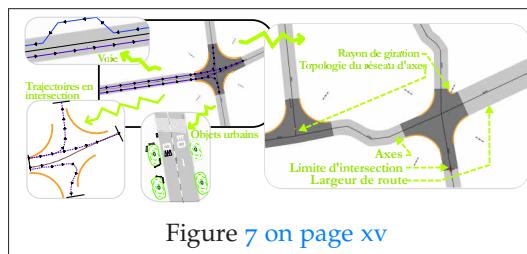
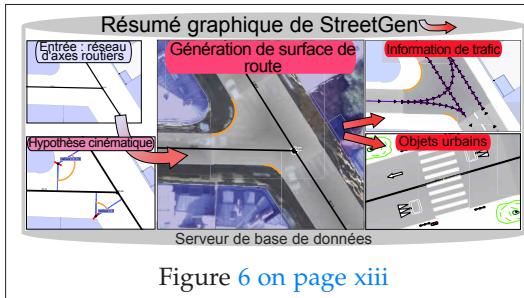
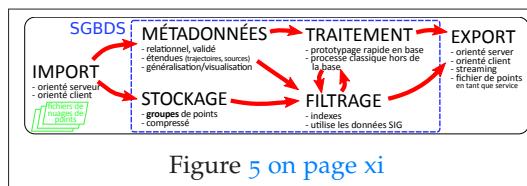
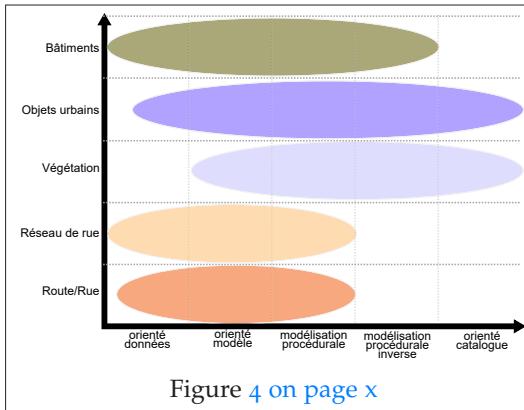
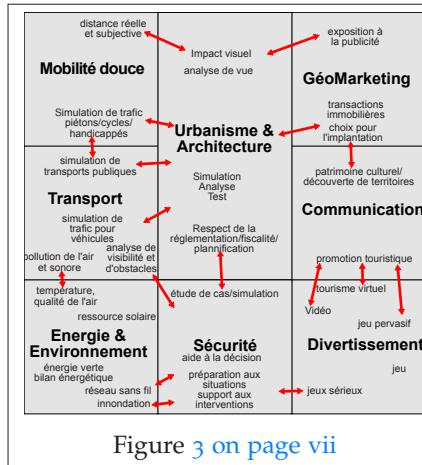
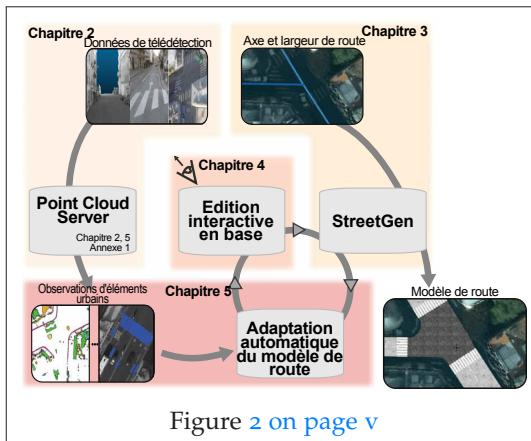


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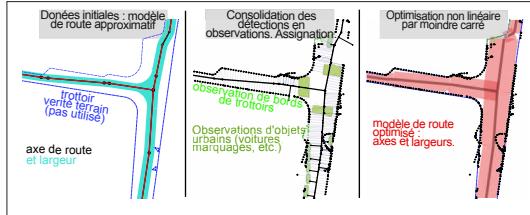


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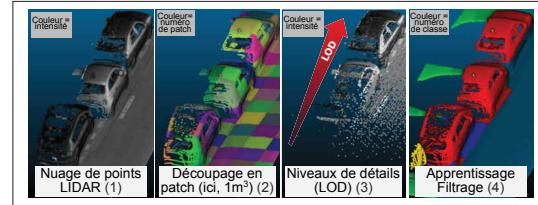


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## INTRODUCTION TO THE THESIS

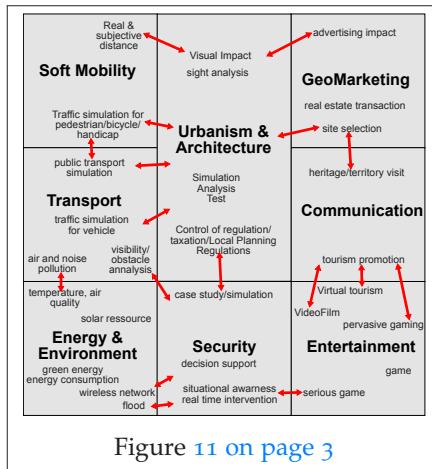


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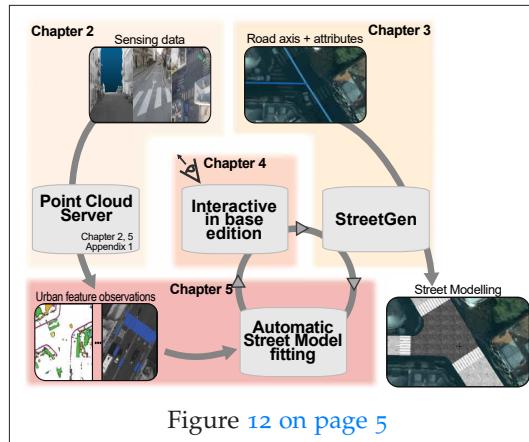


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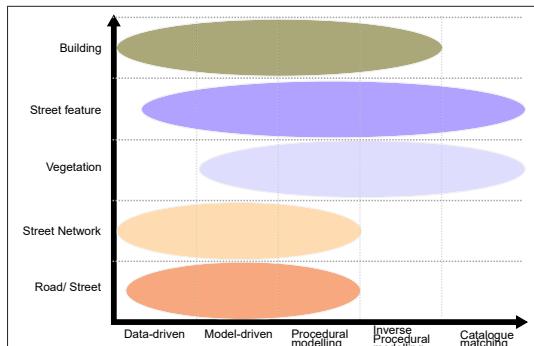


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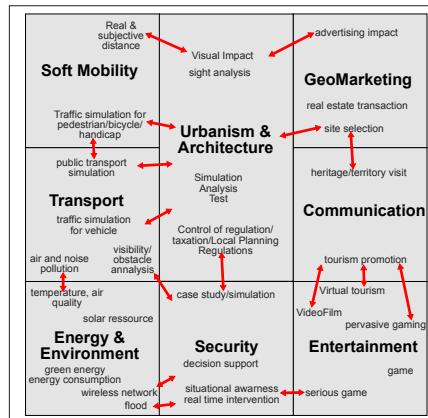


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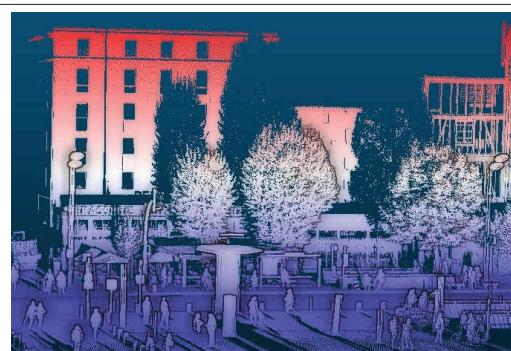


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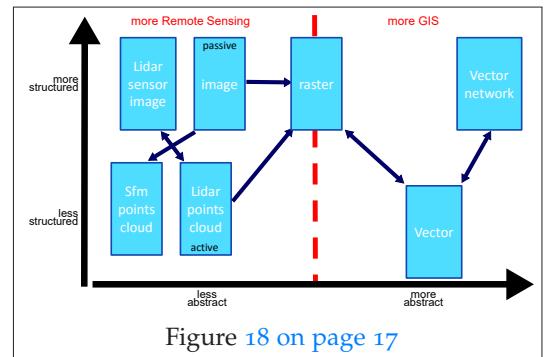


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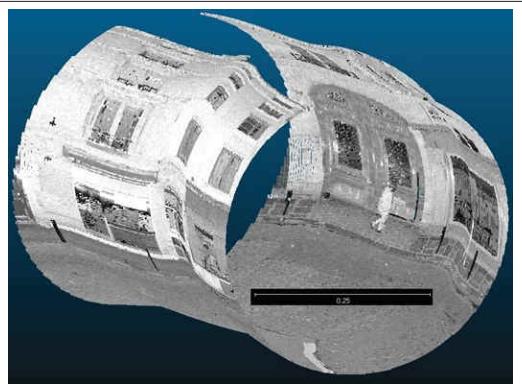


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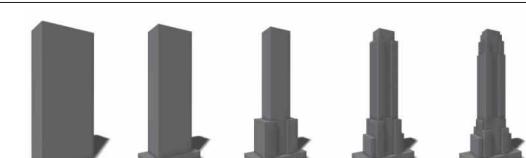


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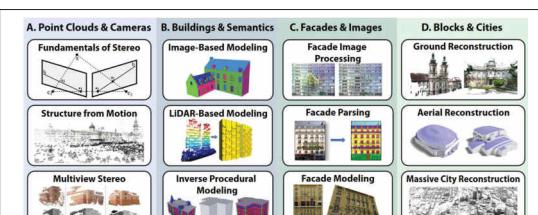


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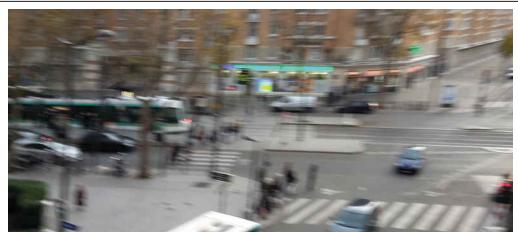


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## CHAPTER 2:PCS : A POINT CLOUD SERVER TO MANAGE POINT CLOUDS

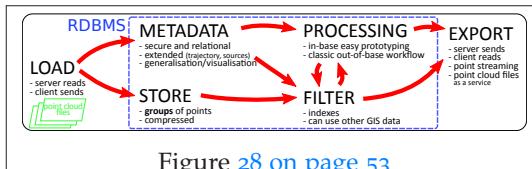


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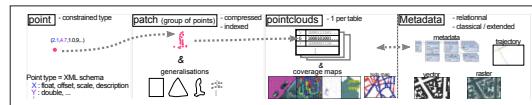


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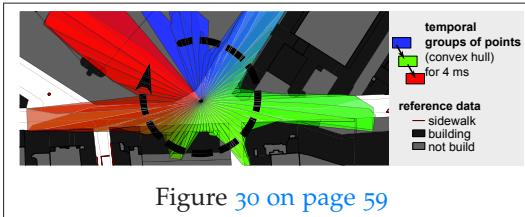


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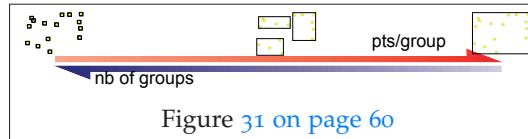


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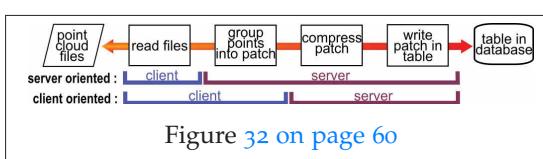


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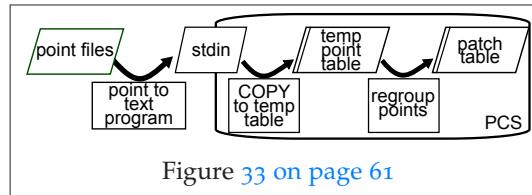


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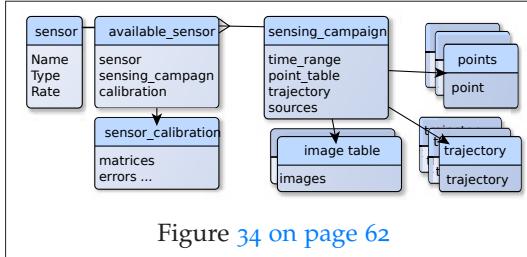


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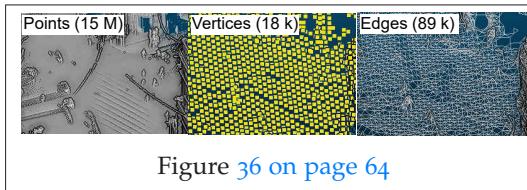


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Filtering on :

```

SELECT gid, patch
FROM my_patches
WHERE
    ST_Intersects(patch::geometry, ...) = TRUE AND
    Pc_NumPoints(patch) BETWEEN 10 AND 100 AND
    file_name LIKE Efile_...2.ply AND
    rc_range(patch.intensity) & numrange(0,1.5) AND
    EXISTS ( SELECT 1 FROM buildings AS b
    WHERE ST_Intersects(patch::geometry,b.geom))

```

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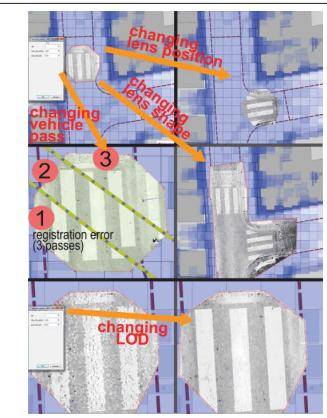


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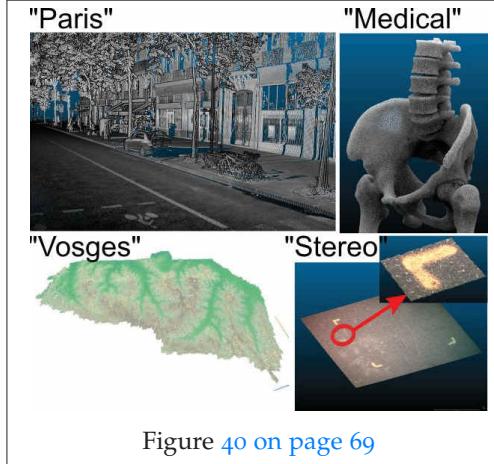


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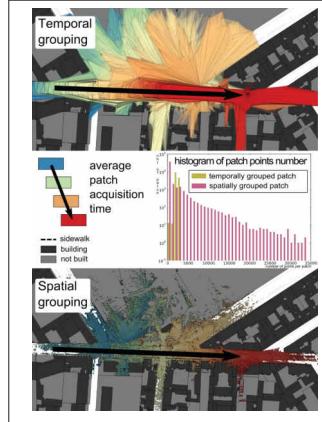


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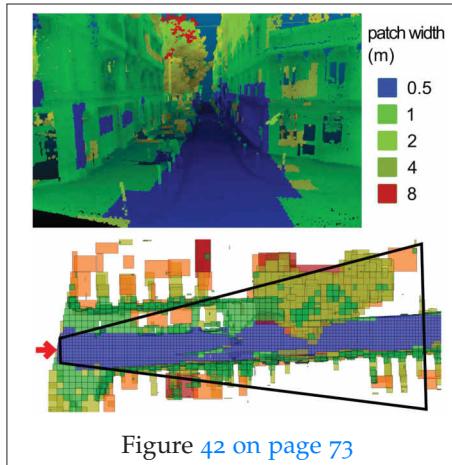


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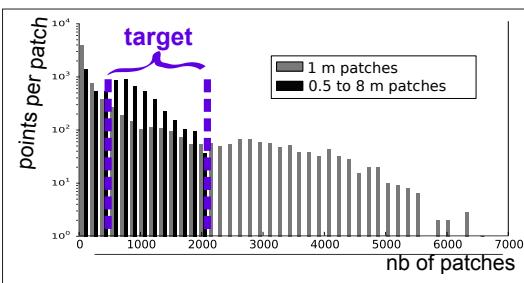


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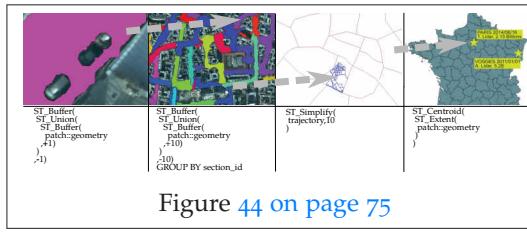


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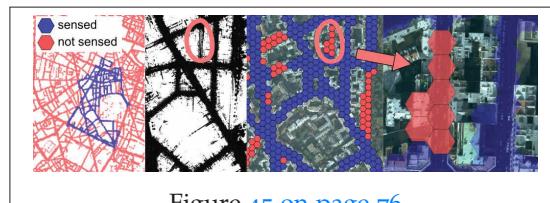
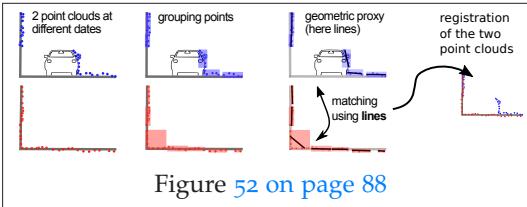
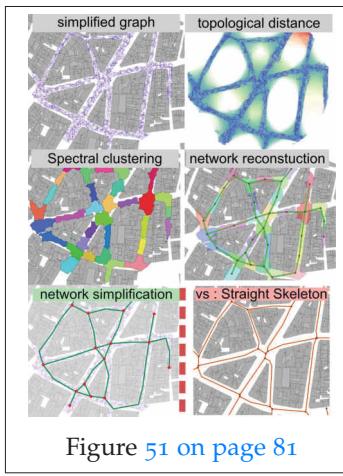
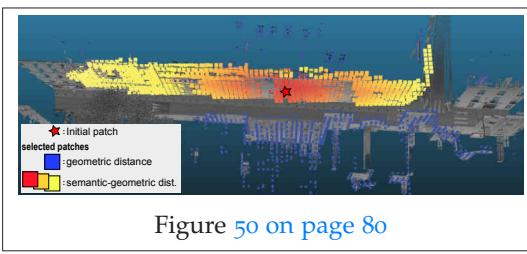
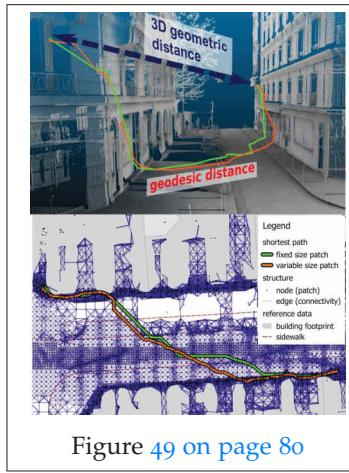
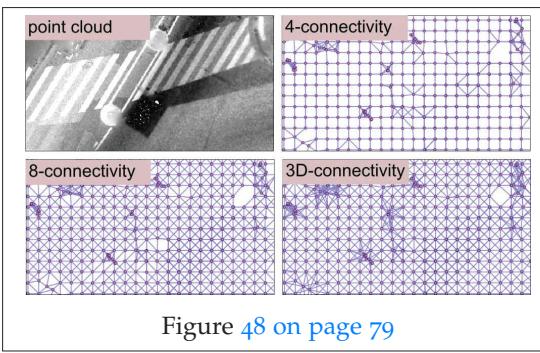
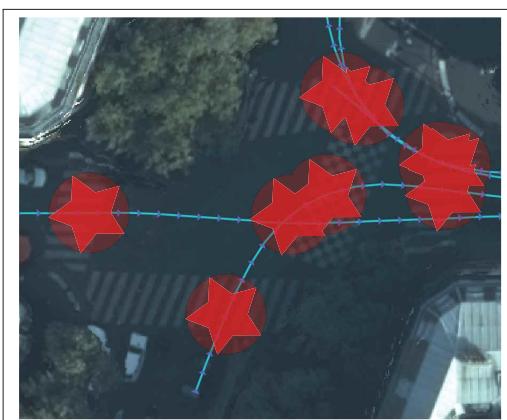
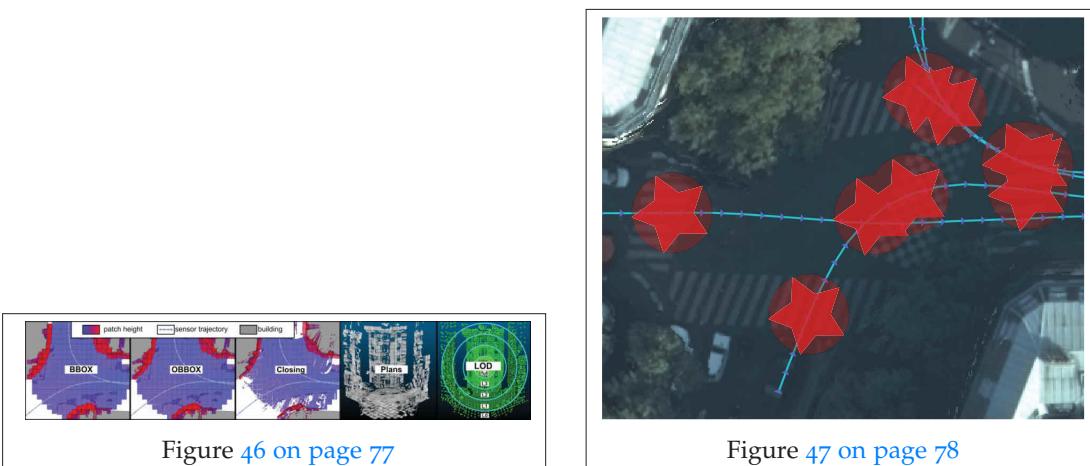


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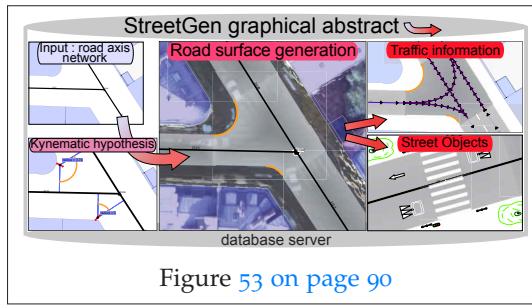


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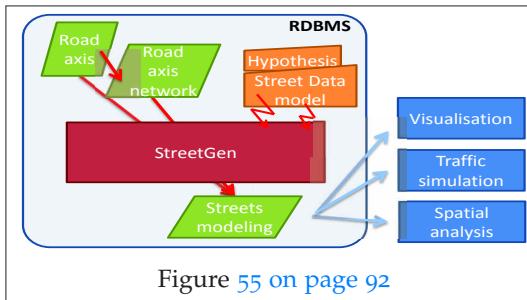


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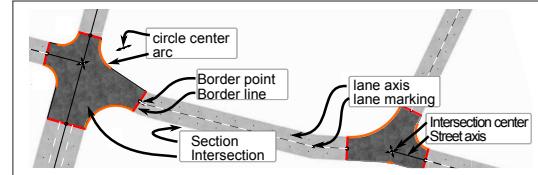


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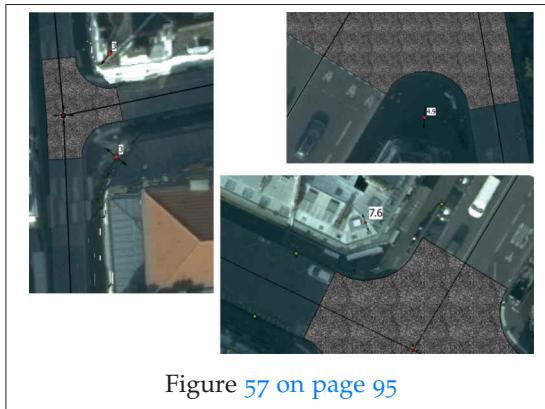


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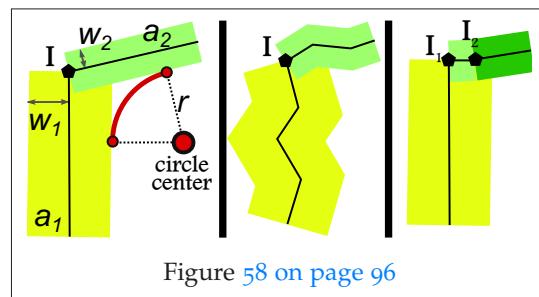


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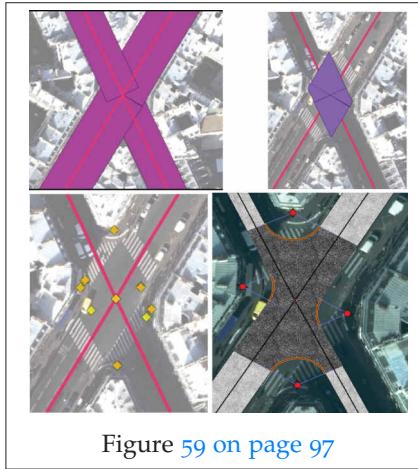


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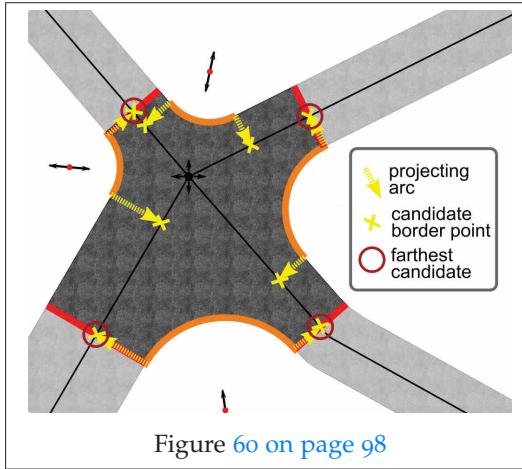


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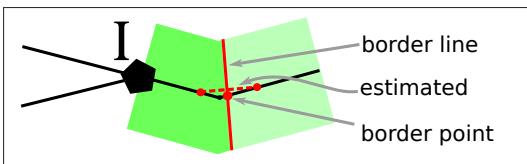


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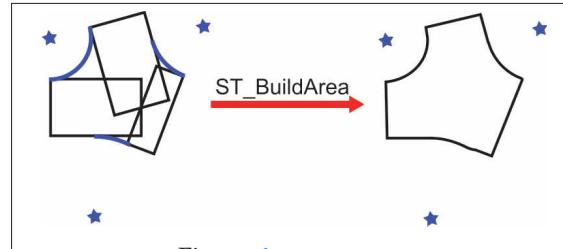


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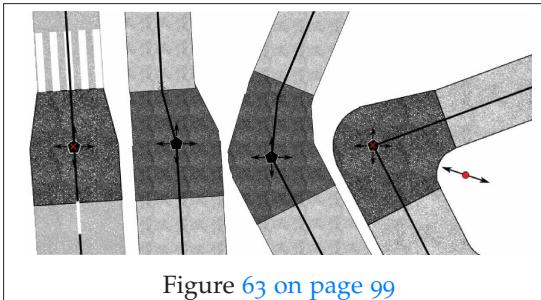


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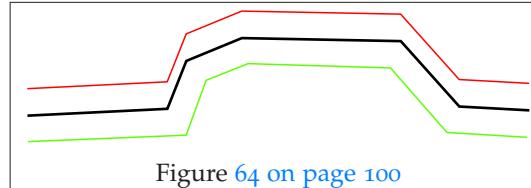


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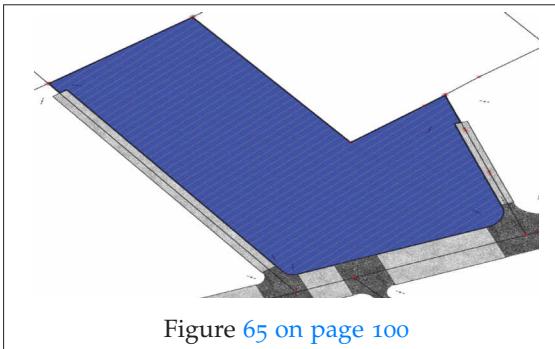


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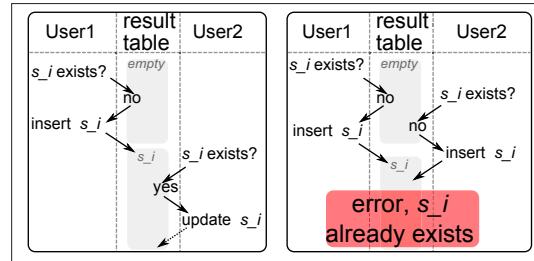


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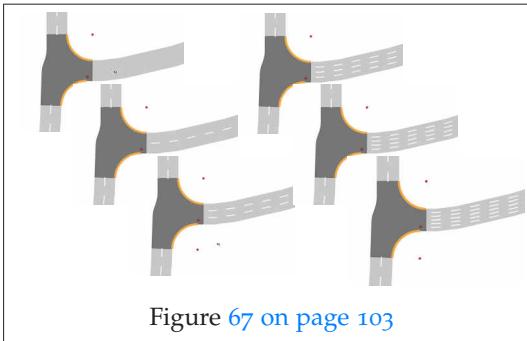


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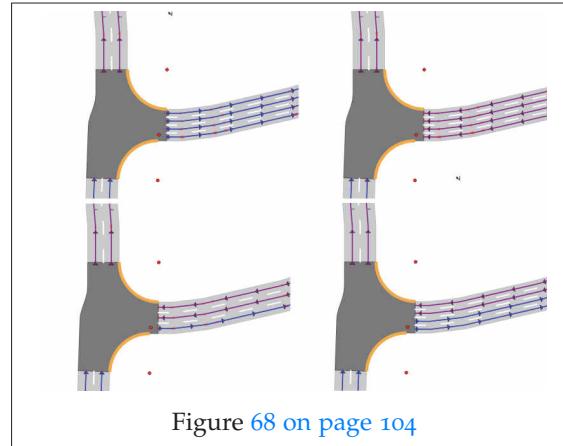


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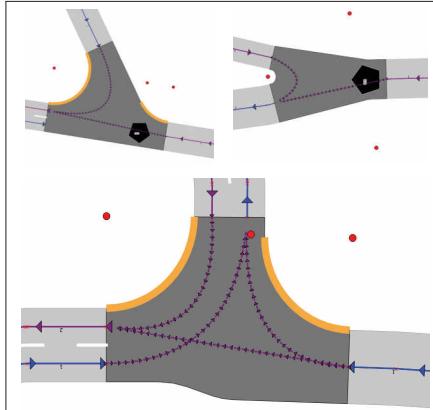


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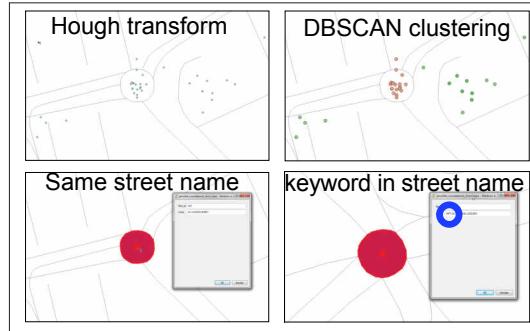


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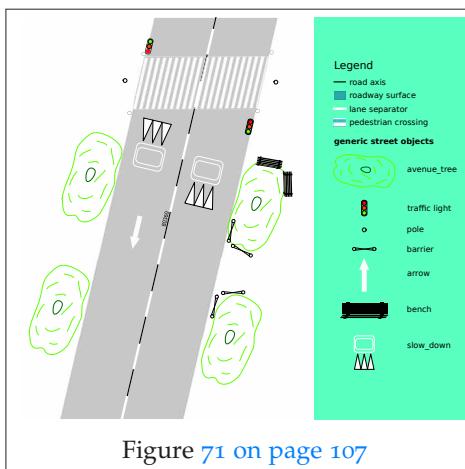


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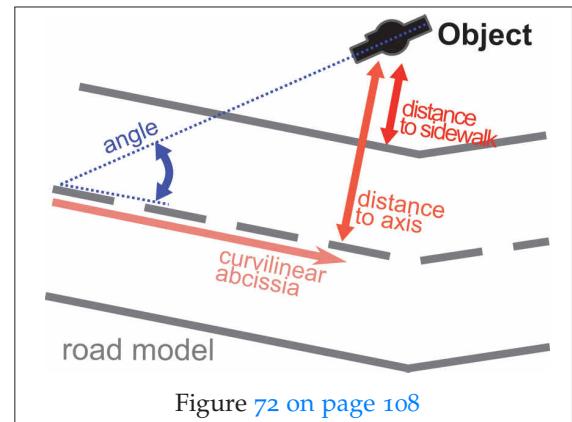


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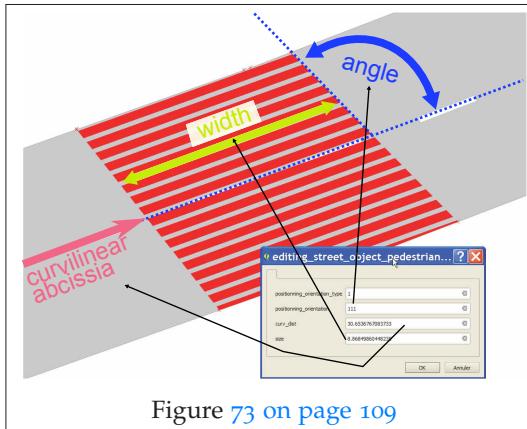


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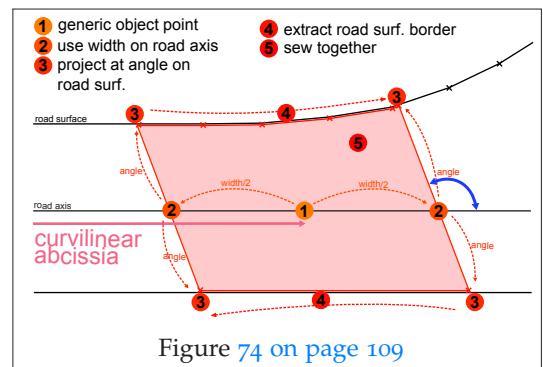
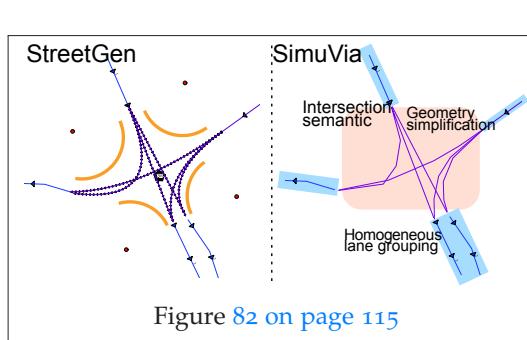
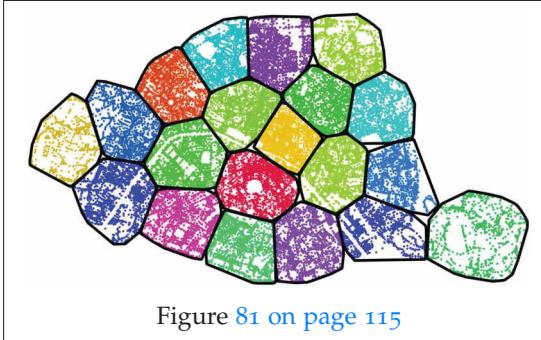
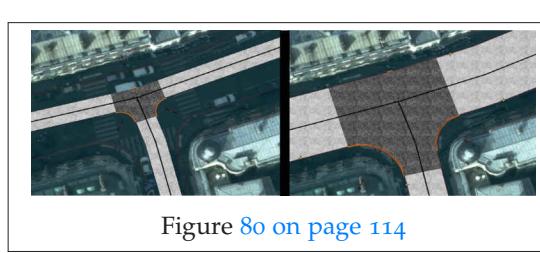
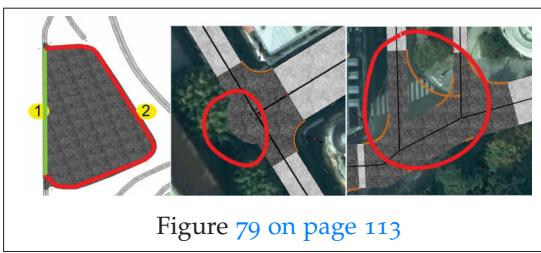
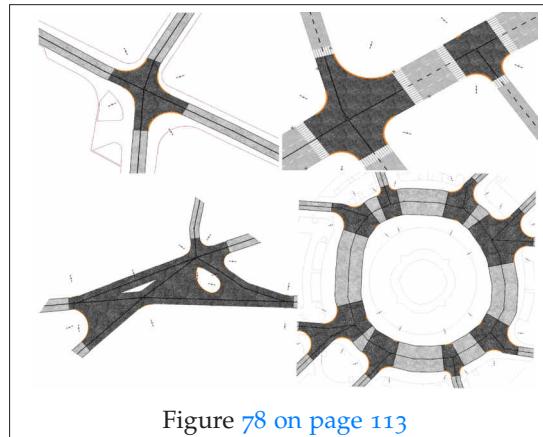
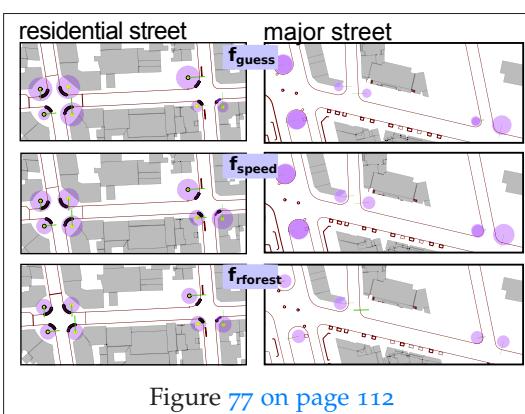
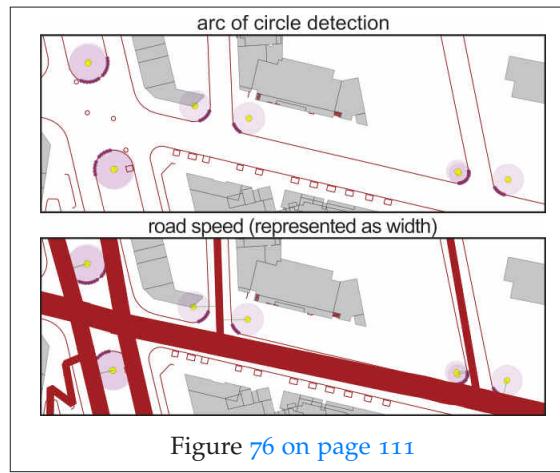
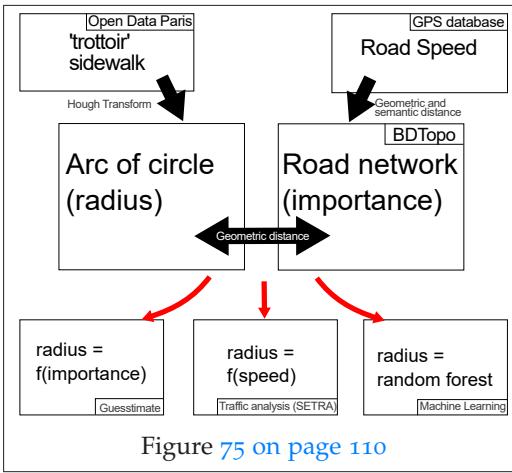


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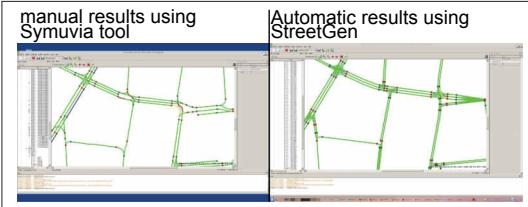


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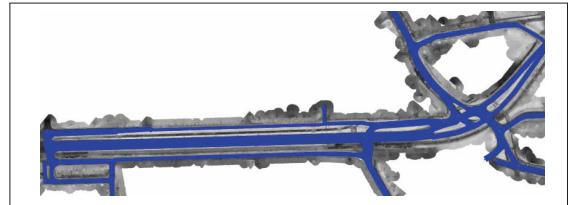


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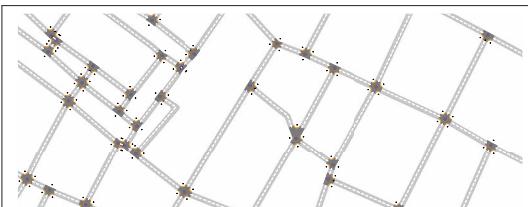


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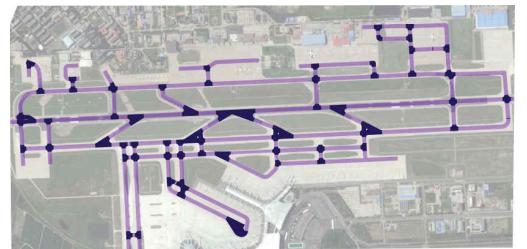


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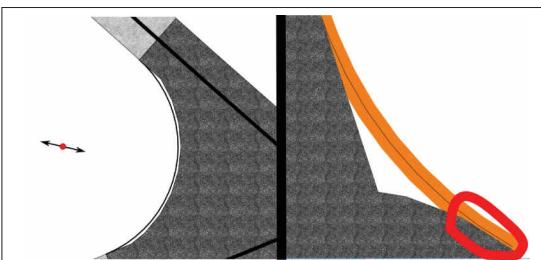


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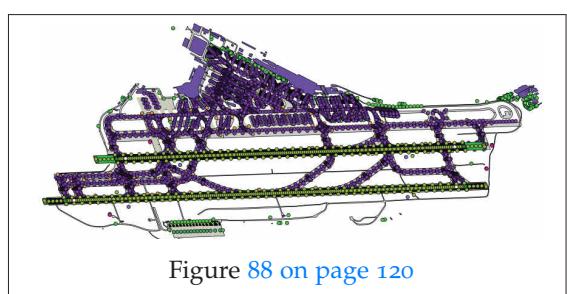


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CHAPTER 4: INTERACTIVE IN-BASE CREATION AND MODIFICATION OF STREET MODEL

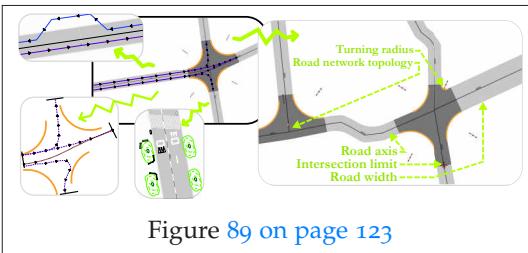


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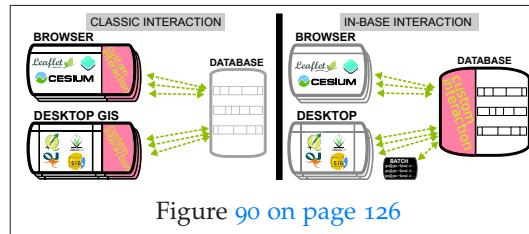


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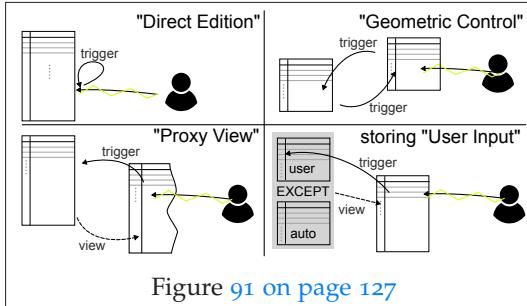


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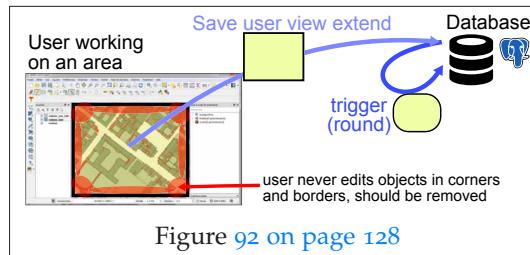


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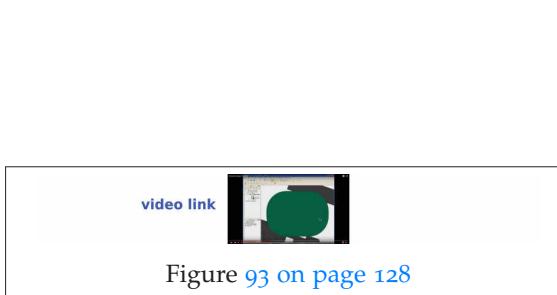


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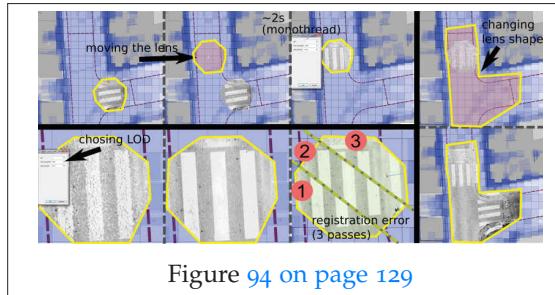


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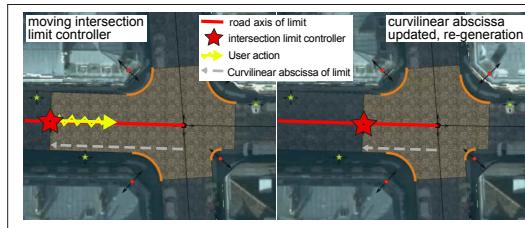


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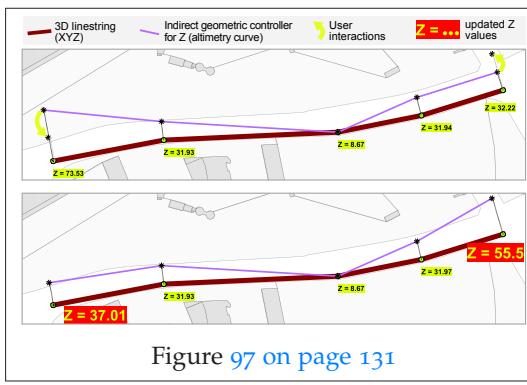


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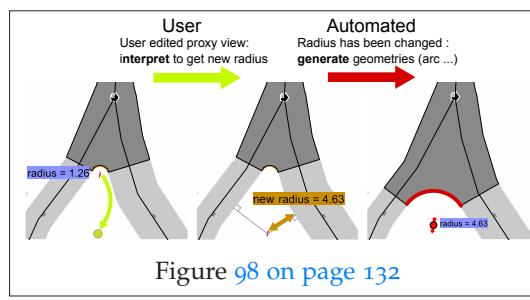


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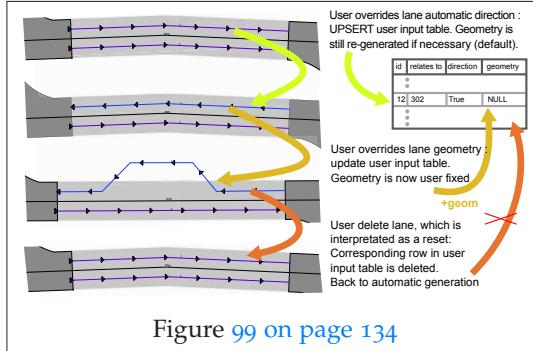


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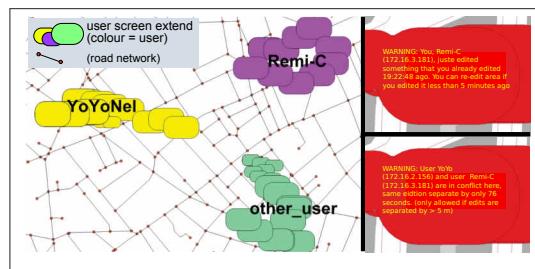


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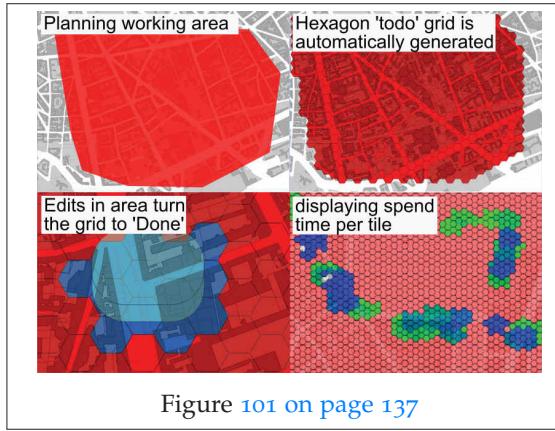


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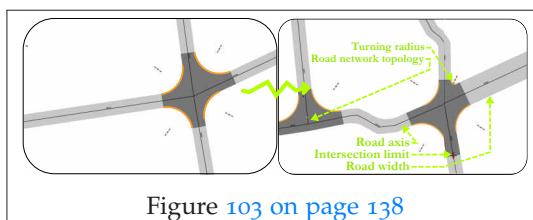


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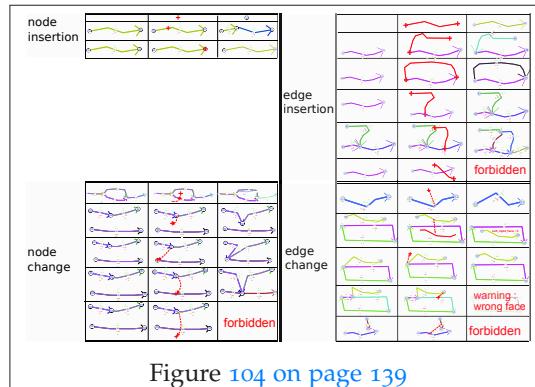


Figure 104 on page 139

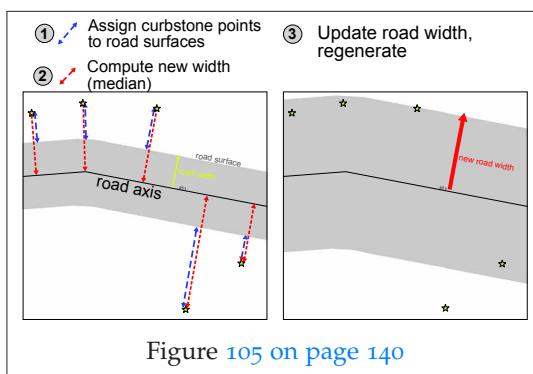


Figure 105 on page 140

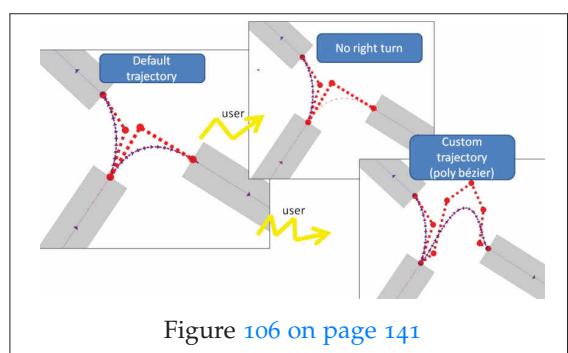


Figure 106 on page 141

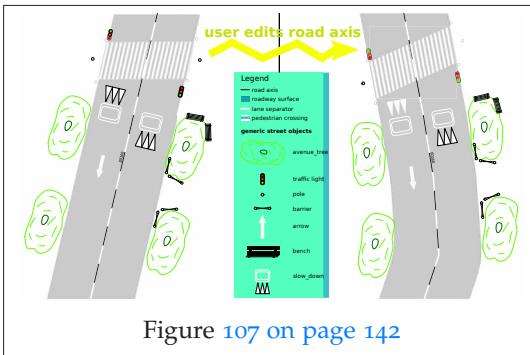


Figure 107 on page 142

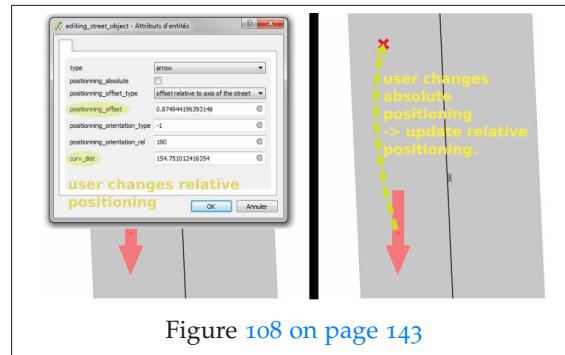


Figure 108 on page 143

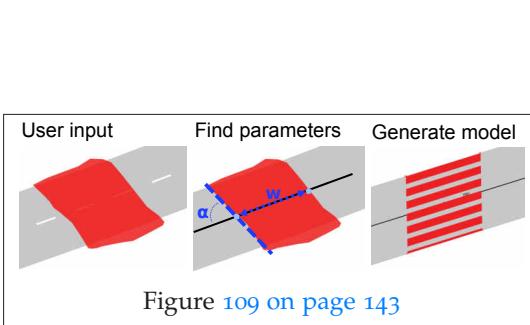


Figure 109 on page 143

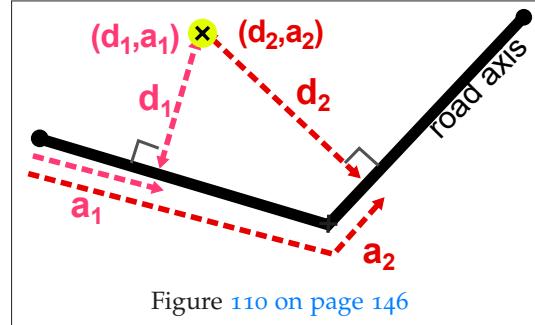


Figure 110 on page 146

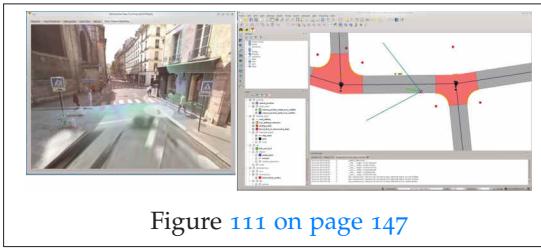
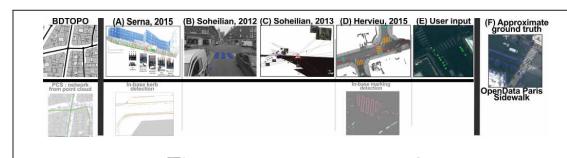
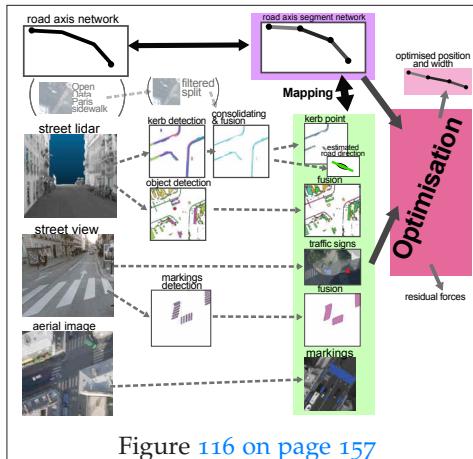
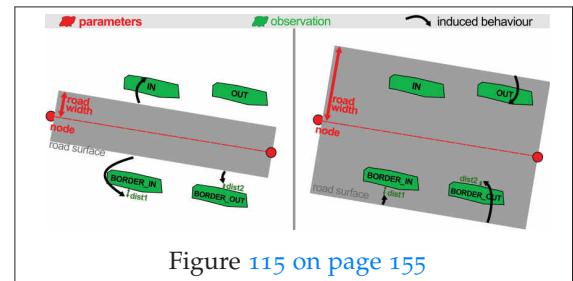
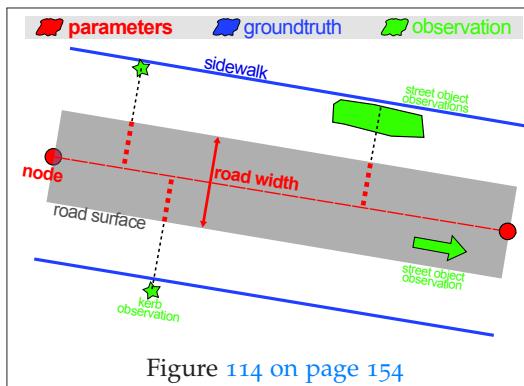
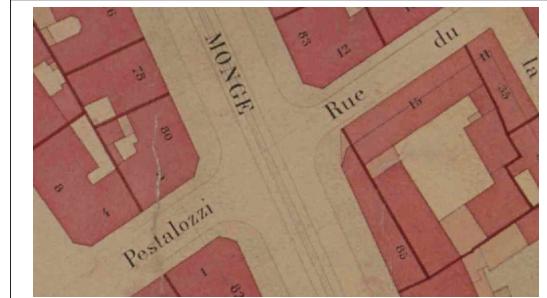
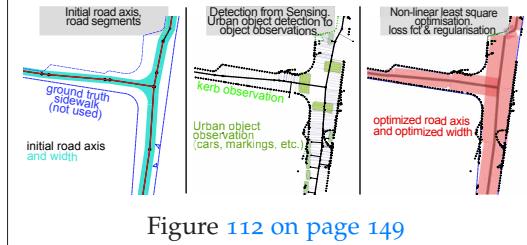
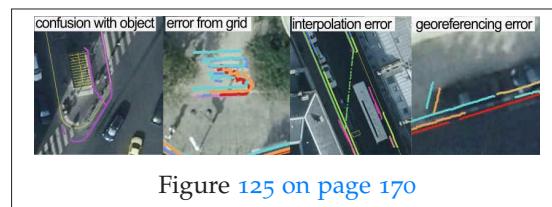
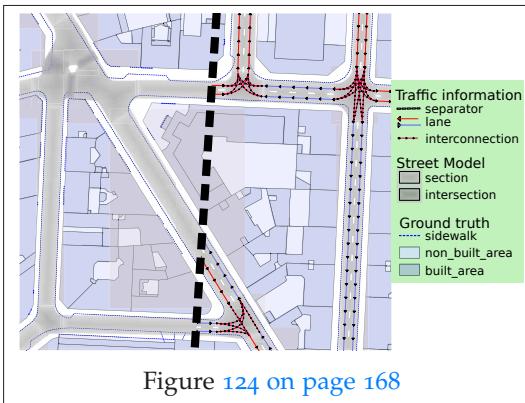
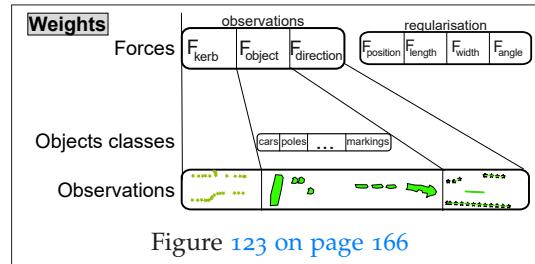
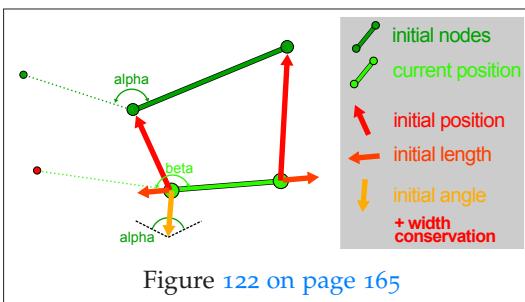
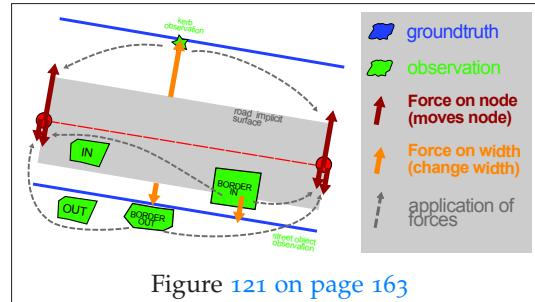
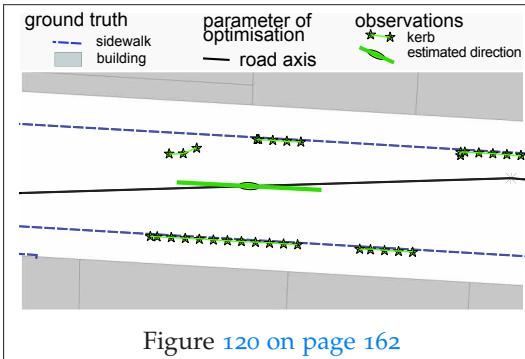
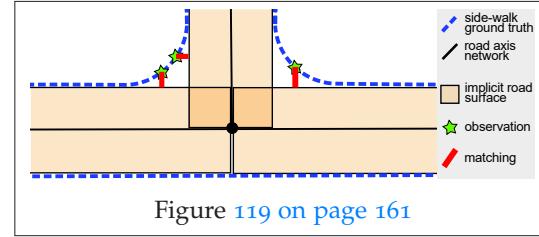
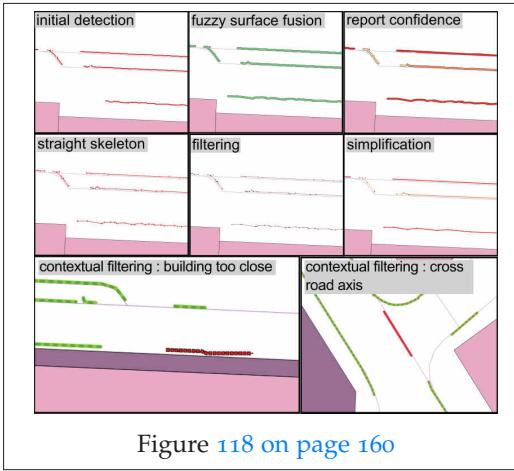


Figure 111 on page 147





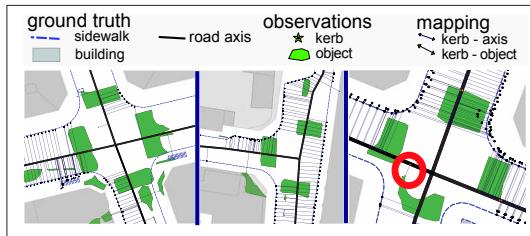


Figure 126 on page 171

Error source	Ground Truth not up to date and mixed	Observations noisy, sparse	Input Topology over-constrained	Road Model too simple
"Paris"	Filtering,	Use obs. derived from ground truth	over-split road segments (> 3 m)	✗
"Sensing"	Filtering, Visual check	Use obs. derived from ground truth	over-split road segments (> 3 m)	✗
"User"	Filtering, manual corrections	Use user input. Use obs. derived from ground truth	Manual optimal split	✗

Legend:  
■■■ subjective prior influence  
✗ ✗ strategy missing or of limited effect

Figure 127 on page 171

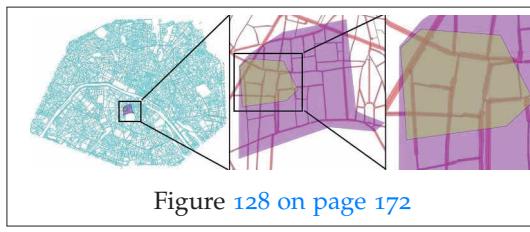


Figure 128 on page 172

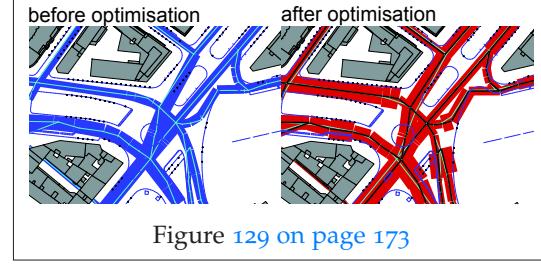


Figure 129 on page 173

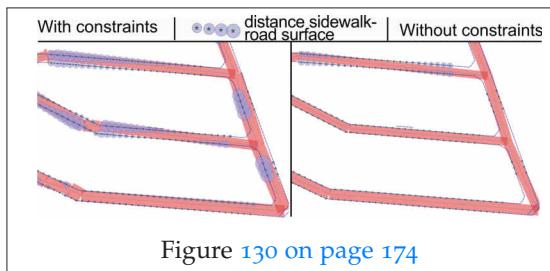


Figure 130 on page 174

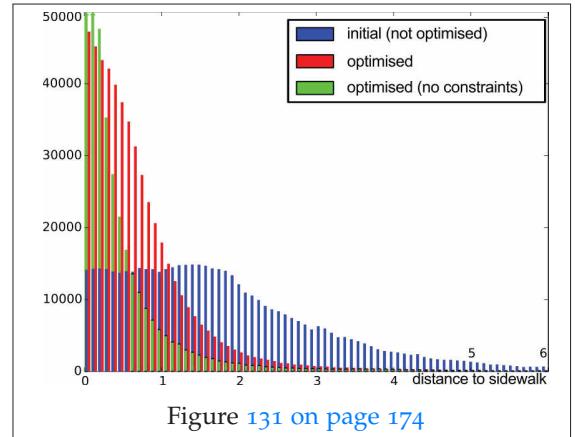


Figure 131 on page 174

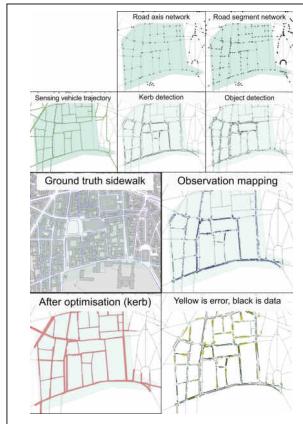


Figure 132 on page 176

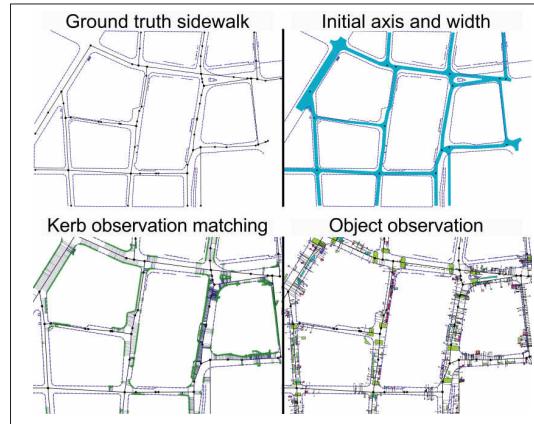
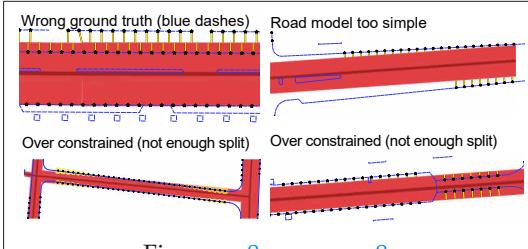
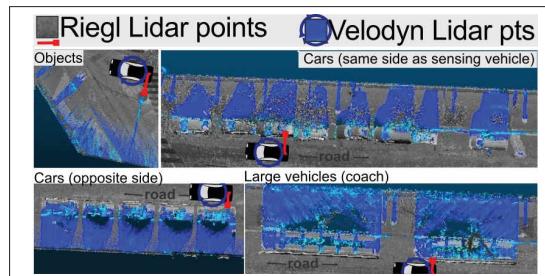
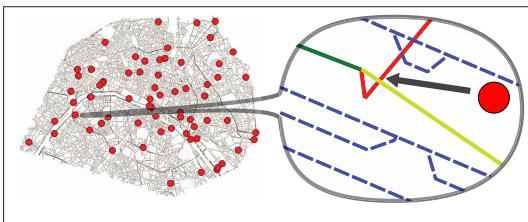
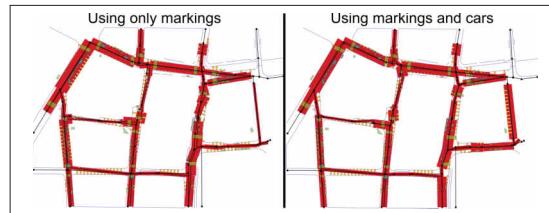


Figure 133 on page 177



APPENDIX A: IMPLICIT LEVEL OF DETAILS FOR THE POINT CLOUD SERVER

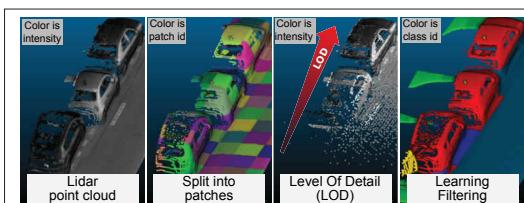


Figure 139 on page 195

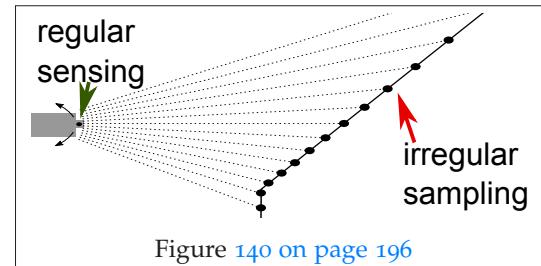


Figure 140 on page 196

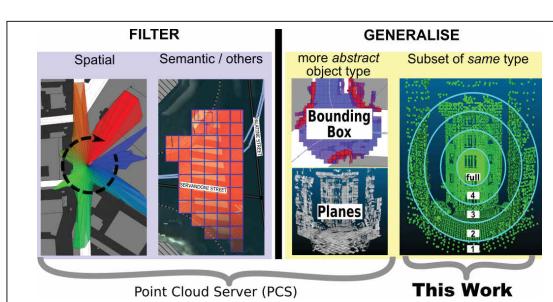


Figure 141 on page 197

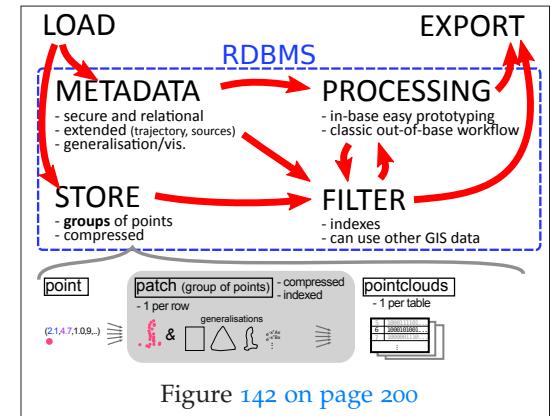


Figure 142 on page 200

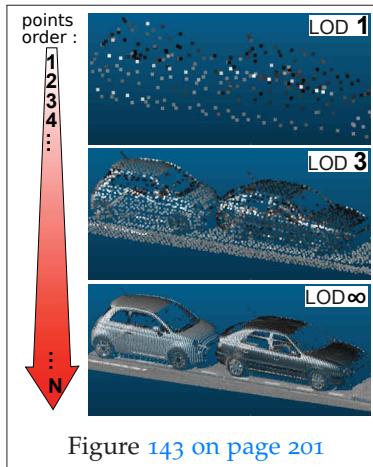


Figure 143 on page 201

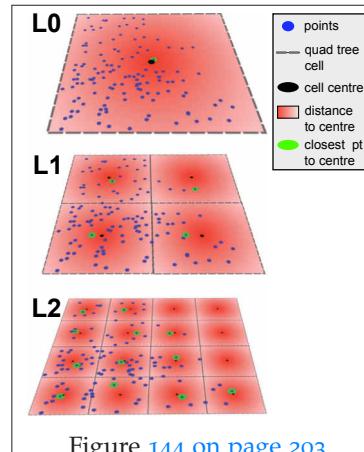


Figure 144 on page 203

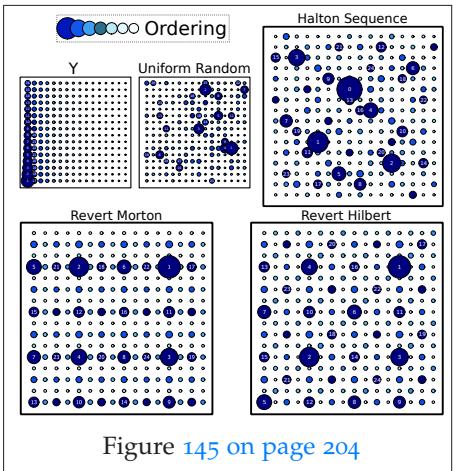


Figure 145 on page 204

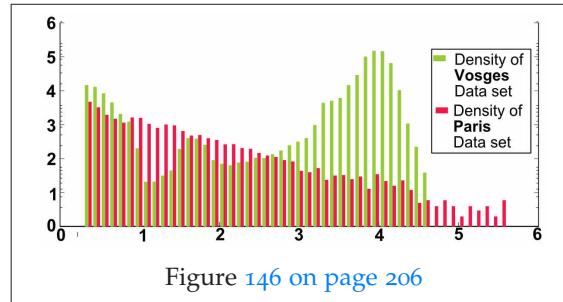


Figure 146 on page 206

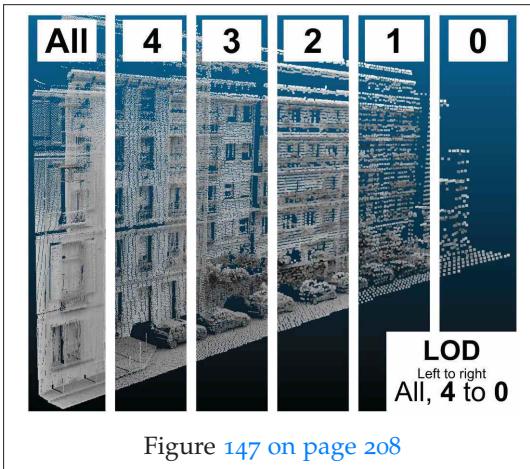


Figure 147 on page 208

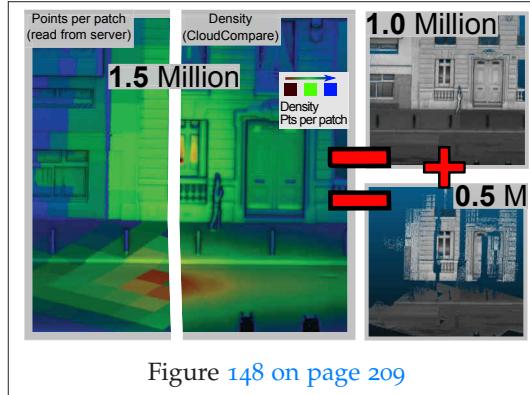


Figure 148 on page 209

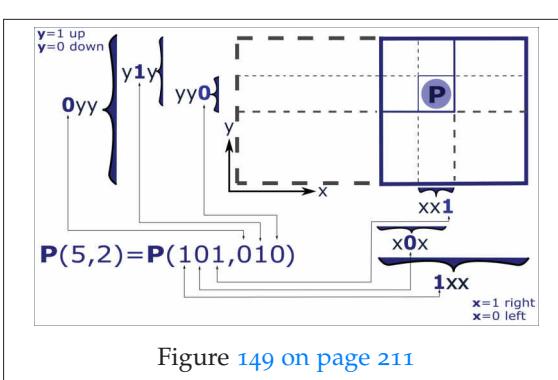


Figure 149 on page 211

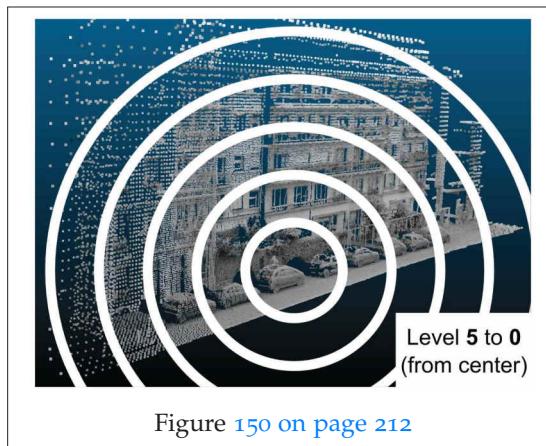
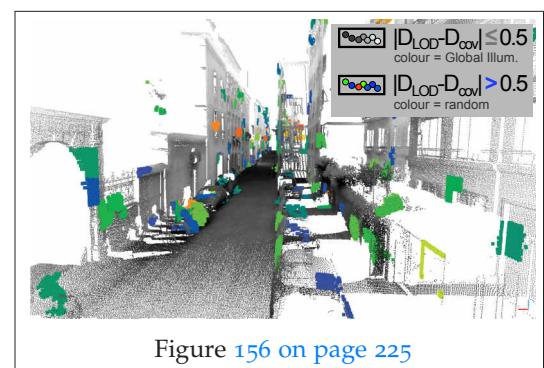
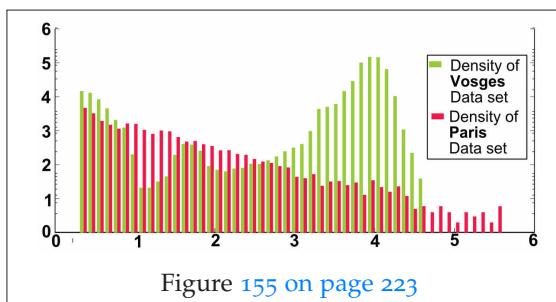
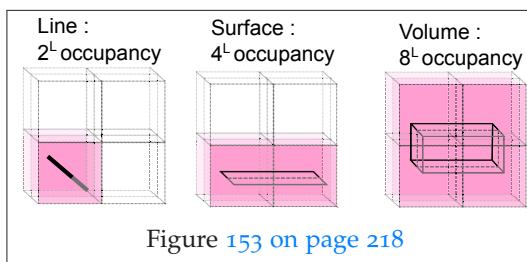
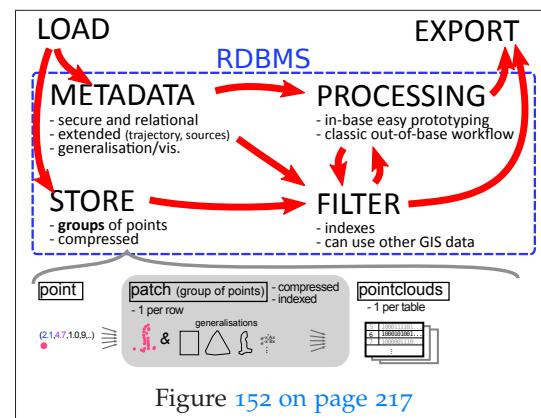
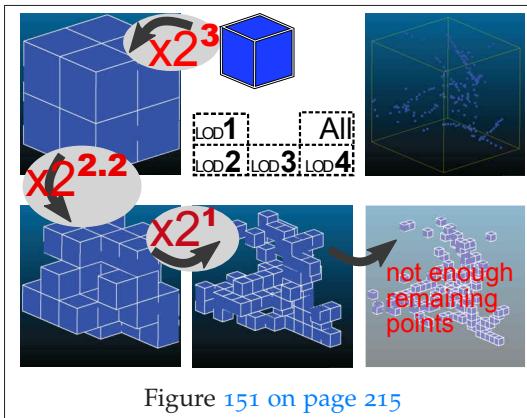
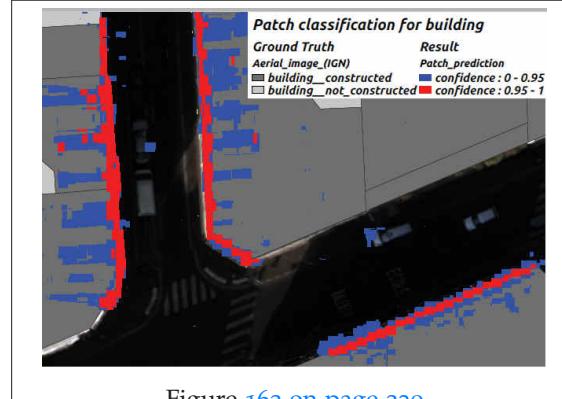
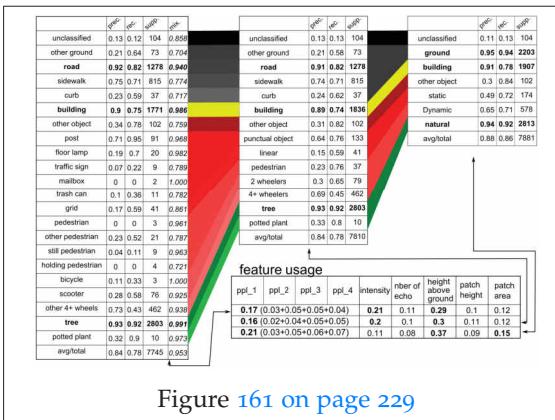
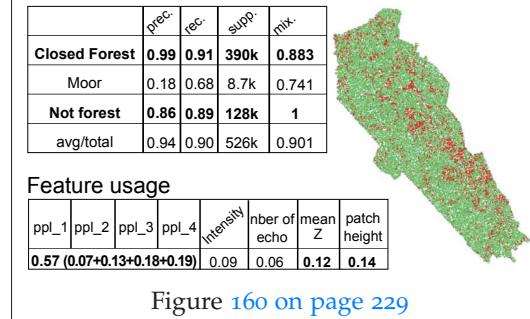
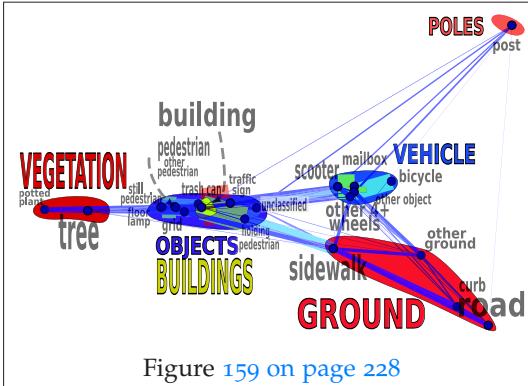
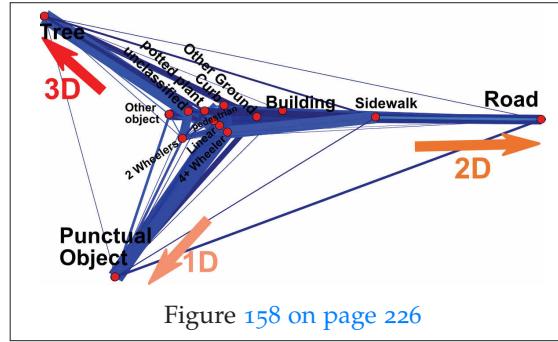
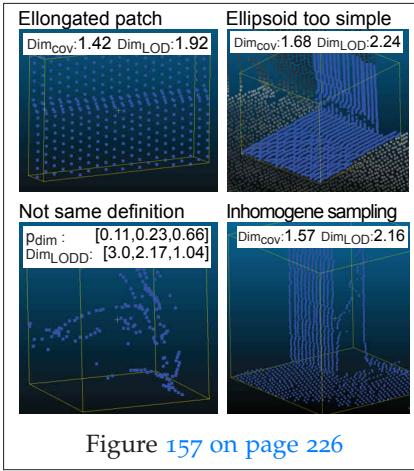


Figure 150 on page 212

APPENDIX B: A NEW DIMENSIONALITY DESCRIPTOR FOR PATCH CLASSIFICATION  
FOR THE POINT CLOUD SERVER





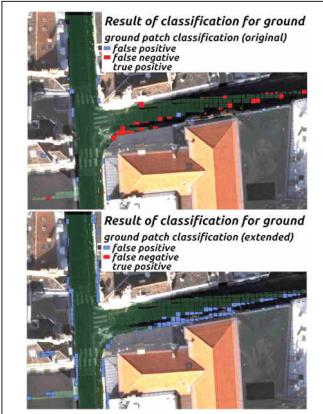


Figure 163 on page 231

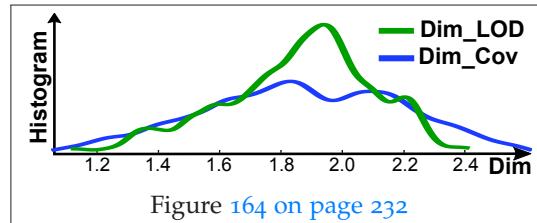


Figure 164 on page 232

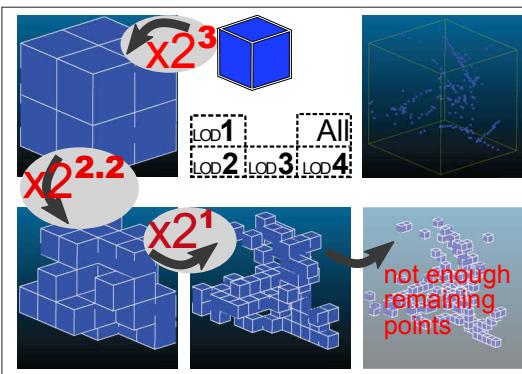


Figure 165 on page 232

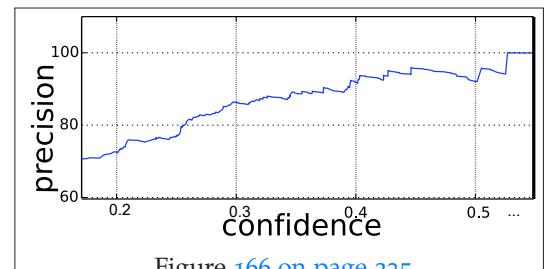


Figure 166 on page 235

## APPENDIX C: MISCELLANIOUS

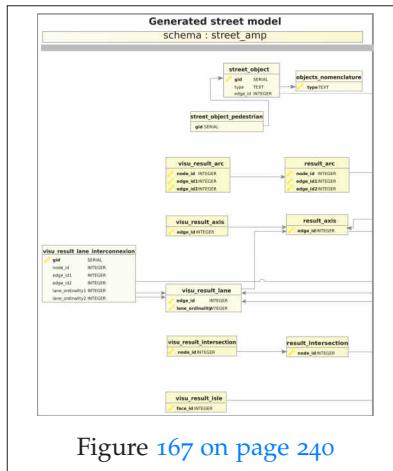


Figure 167 on page 240

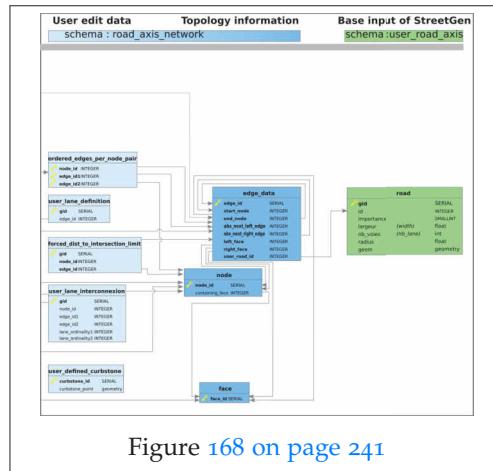


Figure 168 on page 241