Unpacking a political icon: “Bike lanes” and orders of indexicality

Michael Miller Yoder & Barbara Johnstone
29 September 2017
bike lanes in Pittsburgh
bike lanes in Pittsburgh
bike lanes in Pittsburgh

Photo: BikePGH

Photo: Business Insider
bike lanes in Pittsburgh

Photo: BikePGH

Photo: Business Insider

Photo: Dayton.com
Talk about bike lanes in Pittsburgh
Talk about bike lanes in Pittsburgh
“Are we still talking about a bike lane here?”
Motivating questions
Motivating questions

- How does something as simple as *bike lanes* gather so many associations?
Motivating questions

- How does something as simple as bike lanes gather so many associations?
- Do people with different perspectives on bike lanes argue for/challenge certain associations?
Indexicality
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- Ability of language to evoke contexts in which it occurs
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- Mapping from linguistic features to (social) context
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Indexical orders
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- Levels of indexical meanings
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- New *indexical orders* build on, compete with existing orders (often ideological)
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- New *indexical orders* build on, compete with existing orders (often ideological)

- Examples:
  - /ai/ Southern accent
  - T/V distinction
Data
Pittsburgh bike lanes corpus
Pittsburgh bike lanes corpus

Three events:
Pittsburgh bike lanes corpus

Three events:
1. Downtown protected bike lanes (2014)
Pittsburgh bike lanes corpus

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| # documents | 40 |
| # tokens    | 29,534 |
| # instances of bike lanes | 216 |
Pittsburgh bike lanes corpus

Three events:
1. Downtown protected bike lanes (2014)
2. Dennis Flanagan crash (2016)

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<thead>
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<td>News articles</td>
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</tr>
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<td>Opinion/blog posts</td>
<td>8</td>
</tr>
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<td>Comment threads</td>
<td>2</td>
</tr>
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Indexical orders applied

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<th>Overview</th>
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<td>Social identities: characteristics of bike lane users</td>
<td>Young, progressive commuters, but can include recreational riders and families with children</td>
<td>Few young, progressive, white newcomers, not the majority of Pittsburghers, not traditional Pittsburghers</td>
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<td>Characteristics of a city that includes bike lane users</td>
<td>Tech companies; progressive; modern.</td>
<td>Ignores long-time residents and their interests</td>
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<td>“The city’s second protected bike lane is nearing completion. Parallel parking separates the bike lanes from traffic adjacent to Phipps Conservatory. Parking in the bike lane is not legal …”</td>
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<td>“The fact of the matter is that bike lanes save lives. They help keep Pittsburghers healthy.”</td>
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<td>“While I like bike lanes, not many of us use them” (Welch)</td>
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<td>&quot;tech companies … ask for safe streets and to be able to ride a bike to work. Twenty-first century cities are being designed so that people don't have to own a car to be able to live and work in a city&quot; (Peduto)</td>
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Methods
Concordance analysis
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- Looked at sentences surrounding each instance of *bike lanes*
Concordance analysis

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- Annotated for: *sentiment, indexical order, event*
Concordance analysis

Sentiment across bike lane instances

- Positive
- Negative
- Neutral

Number of bike lane instances
Concordance analysis

Indexical orders across bike lane instances

Indexical order

Number of bike lane instances
Findings
Event vs sentiment
Event vs sentiment

- **2014 Protected Bike Lanes**
  - Positive: 48.4%
  - Negative: 33.0%
  - Neutral: 18.6%

- **2016 Dennis Flanagan Crash**
  - Positive: 82.1%
  - Negative: 10.7%
  - Neutral: 7.2%

- **2017 Mayoral Race**
  - Positive: 46.1%
  - Negative: 31.4%
  - Neutral: 22.5%
Event vs sentiment

- Most positive: crash (bike lanes could save lives)
Event vs sentiment

- Most positive: crash (bike lanes could save lives)
- Most negative: mayoral race (bike lanes are unpopular)
Event vs indexical order
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- 1st order: installation of bike lanes
Event vs indexical order

- 1st order: installation of bike lanes
- 2nd order: crash
Event vs indexical order

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- 2nd order: crash
- 3rd order: installation of bike lanes (culture change?)
Event vs indexical order

- 1st order: installation of bike lanes
- 2nd order: crash
- 3rd order: installation of bike lanes (culture change?)
- 4th order: mayoral race
Sentiment vs indexical order
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Sentiment vs indexical order

- Positive instances stressing 2nd order (safety)
Sentiment vs indexical order

- Positive instances stressing 2nd order (safety)
- Negative instances operating on 1st order (use of space)
Conclusion
Questions, revisited
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• How does something as simple as bike lanes gather so many associations?
Questions, revisited

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  > Use in different discursive contexts, different orders of indexicality
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Questions, revisited

• How does something as simple as bike lanes gather so many associations?
  > Use in different discursive contexts, different orders of indexicality

• Do people with different perspectives on bike lanes argue for/challenge certain associations?
  > Text from different groups reinforce bike lanes in indexical orders conducive to their argument
Thank you!