



The Egyptian Revolution from the Perspective of an Urban Planner: Demonstrations on the Streets of Alexandria, Egypt

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Switching the Virtual World into the Real World: Demonstrations in Egypt



Source:
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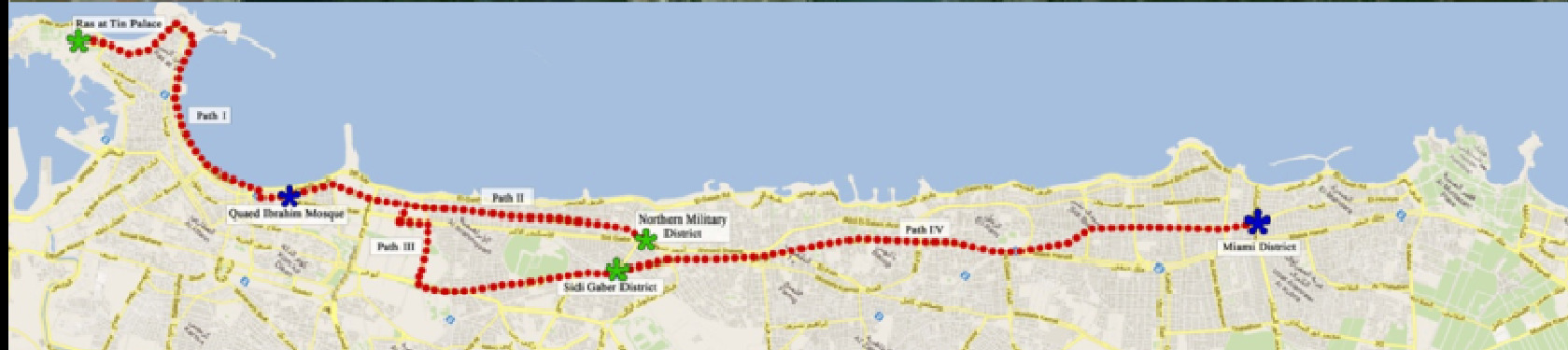
Introduction

Goal of Research

- Collecting the feelings of the protestors during the protesting events in Alexandria
- Impacts on humans' feelings: urban settings, human masses, distance, weather,...
- New methods to measure the feelings of people in urban spaces
- Reactions and feelings → surrounding, built and non-built environment

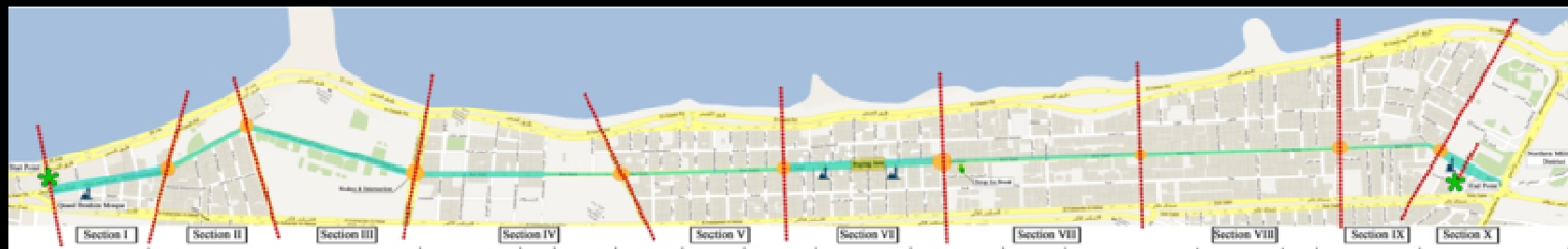
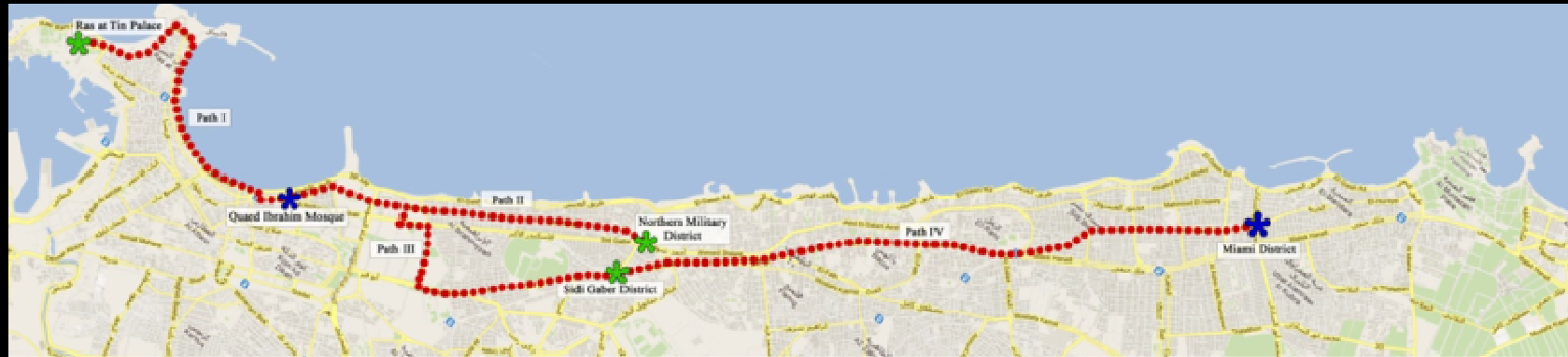
Introduction

Demonstration Route



Examination area

Demonstration Route



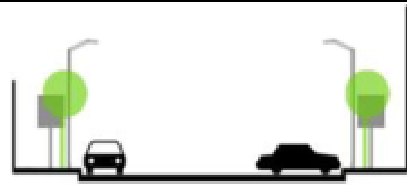
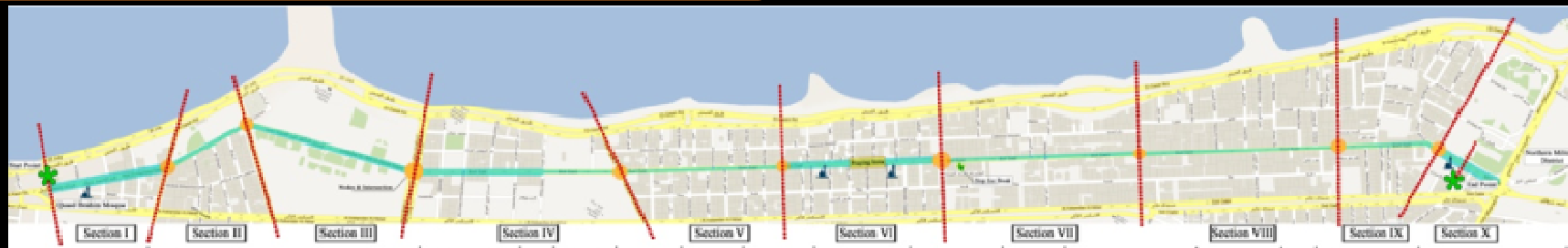
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Route characteristics:

- Strip of 4,34 km
- 10 defined sections along the path

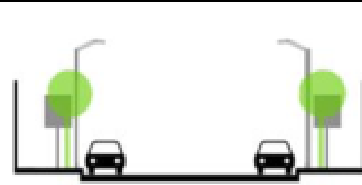
Urbanistic sectors

Different Space Characteristics



| 4.0 | 2.5 | 9.0 m | 5.0m | 4.0m |

Section I



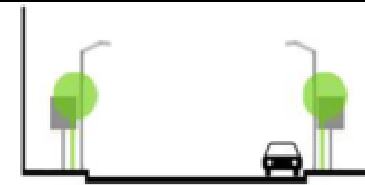
| 4.0 | 2.5 | 8.0 m | 2.5 | 4.0m |

Section II



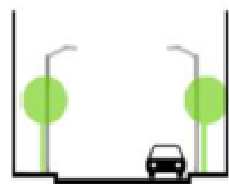
| 3.0 | 9.5 m | 2.5 | 4.0m |

Section III



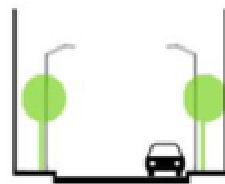
| 4.0m | 9.5 m | 2.5 | 4.0m |

Section IV A



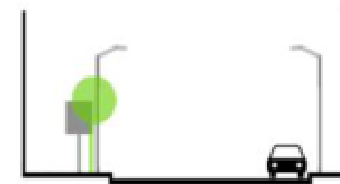
| 2.0 | 9.0 m | 2.0 |

Section IV B



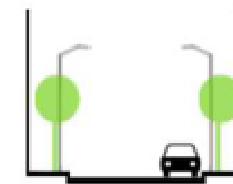
| 2.0 | 9.0 m | 2.0 |

Section V



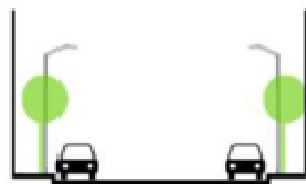
| 6.0m | 10.5 m | 2.5 | 2.0 |

Section VI



| 2.0 | 9.0 m | 2.0 |

Section VII



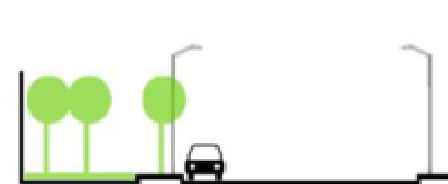
| 2.0 | 2.5 | 9.0 m | 2.5 | 2.0 |

Section VIII



| 3.5m | 5.0m | 9.0 m | 2.5 | 2.0 |

Section IX



| 8.0m | 2.0 | 15.0 m | 2.0 |

Section IX

Source: own source

Urbanistic sectors

The Participants



Source: own source

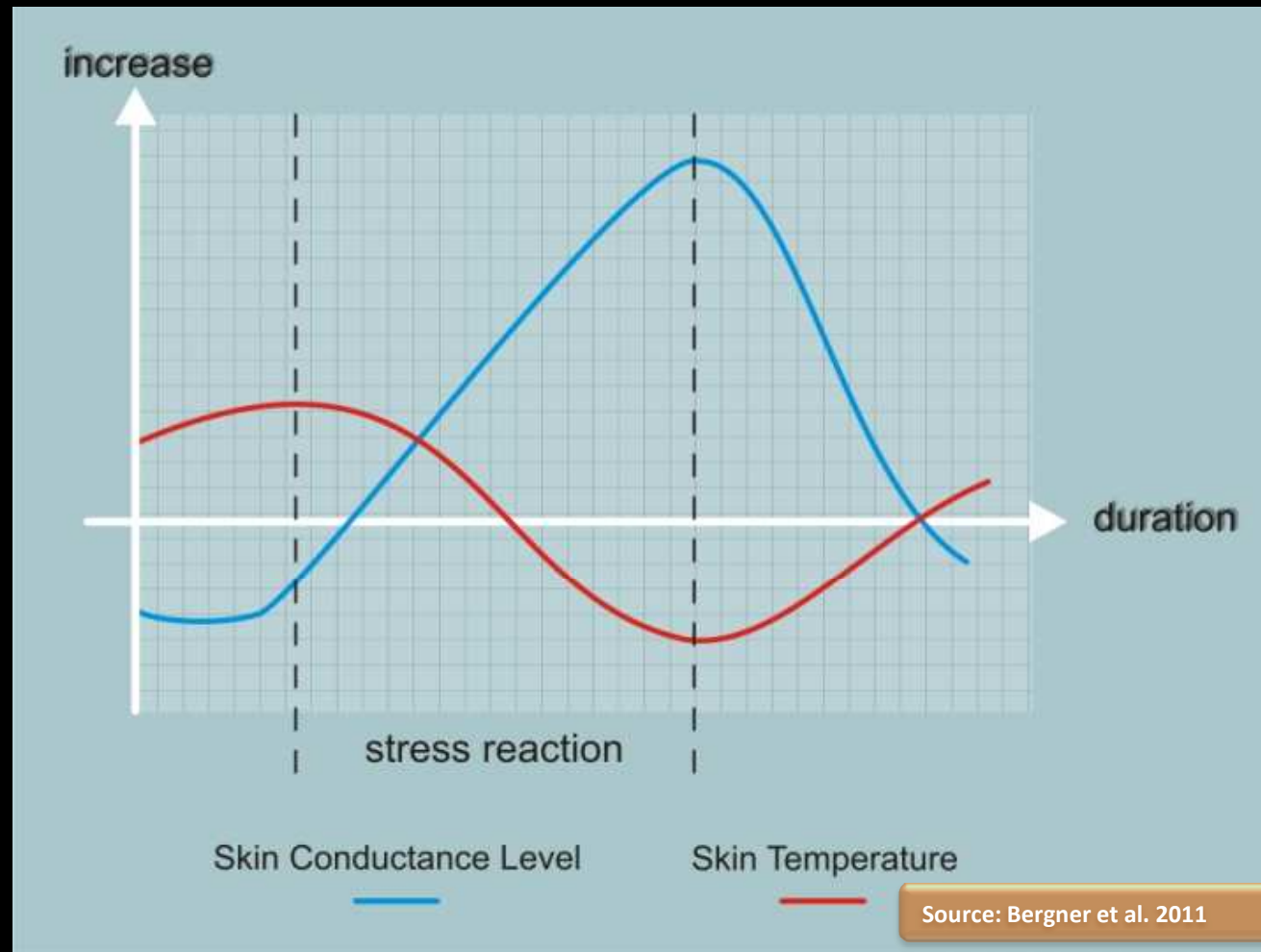
2 female participants
equipped with video
camera, GPS tracker, one
SMART-Band for each

March lasted almost 3
hours

One pause during the walk

Study design

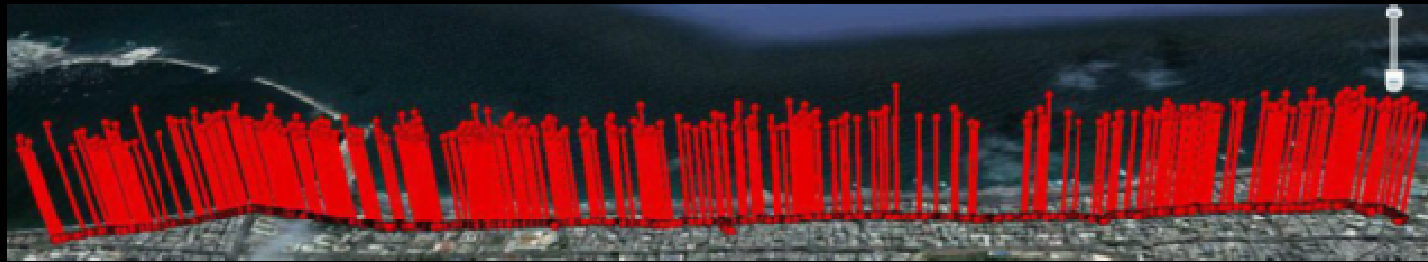
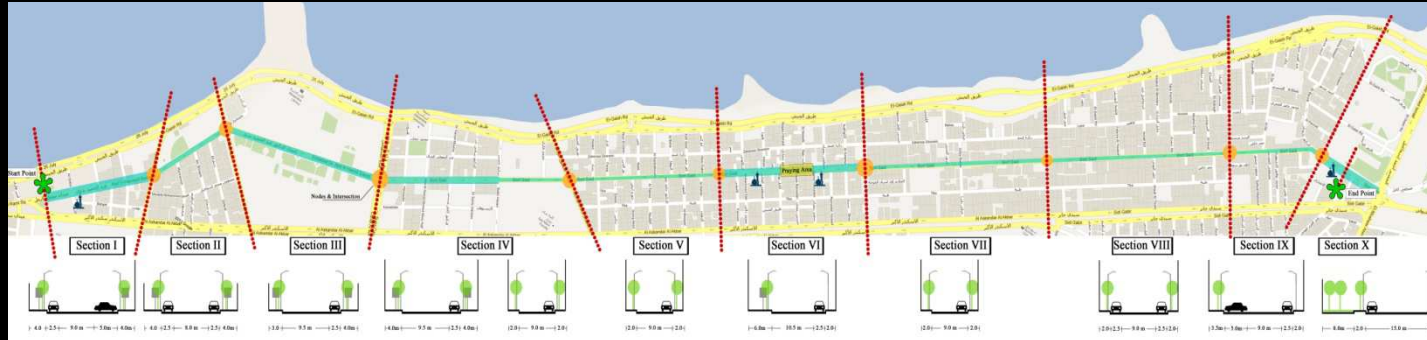
Measurement Techniques and Analysis



Emotion measurement with physiological vital data identifying stress and concurrent geo-tagging.

Sensor strap

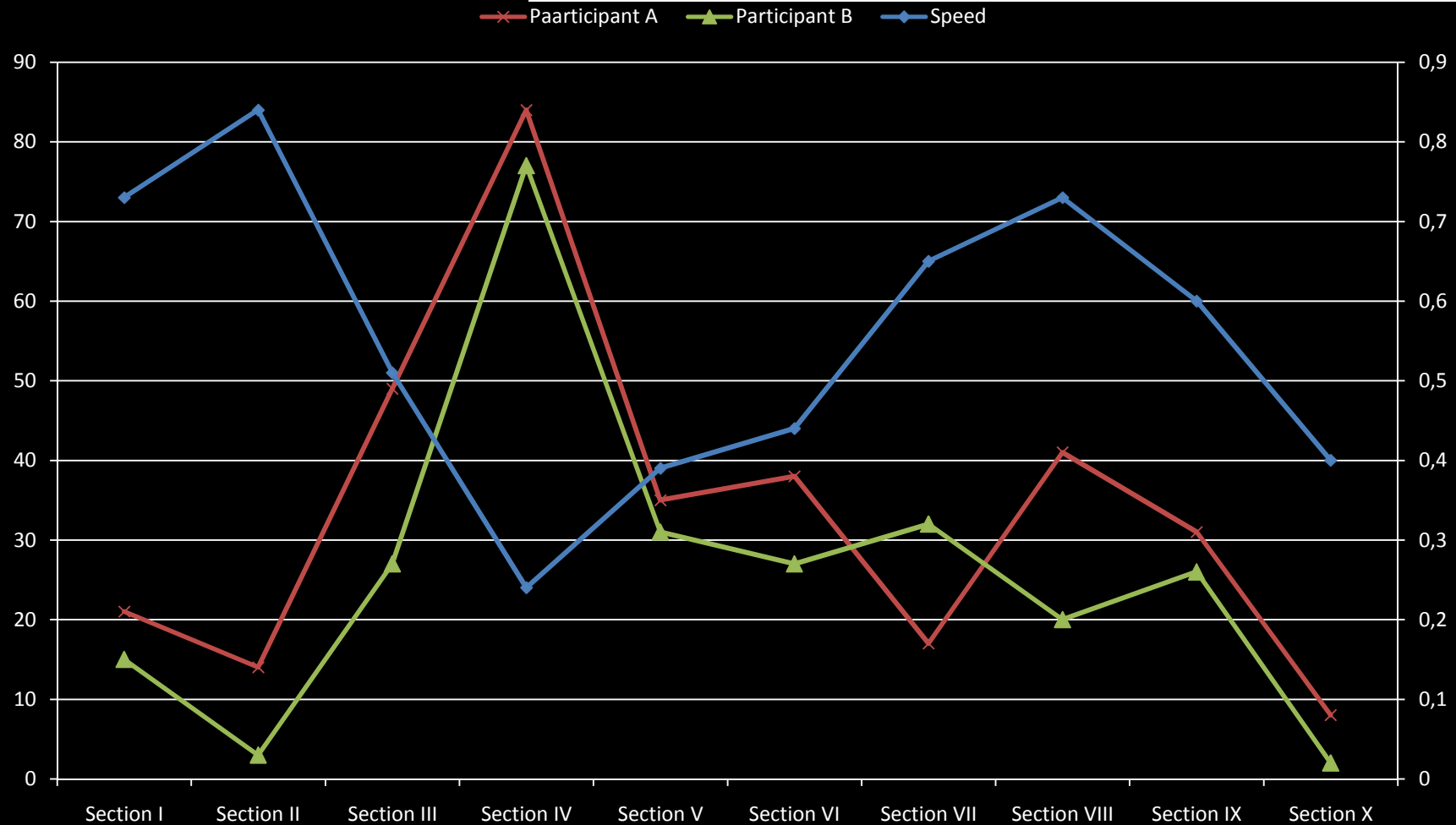
Street Profiles and Pedestrians' Speed at the Different 10 Street Sections along with Stress Profiles for Participants A & B



Source: own source

Findings and Analyses

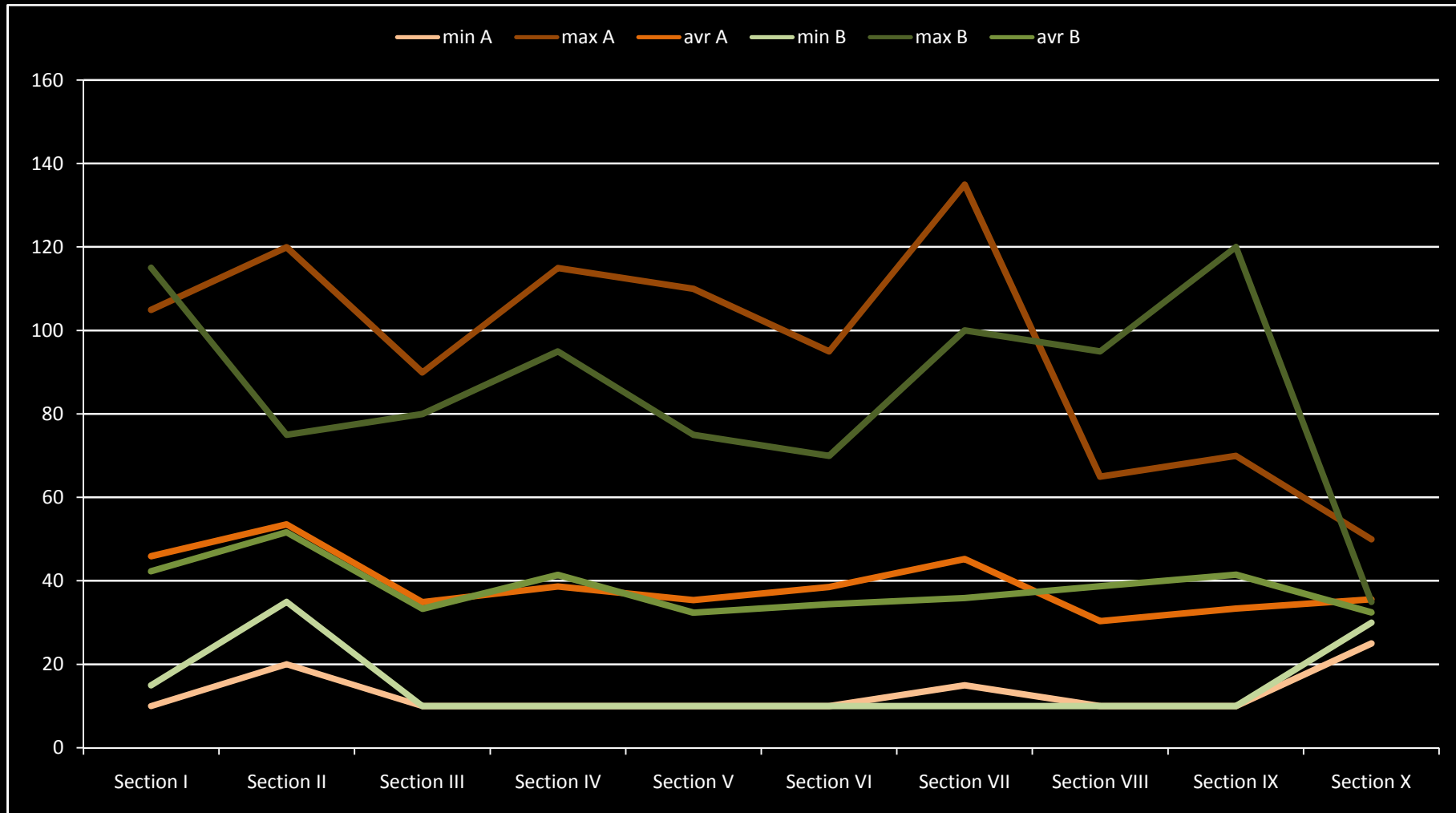
Amount of Stress Points & Average Pedestrian's Speed for each Street Section



Source: own source

Findings and Analyses

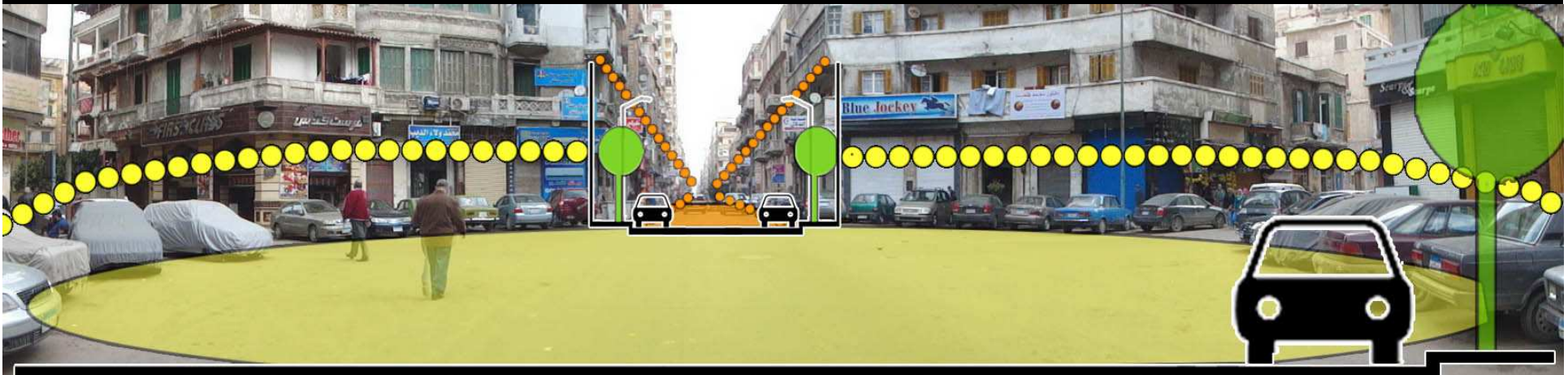
Min, Max and Average Stress Values (by duration of stress reaction)



Source: own source

Findings and Analyses

Different Obstacles that Trigger Stress Responses along the Path



Source: own source

Neuralgic points

Effect on Demonstrators Feelings

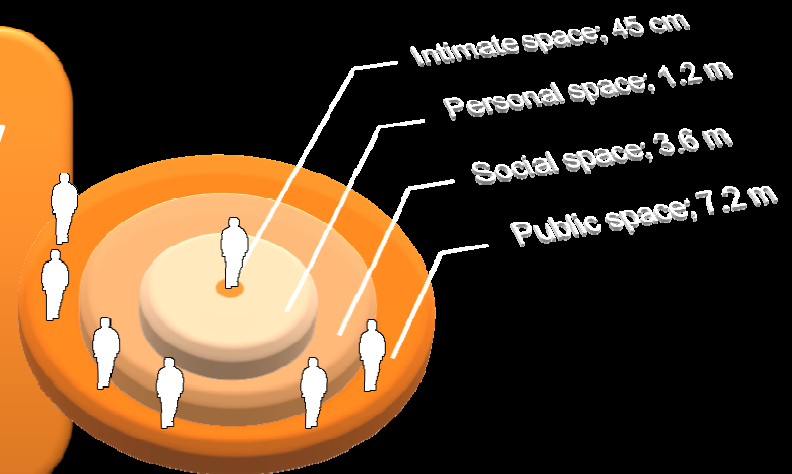
Walk, street conditions, width, people densities

Various types of obstacles blocked the path

Bad weather condition by the end

Getting enthusiastic, cheering with other demonstrators

Stress values rose proportionally
with the density of the
surrounding demonstrators



No definite results - limited number of testing subjects

Conclusion

Further Development

Further studies are essential for producing more robust data.

A larger number of testing subjects is needed.

Concentration solely on recent findings for further research.

Knowledge Processing

Transferability of the findings to other testing locations.

Knowledge transfer to safety and security research in urban spaces.

Better comprehension of human perception in urban spaces.

Outlook

Thank You For Listening!

