



# LingoBoingo

*Joining Forces to Promote Games for Linguistic  
Research and Technology Development*

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- ◆ Need
  - scant coverage of the world's language
  - limits of current approaches
- ◆ Inspirations – LibriVox, Zooniverse, GLG, etc.
- ◆ Incentives
  - information, entertainment, self-expression, socializing, developing skills, demonstrating competence, competition, status, prestige, recognition, access to (HLT) services, contributing to a greater cause or good
- ◆ Workforces & X-sourcing
  - recruiting, task scaling, assessing skills, multiple annotations, comparing
- ◆ Workflows & Post-processing
- ◆ NIEUW & its role in the effort
  - infrastructure
  - activities
  - portals: games, citizen science, language professionals

Great Language Game

Play About

## What language is this?

Lives: 3

Score: 0



Danish

Marathi

Telugu

Vietnamese

>16M judgments in 9 months  
>38M judgements extrapolated  
probably many more  
but  
only confusability data,  
no new annotations



## Name That Language!

Can you identify the language?

Score:	10
Round:	2
Lives:	3



Russian Portuguese Polish

Play Again

- ◆ Game Play: using bonus round to collect novel annotations
  - # moves, levels, 'lives'
  - reward for correct, penalty for incorrect - normally and in bonus round
  - frequency of bonus rounds
  - skip or answer before clip complete
  - # languages, # distractors, closed set
- ◆ Data
  - language of clips relative to player's
    - location
    - native language
    - performance
  - language of distractors relative to
    - all above
    - distance from target language
      - phonemically
      - in terms of family tree

## Language Squad

AutoPlay : ▶

🌐 0 | ★ 0

**Question 1 :** Play ▶

English

French

Japanese

seems easier than  
Great Language Game

Play Home About

lives 3 level 1 score 0


▶

Mayan Portuguese Chinese (Yue) Danish

seems much more difficult than Great Language Game


**L I N G O B O I N G O** World Language Games

All English French




**Jeux de mots**  
French

Lexical and semantic games with a purpose in French.




**Phrase Detectives**  
English

Compete against other detectives by identifying the relationships between words and phrases in a variety of texts including literature, history, travel, entertainment and science. Earn top scores!



**Tile Attack**  
English

Go head-to-head against another player competing to identify the noun phrases of a text.



**Zombilingo**  
French

Identify syntactical dependencies, collect brains and eat them! This language game is fun for both fans of grammar and zombies.

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- ◆ Portal - links
- ◆ Authentication
- ◆ Back-end
- ◆ Publicity
  - analysis



## Events

- ◆ November: sites snapshot current # players, # annotations
- ◆ December: LDC newsletter, social media; cross promotion among sites
- ◆ January: LinguistList mailer (includes single post to FB, Twitter, G+)
- ◆ February: SciStarter
- ◆ March: Facebook direct
- ◆ April: Philadelphia Science Festival (55,000 attendees to Carnival)
- ◆ May: Twitter direct
- ◆ June: Google AdWords

## Measures

- ◆ Games
- ◆ Items
- ◆ Annotations Per Item
- ◆ Countries
- ◆ Lifetime Judgements
- ◆ Average Judgements per Player
- ◆ Average Lifetime Play
- ◆ Monthly Active Users
- ◆ Retention (months/weeks)
- ◆ Throughput (hours/days)
- ◆ User Performance (precision, recall, f)
- ◆ System Performance (precision, recall, f)
  - with and without voting

## ◆ December

- LDC
  - 12/6 Facebook and Twitter pages
  - 12/15 Newsletter
  - 12/18 “What’s New” on homepage

## ◆ January

- LinguistList
  - 1/22 Mailer
  - Facebook post
  - Twitter post
  - G+ post

## ◆ February

- SciStarter discussion started

## ◆ March

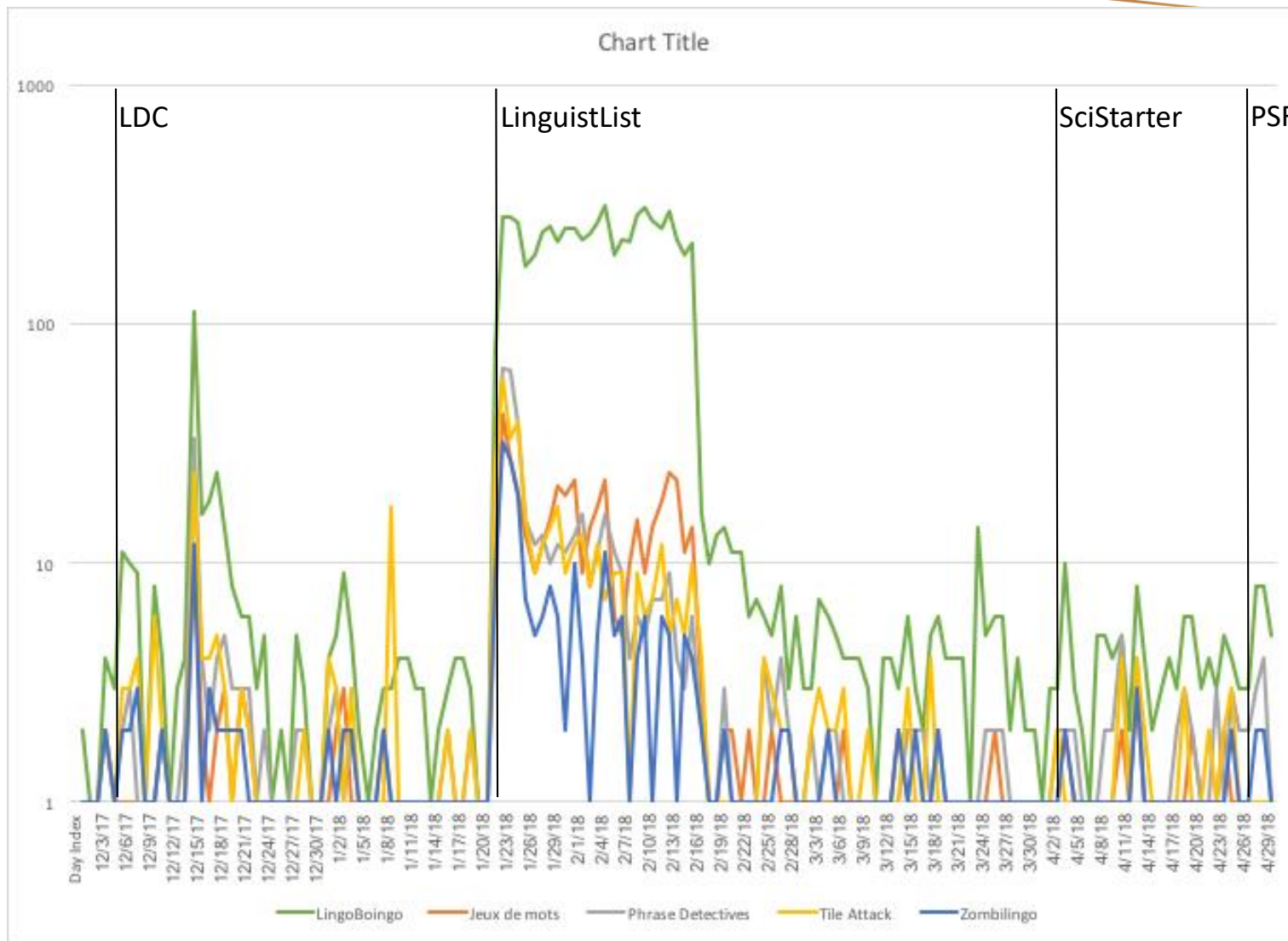
- SciStarter discussion continues

## ◆ April

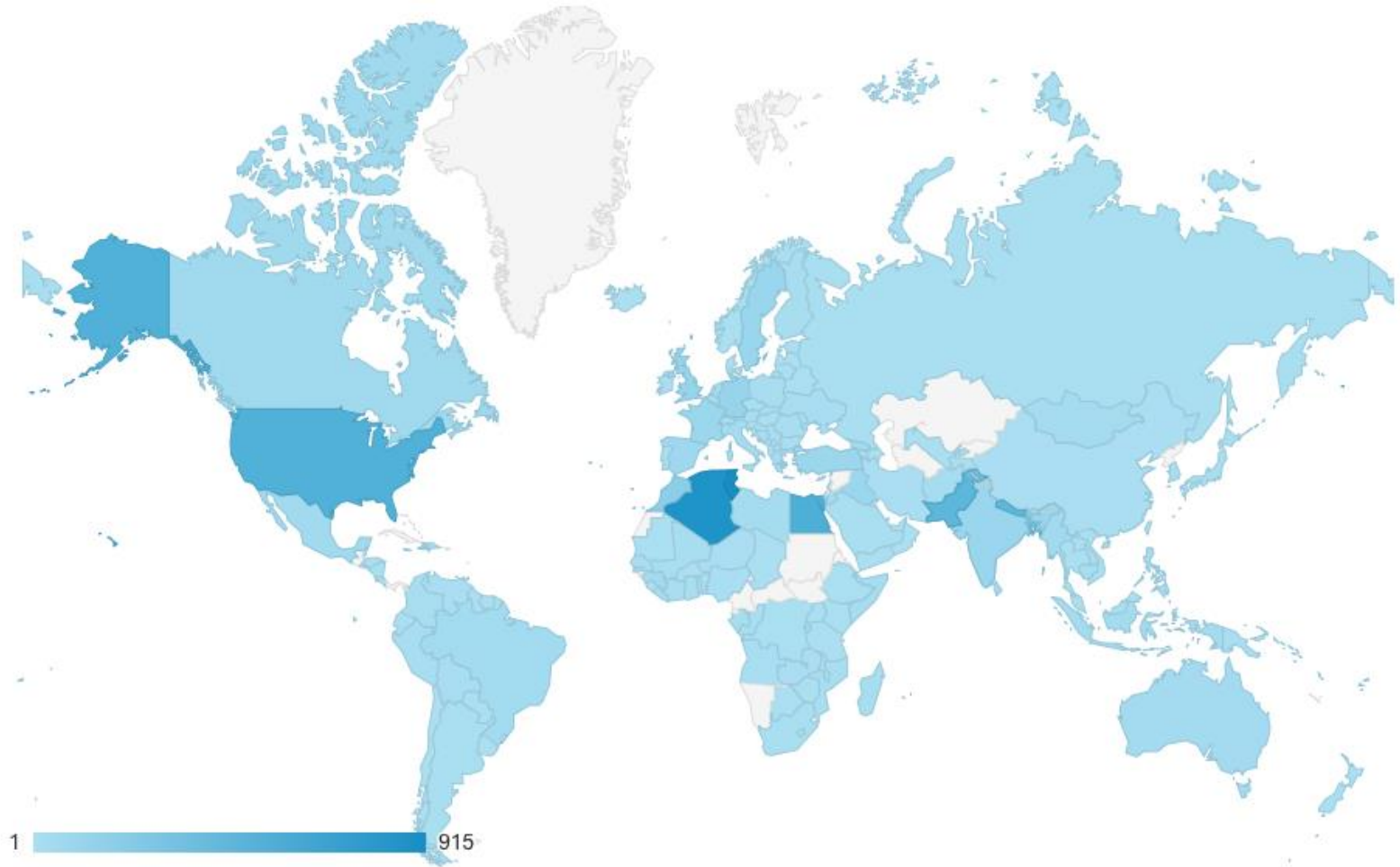
- SciStarter
  - 4/4 project added
- Philadelphia Science Fair
  - कण्ठ

## ◆ May

- SciStarter
  - 5/15 promotion campaign to start



Correlation with sessions received at:  
 Tile Attack=.96  
 Zombilingo=.94



- ◆ Findings
  - Still ‘intra-research-community’
  - Not everyone who visits LingoBoingo plays a game immediately
  - Individual publicity events affect games differently.
  - Use decreases during weekends
  - Entropy but some cumulative effect apparent
- ◆ To join:
  - game
  - resulting data shared with research community
  - track impact of publicity
- ◆ Thanks to:
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