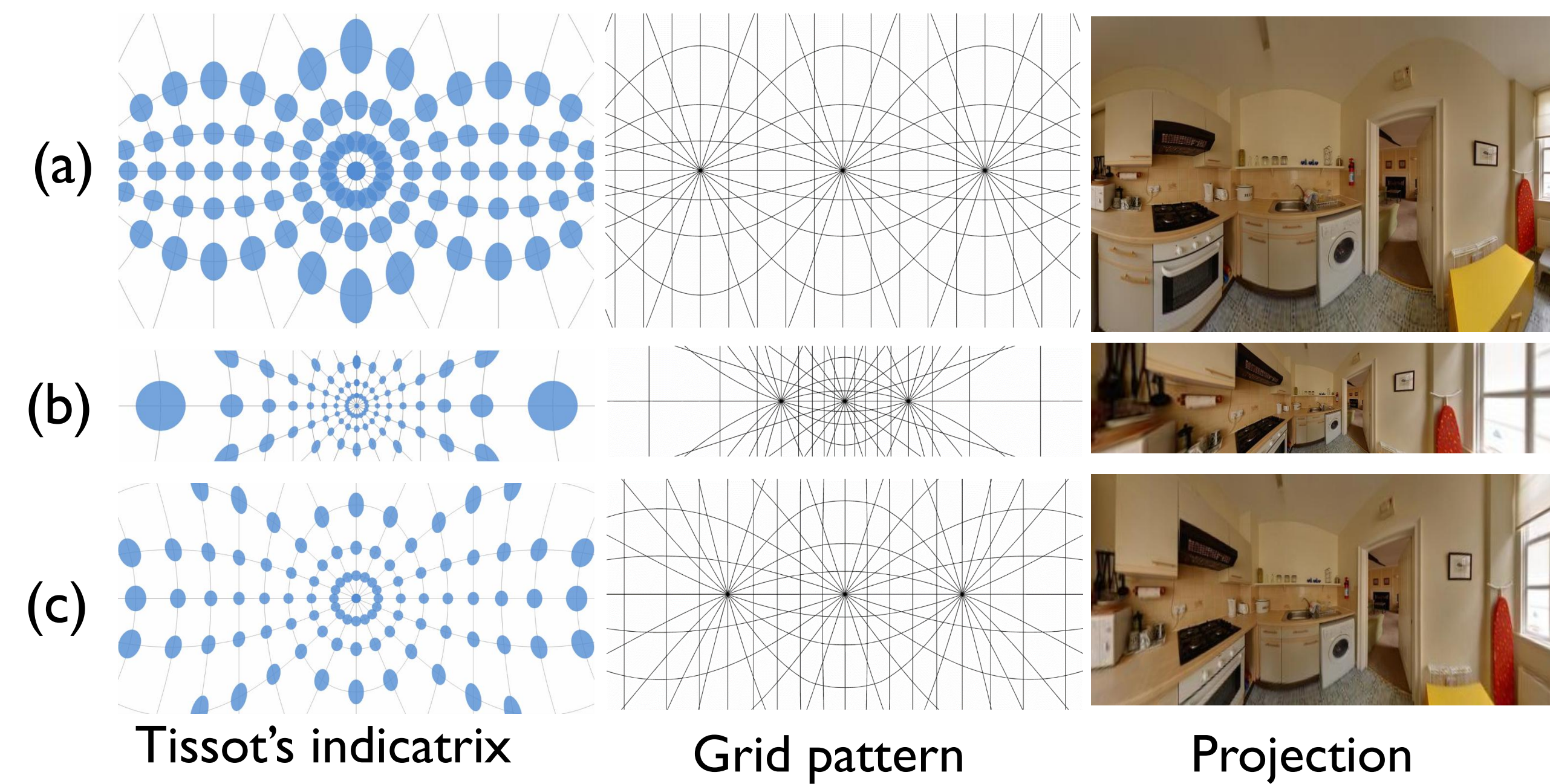


Horizontal FOV analysis

Swung-to-Cylinder Projection



Swung-to-cylinder projection



(a) cylindrical projection (b) Pannini projection (c) swung-to-cylinder projection

Distortion analysis

Parameter optimization



Results

