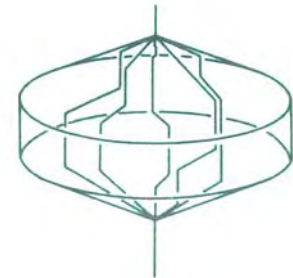


Time Geography Rediscovered: A Common Language for Location-oriented Services

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Presentation Outline

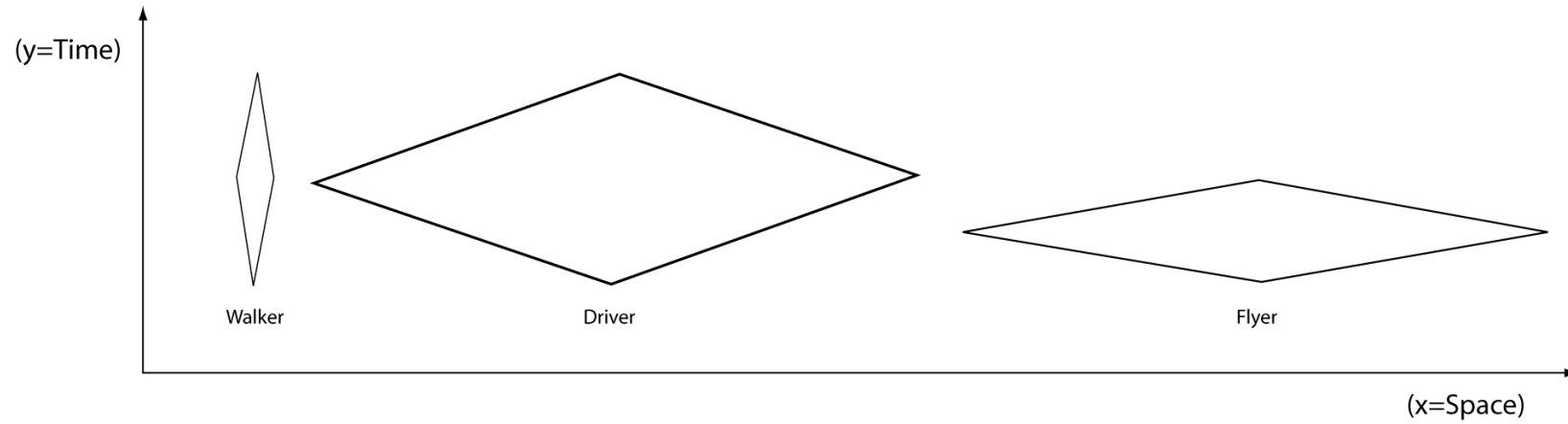
- What is Time-Geography (TG)?
- How might TG be useful to LOS?
- Research example—Consider8
- Sample scenarios
- Current projects with TG elements
- Q & A

What is Time-Geography?

T/G Key Concepts

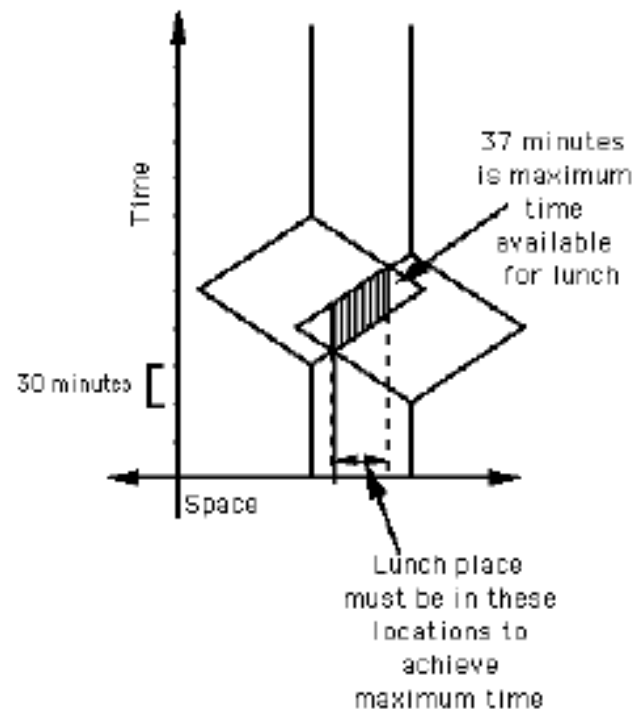
- Individuals are linked with *time* and *space*
 - The expression of this is a *path*
 - Paths intersecting are *bundles*
 - Places where activity occurs are *stations*
- People and their actions are limited by physical, social, and temporal *constraints*

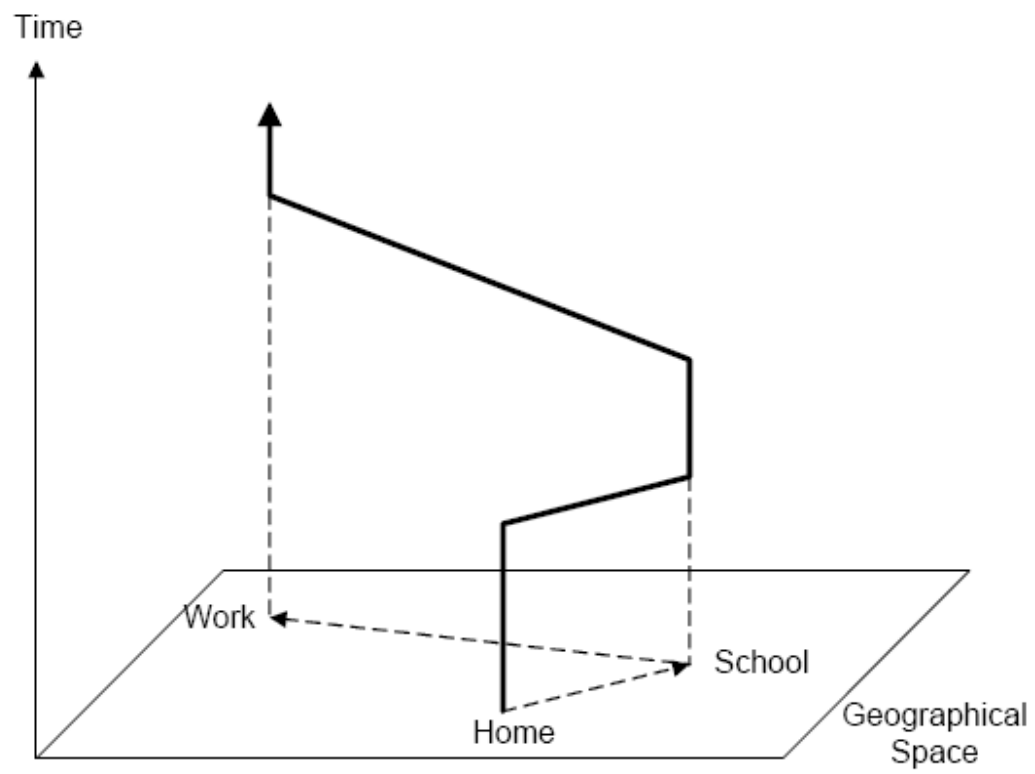
Time/Space Prisms



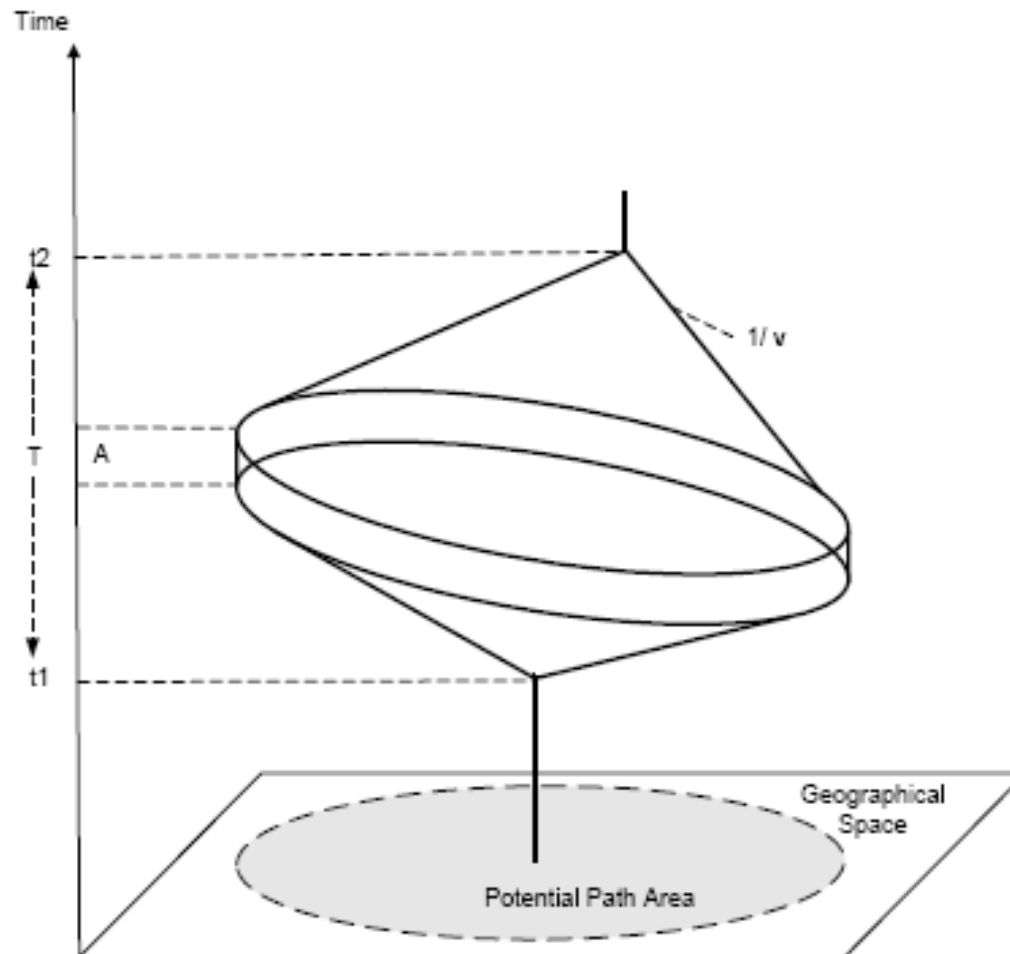
Time/Space Prisms (cont)

TWO PEOPLE PLAN A LUNCH MEETING,
CONTINUED

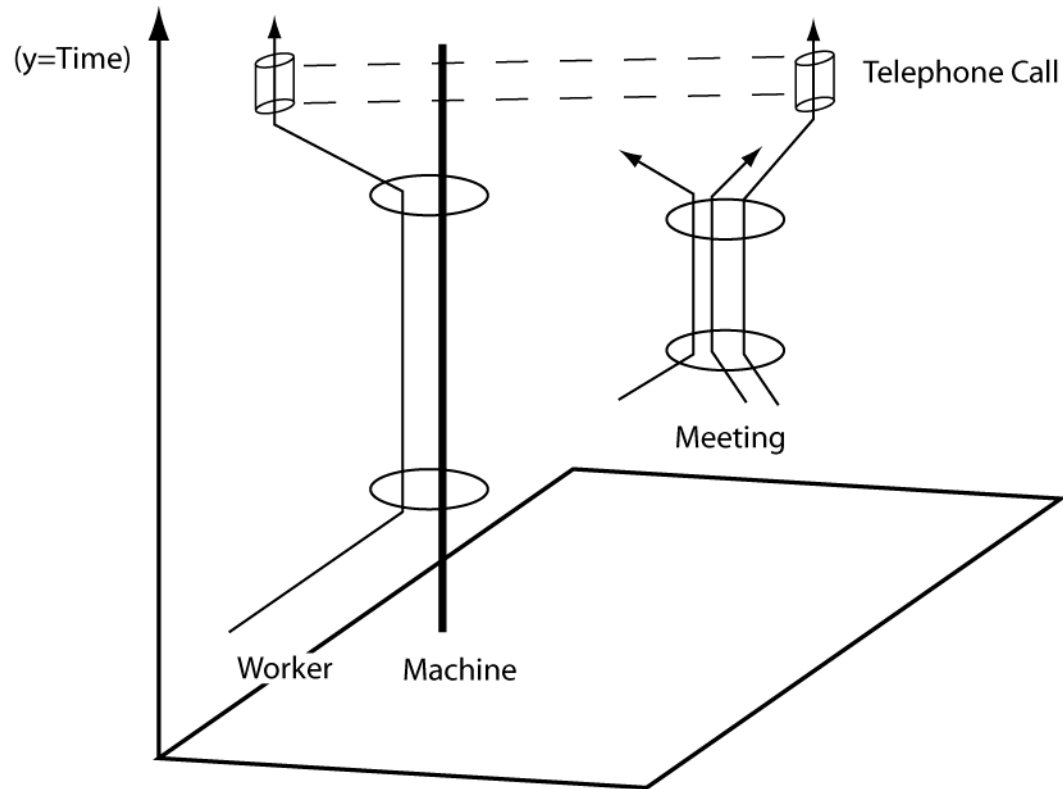




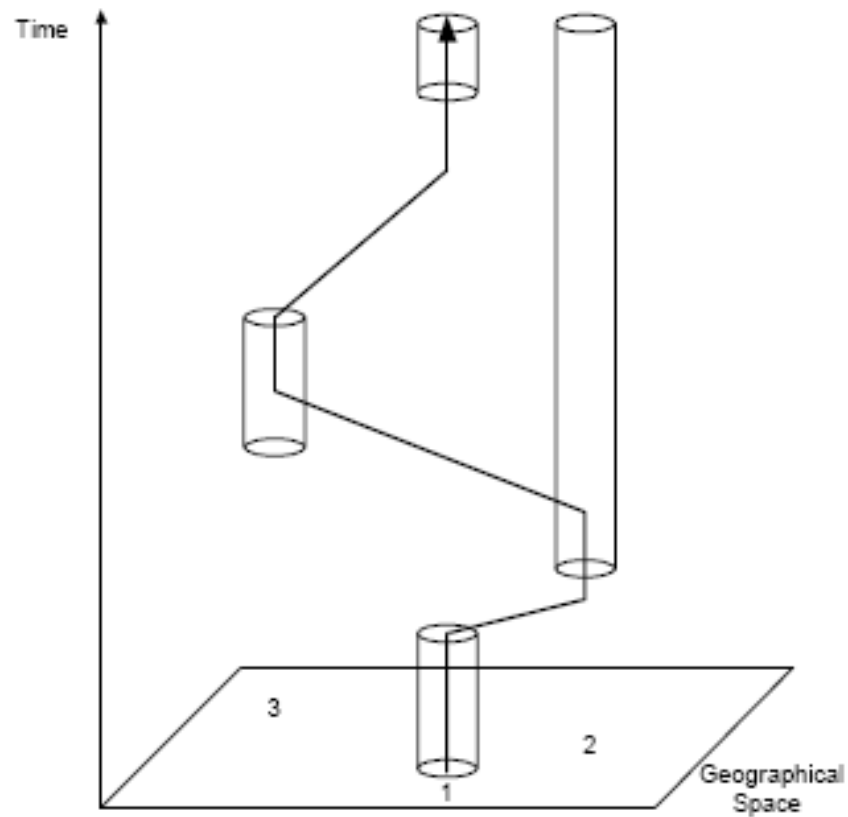
Time/Space Prisms (cont)



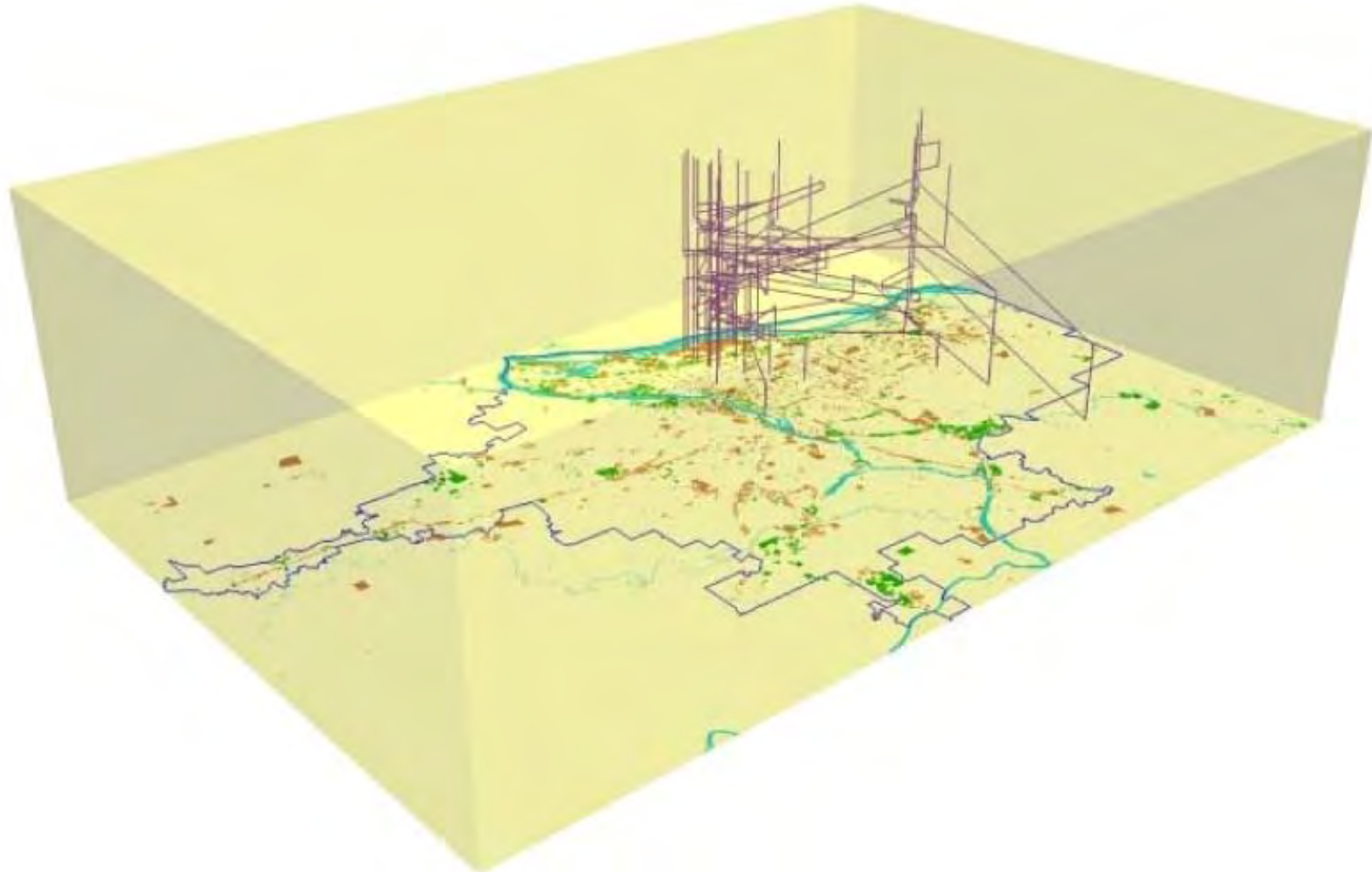
Paths and bundling



Space/Time Path and Stations







How might Time Geography be
helpful to location-oriented services?

Why Time Geography?

- Contextualize users
- Common language
 - TG necessitates a shift away from beliefs within LOS community
 - T.ex, primacy of localized, JIT information
 - Issues around place and location have relevance beyond the atomic individual
 - Too often services focus on this level, missing the greater meso-level implications
 - Many services can be developed from this
- Privacy concerns

Research Example: Consider8

Research Example—Consider8

- Use TG to refine data from mobile service providers
- Potential Benefits:
 - Richer pictures of individuals engaged in social activities
 - Anonymity of customers better maintained

1st User Study—Technical Feasibility

- How easy would discovering paths be ... ?
 - Using off-the-shelf technology and some custom software
- Initial test group of 4 research colleagues
 - Capture paths of individuals
 - IDs of all base stations that user device accesses are logged
 - Base stations IDs are x-referenced for long/lat
 - Paths are mapped by tracing long/lat coordinates in time order
 - Identify stations



Sample Scenarios

Day at the Beach

- For a relaxing day at the beach, it would be helpful to know which is the least crowded





A Night on the Town

- What nightclub is the best tonight?
 - “Should I go to Spy Bar or Sturecompaniet?”



A Night on the Town

- What nightclub is the best tonight?
 - “Should I go to Spy Bar or Sturecompaniet?”





Current projects with TG elements

orangeTM

Sense Networks

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