LingoBoingo

Joining Forces to Promote Games for Linguistic Research and Technology Development

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Background

- **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
Inspiration: Great Language Game

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

[Buttons: Play, Pause, Russian, Portuguese, Polish, Play Again]
Game Parameters

- **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: on/off

Question 1: Play

- English
- French
- Japanese

seems easier than Great Language Game
Others: LingYourLanguage

seems much more difficult than Great Language Game
LingoBoingo Portal

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

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.
## Publicity: Planned

hat tip U. Essex

### 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
Publicity: Actual

◆ 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
    ■ ड्रफ्ट

◆ May
  ● SciStarter
    ■ 5/15 promotion campaign to start
Sessions/Day & Outgoing Clicks

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

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