

Preferred citation style

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Contrasting time-space paths

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Mobility biography: Definition and the research question

Definition:

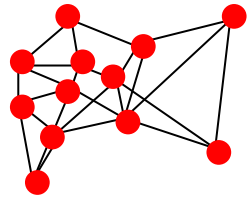
“*mobility biography*” - the collection of an individual’s longitudinal trajectories in the mobility domain.

It assumes the existence of events at certain moments in an individual’s life that change their daily travel patterns to an important degree, for example the car ownership or other mobility characteristics”.

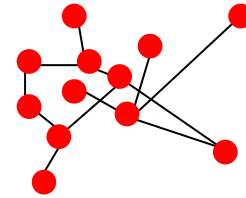
The question:

Which specific events cause major changes to the personal mobility behaviour?

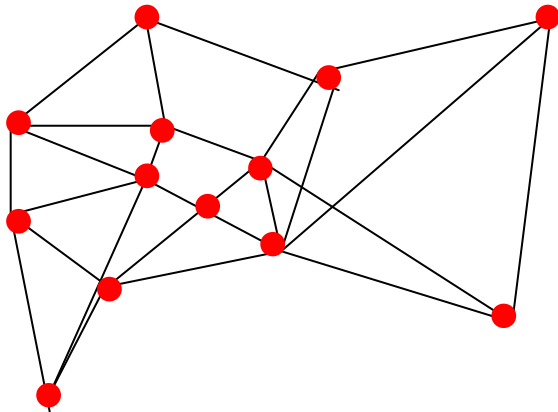
Social network topographies (Spatial/Social components)



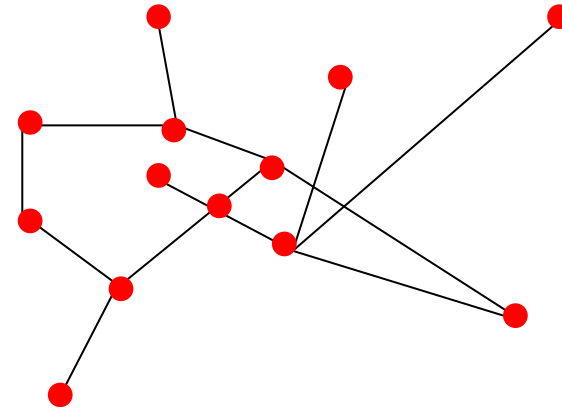
Dense/tight



Dense/loose

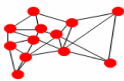
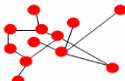
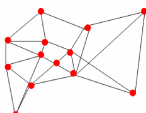
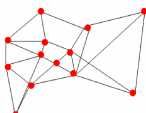


Sparse/tight



Sparse/loose

Considerations in different approaches

Social network approach	Spatial density		Social density		Strength of Tie		Tools	
	<i>Dense</i>	<i>Sparse</i>	<i>Tight</i>	<i>Loose</i>	<i>Strong</i>	<i>Weak</i>	<i>Network tools</i>	<i>Mobility tools</i>
Community studies (Park <i>et al</i> 1925) 	X		X		X			
Social capital approach (Putnam, 2000) 	X			X		X		
SNA (Wellman, 1999) 	X	X	X	X	X	X	X	
Small world analysis (Watts, 1999) 		?	X			X		
<i>Mobility Approach</i> (Larsen, Urry, Axhausen, 2005)	X	X	X	X	X	X	X	X

Qualitative interviews

Characteristics and tasks:

- 30 qualitative guide-line interviews
- Study area: Zurich and Berlin
- Wide range of age, education, occupation
- Different cases of mobility patterns/biographies

- Oral history to conduct life stories
- Developing a method to obtain long-duration data

Qualitative data

Main research topics

- Life course transitions
- Social networks
- Adopted mobility patterns between generations

Which events have we identified within these three research topics which affect mobility?

Qualitative results: Life course transitions

Mobility patterns changing in life time due to

- Relocation (job, place of residence)
- Flexibility
- Access to mobility tools
- Birth of children
- Negative experiences with mobility tools
- Positive experiences with mobility tools
- Age-related immobility

Qualitative results: Social networks

- Social contacts living far away are associated with holiday destinations
- Geography of social network increases over lifetime
- Institutionalized special occasions are reasons to meet-up at-a-distance
- Low generalised costs of communication support maintaining social contacts at-a-distance
- Low generalised costs of transportation support maintaining social contacts at-a-distance
- If the number of events in the mobility biography is increasing, the social network becomes disperse

Qualitative results: Intergenerational patterns

- Different types of acceptance and rejections
- Favourite landscape is associated with the place of the parental home
- Related holiday frequency
- Related mobility tool preferences

Quantitative survey

Collecting biographic network and travel choice data relevant to the mobility patterns over time:

Change in

- Home
- Education
- Work locations
- Availability, ownership of mobility tools

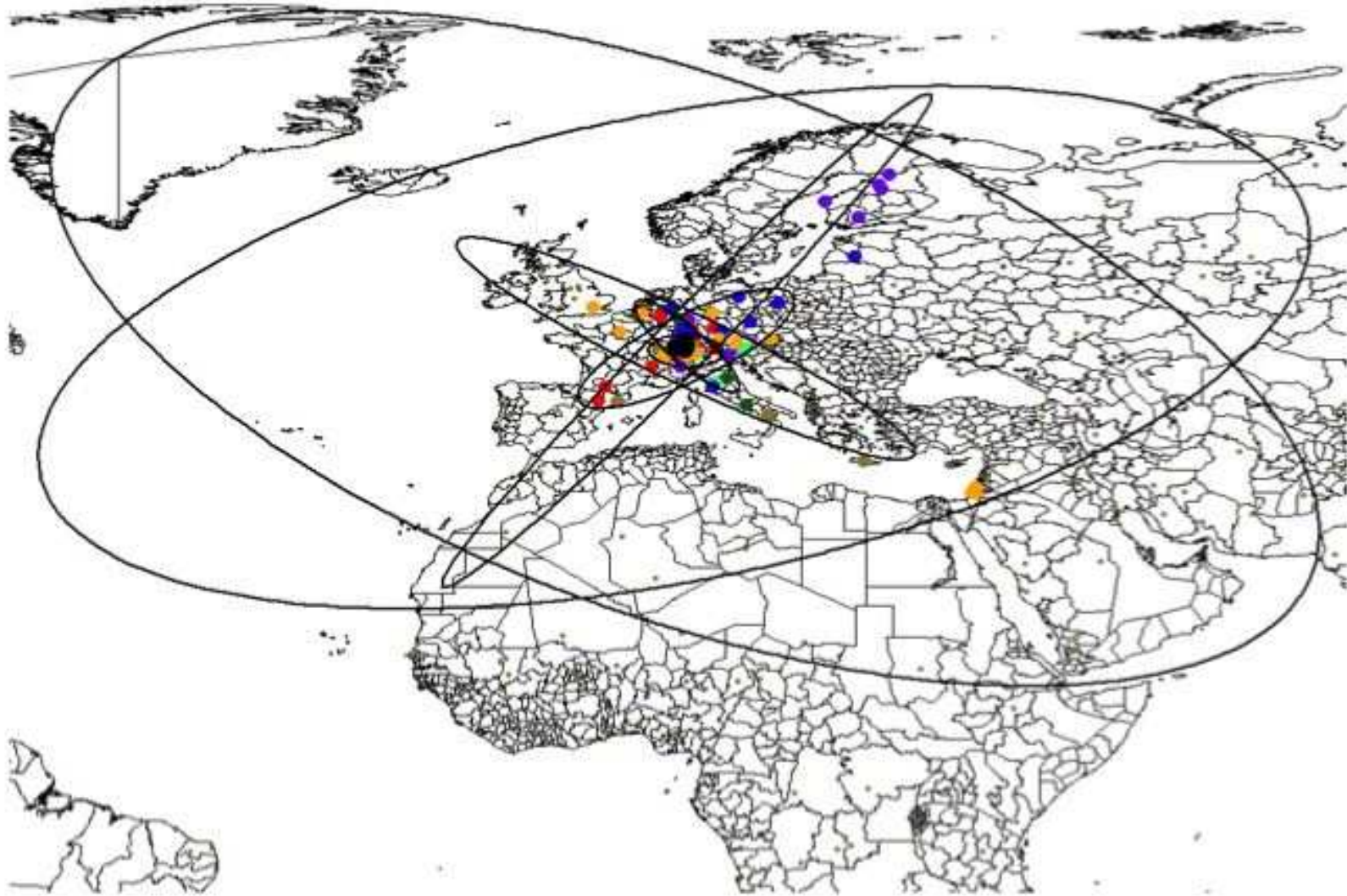
- Locations of the social network members

Activity spaces

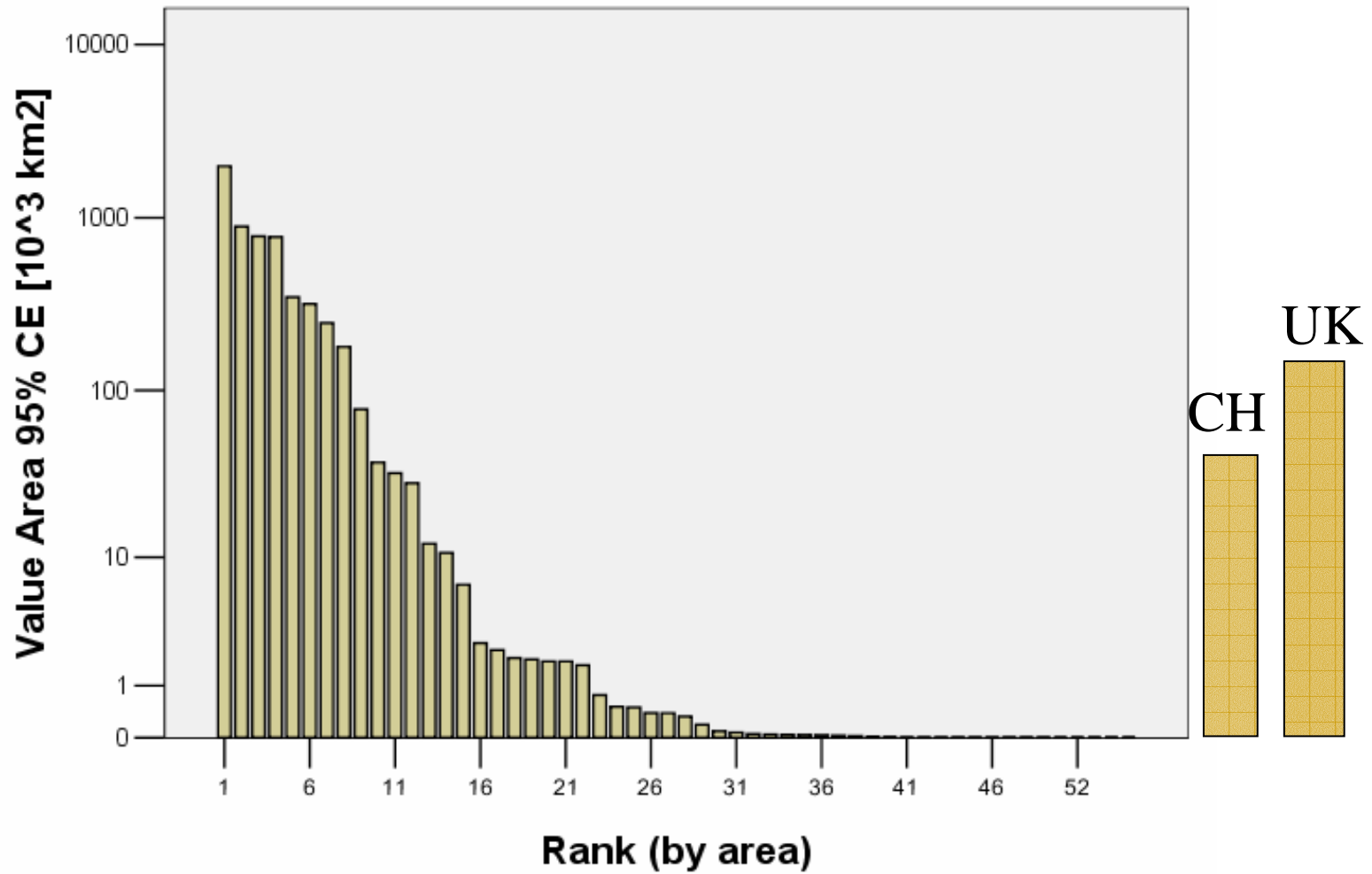
Measuring activity space as a representation of the geography of social networks

- Egocentric networks
- Geocoded places like home, holiday, residences of the social network members, working places to capture the activity space
- A measured value to capture the geographical dispersion
- Method to rank geography of social network ($N \approx 250$).

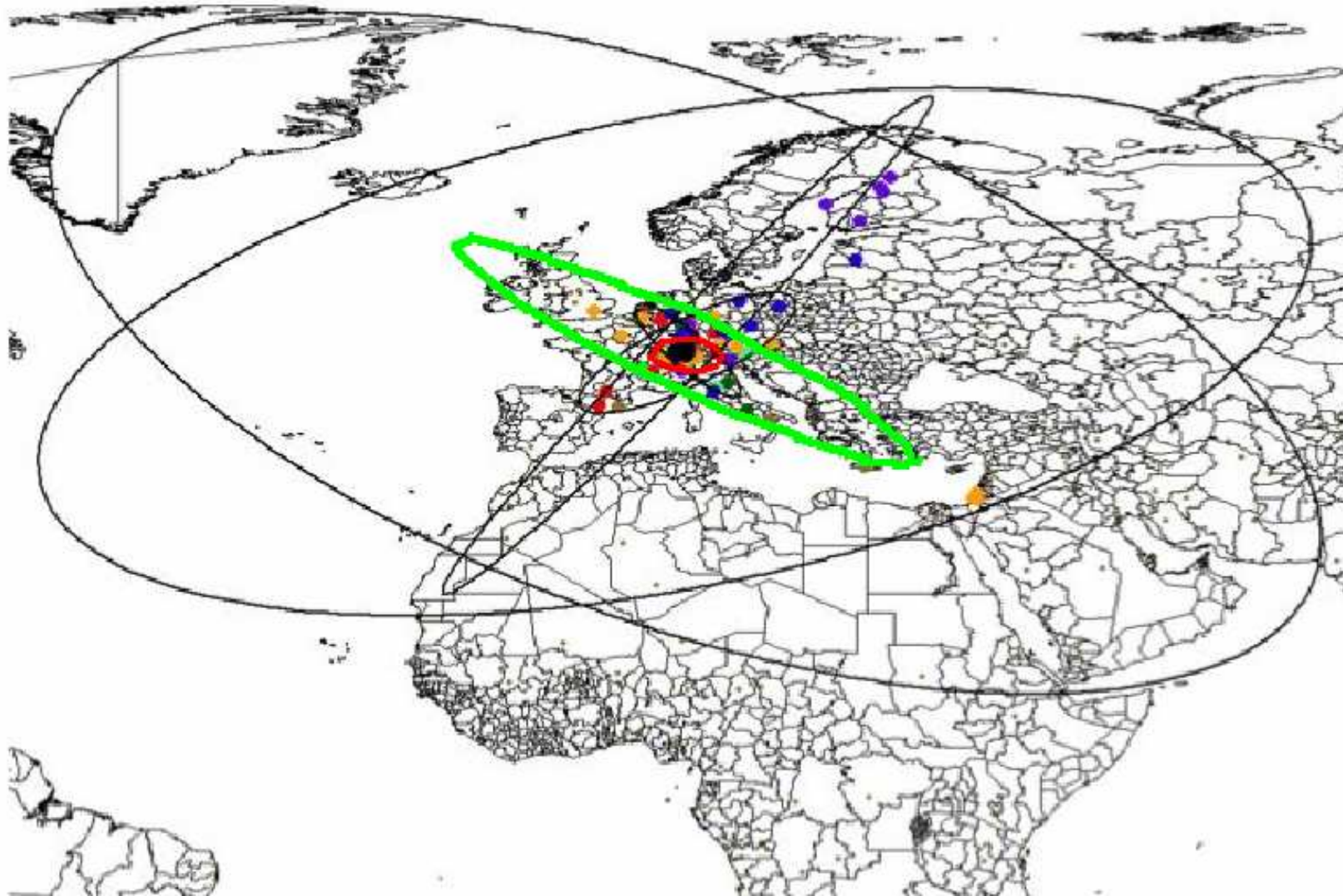
Activity spaces: results



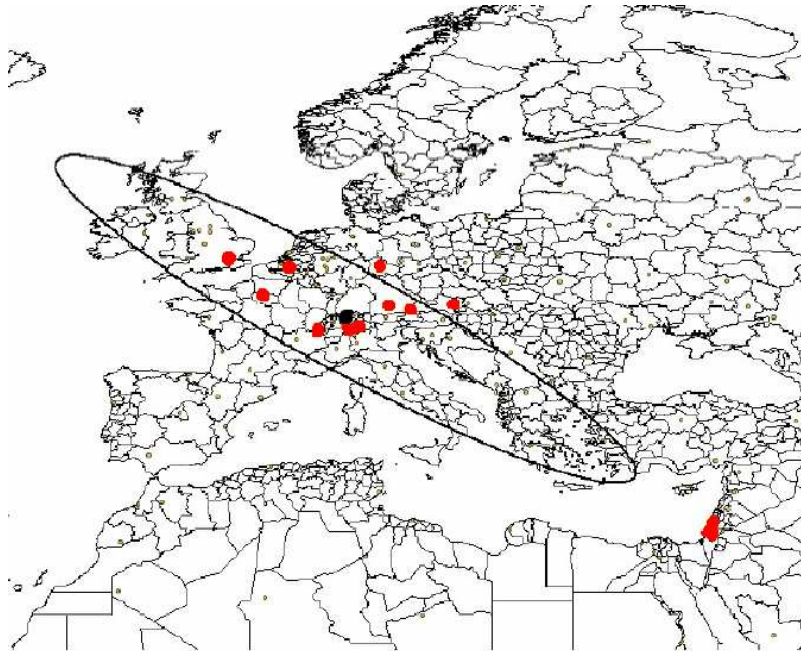
Activity spaces



Activity spaces: Example 1 and 2



Activity space: Example 1



Quantitative Data

Male

Year of Birth: 1940

Size of ellipse: 20 [Mio. km²]

Number of contacts in survey: 29

Most used method of transport: Car

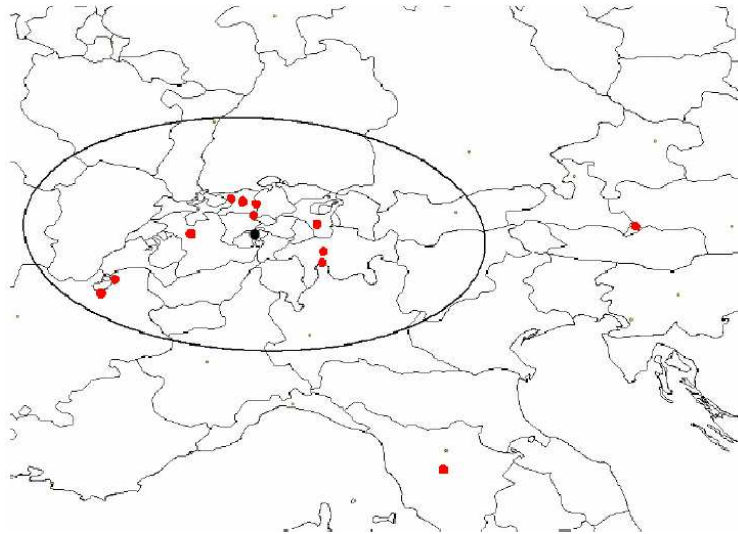
How many times moved in life: 3

How many times changed job in life: 5

Car accessibility since driver license: 100 %

Occupation: Self-employed consultant

Activity space: Example 2



Quantitative Data

Female

Year of Birth: 1976

Size of ellipse: 2,6 [Mio. km²]

Number of contacts in survey: 22

Most used method of transport: Public

How many times moved in life: 4

How many times changed job in life: -

Car accessibility since driver license: 66,7 %

Occupation: Student

What is next ?

Questions to highlight in the coming survey:

- What is the interaction among mobility biography and spatial distribution of the social contacts?
- Will more flexibility in life lead to a larger social geography?
- What effects has the geography of social networks upon personal mobility?
- Which mobility management is necessary to maintain disperse social networks?

Questions



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