

# Understanding Usability Issues of Bidirectional Bilingual Websites

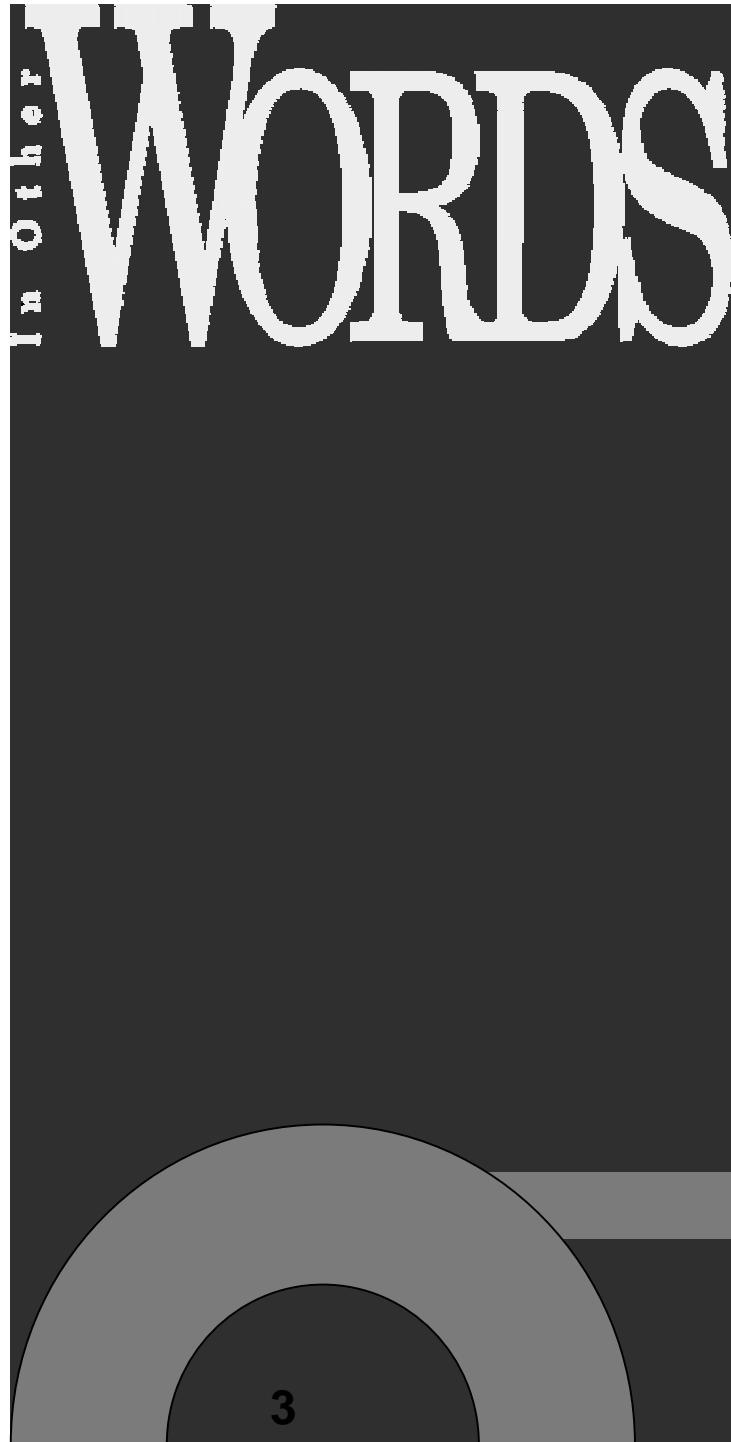
**NOTE:** The original presentation contained video and sound; all such slides have been removed.

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In Other WORDS, Israel

# Overview

- Background leading to research
- Methodologies
- Findings
- Recommendations
- Q&A



## Background

Why did we launch this research project?

# Limited Usability Data for BDBL

- BDBL
  - bidirectional bilingual
  - includes any mix of a western language with Hebrew and/or Arabic
  - could also include vertical Asian languages
- What exists
  - single-language usability data (mostly English)
  - some bilingual data, but almost exclusively with western languages

# General Bilingual Problems

- Needs of population
- Accessibility—users must be able to:
  - **see** options
  - **recognize** options
  - **respond** to options
- Appropriate content for both languages
  - full and accurate translation
  - appropriate localization (including navigation)

# Specific BDBL Problems

- Numbers flipped in translation
- Embedded text problems

## אבחון

לשם כך פיתחו החוקרים קריטריונים לאבחון, הנקראים "מדדי רומא" (Roma criteria), המתאימים לאבחון מצבים של תסמונת המעי הרגז והפרעות גסטרואנטרולוגיות אחרות, שבהן המעי נראה תקין אך אינו מתפקד כראוי.

# Our Assumptions

- Native language is always visually dominant
- Language direction affects:
  - visual hotspot area on screen
  - navigation intuition
- There are more possible errors than translation

In Other  
**WORDS**

# Methodologies

Research guidelines

# Participant Details

- Surveys in Hebrew and English
- 36 selected from 59 entries
- No computer experts or novices
- 20 female, 16 male
- Age: 18 to 63
- Mother-tongue English, Hebrew, Arabic, and other

# System Details

- CPU: Pentium 4, 2.8 GHz
- OS: Windows XP Professional, version 2002, service pack 2
- Monitor: 18", resolution 1024 x 768
- Internet connection: high speed (avg. 400 Mbps)
- Browser: Internet Explorer 6.0

# Sites

- Mixture of large and small
- Mixture of commerce and service
- Mixture of “slick” and amateurish
- Nine (9) websites:
  - small commerce: PC and Go
  - large high tech: Intel Israel
  - cellular service: Pelephone and Cellcom
  - transportation: Israel Railways and Egged
  - consumer products: Tnuva and Strauss
  - entertainment: New Israeli Opera

# Usability Guidelines

- Each tester worked on several unfamiliar sites
- Specific tasks with “think out loud” method
  - find job listings at Intel
  - locate nutritional information for plain yogurt
  - compare MP3 players within price range and size
  - check prices of cellular phone models
  - select an opera within date and price range
  - look at train or bus schedule for specific trip
- Facilitator to observe
- Per-site interview (optional)

## Findings

Some expected, some surprises

# Confirmation of the Basics

- Invisible links *are* invisible
- Overcrowded screens annoy users
- Problem with broken **Back** button
- Animation is distracting for many users

# Confirmation of Age-related Issues

- Below-the-fold invisibility (scrolling)
- Not seeing invisible links

<b>Age</b>	<b>Success: Scrolling</b>	<b>Success: Invisible Links</b>
18 to 44	62%	43%
45 to 63	21%	26%

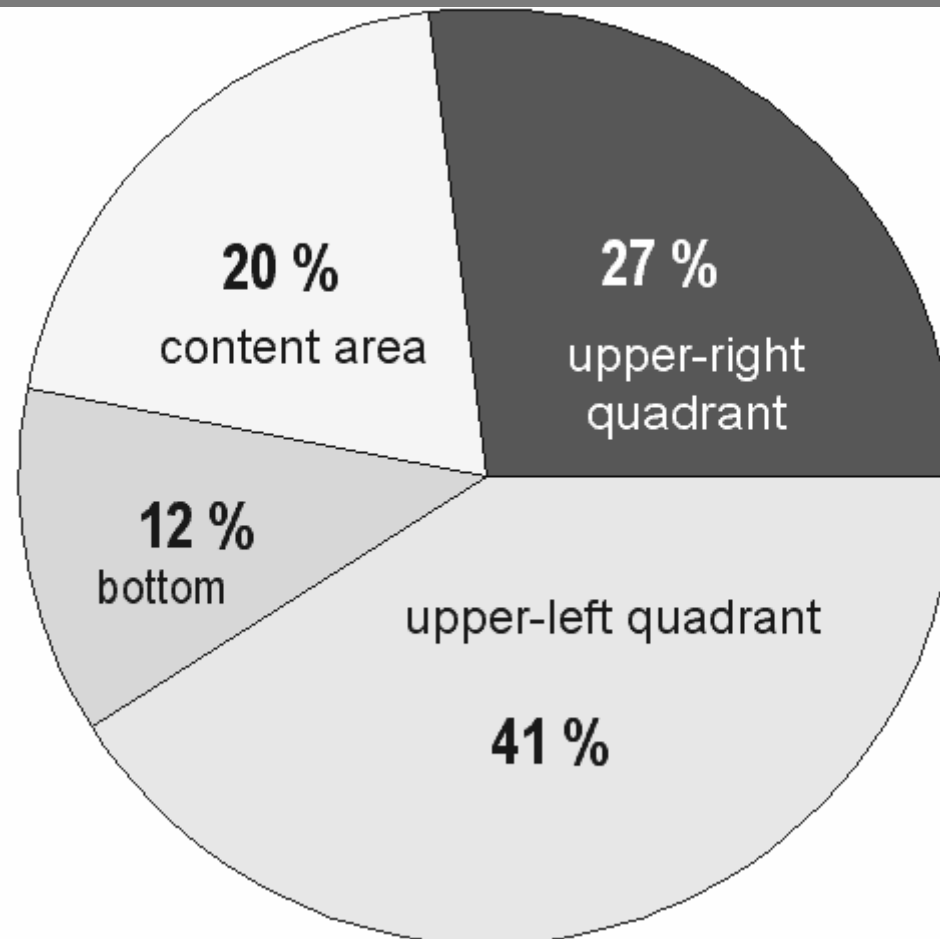
## Age-related Issues, cont.

- Older users read, rather than scanned
- Pelephone “Esc” site satisfaction rating:
  - age 20 or under: 7.2
  - age 50 and over: 1.3

## BDBL Specifics

- Placement of language link was critical
- Size of language link was important
- Users got frustrated faster
- Aesthetic issues (font size, amount of text, colors, etc.) became more critical
- Mixed text was confusing
- Transliteration and spelling: search failure

# Click Area on Screen: MT-LR



---Egged--- - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Print Mail Stop Send To Favorites

Address Go Links

Home | Info | Tickets to Eilat | News | Tourism | Services | About us | Contact us | Search  RU | עבר

Source Destination  Line

Ascending

Descending

Day

[Search](#)

News Traffic

20%

Egged's environmental report for the year 2003 - 2004, reflects the central role that commitment to society and the environment have in our company's long-term strategy

[Read more](#)

**Daily Tours**

Daily tours around Holy land with "Egged Tours" to Jerusalem, Massada, Dead Sea etc. One day to ten days packages.

[Read more](#)

**Fares and discounts**

Fares and discounts for different type of passengers, available on public transport

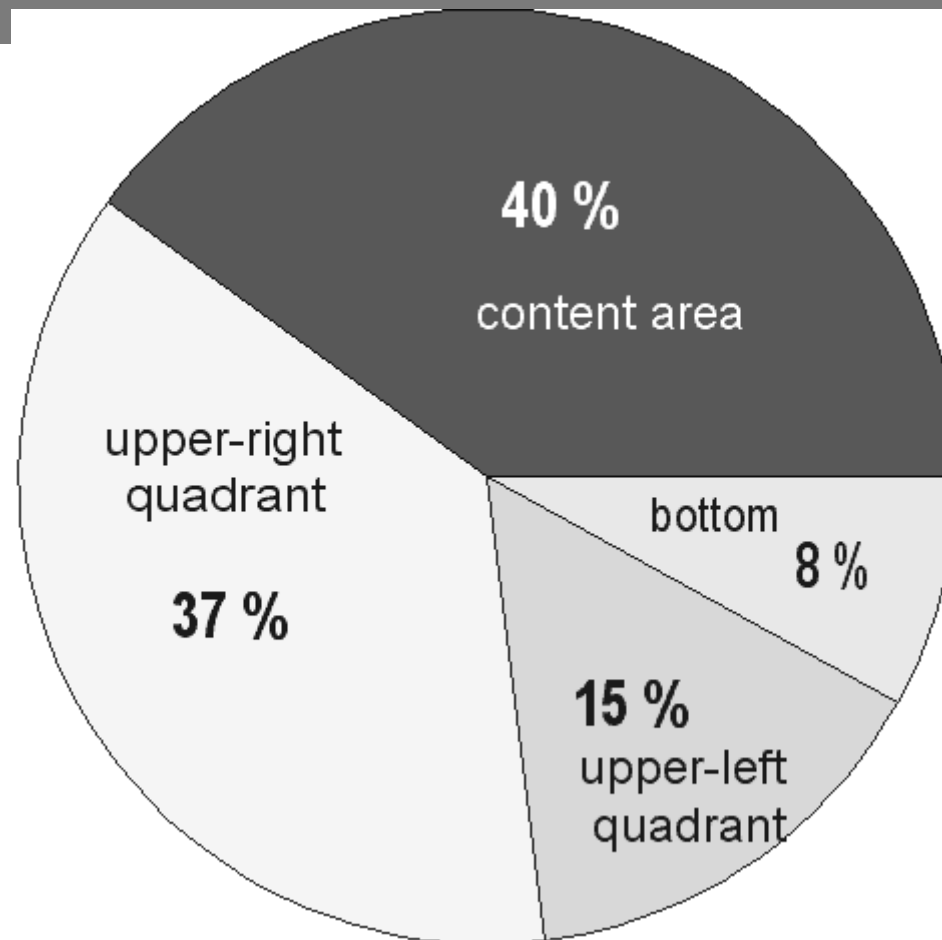
[Read more](#)

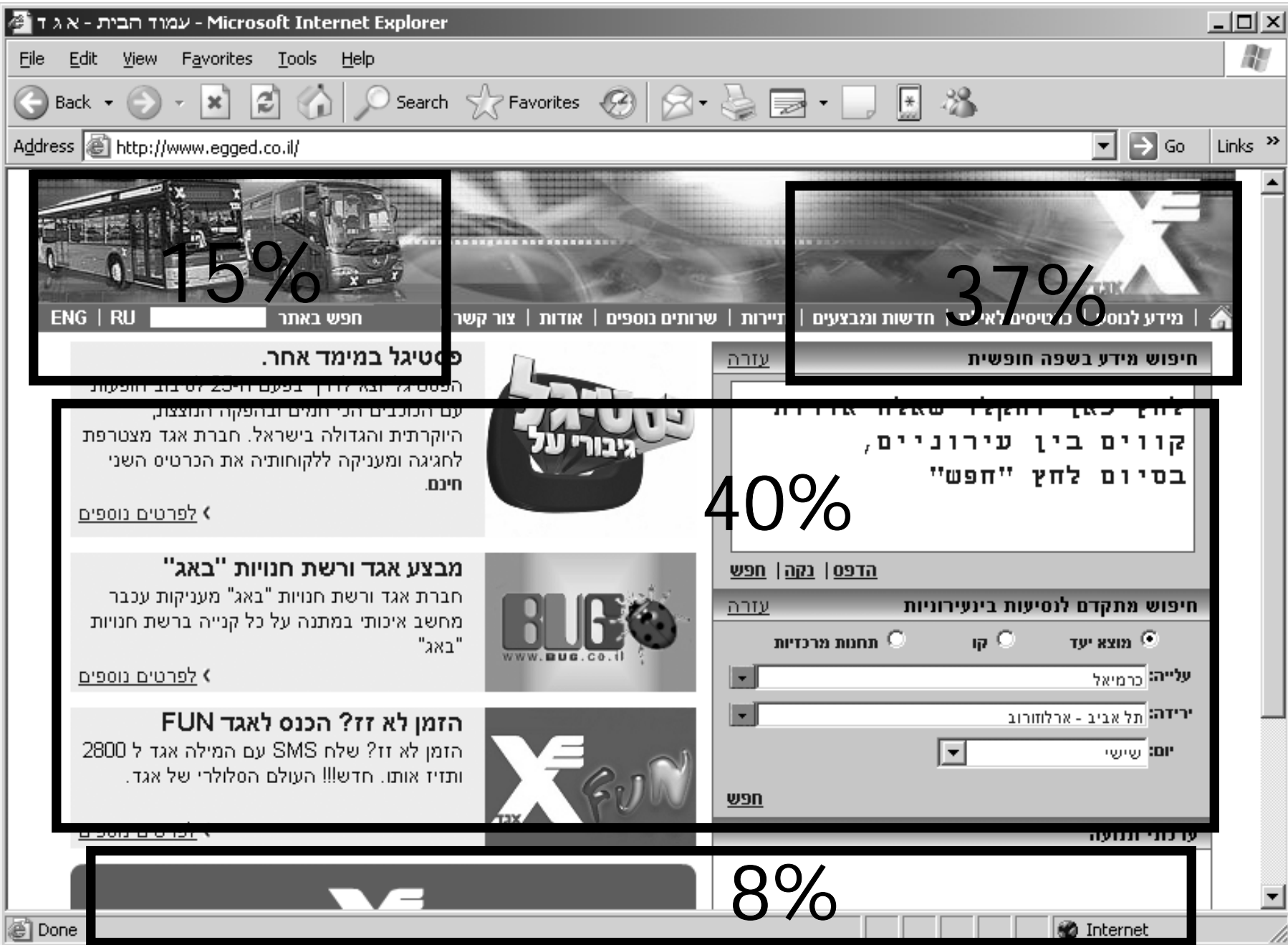
Info | Tickets to Eilat | News | Tourism | Services | About us | Contact us

12%

Done Internet

# Click Area on Screen: MT-RL





15%

ENG | RU  חפש באתר

מידע לחסמי כרטיסים לא ימי חדשות ומבצעים | זיירות | שרותים נוספים | אודות | צור קשר

פסטיגל במימד אחר.

37%

מידע לחסמי כרטיסים לא ימי חדשות ומבצעים | זיירות | שרותים נוספים | אודות | צור קשר

חיפוש מידע בשפה חופשית

40%

לחץ כאן והתקן שאלה אודות קווים בין עירוניים, בסיום לחץ "חפש"

הפסטיגל גיבורי על

מבצע אגד ורשת חנויות "באג" חברת אגד ורשת חנויות "באג" מעניקות עכבר מחשב איכותי במתנה על כל קנייה ברשת חנויות "באג"

הזמן לא זז? הכנס לאגד FUN הזמן לא זז? שלח SMS עם המילה אגד ל 2800 ותזין אותו. חדש!!! העולם הסלולרי של אגד.

עזרה

חיפוש מתקדם לנסיעות בינעירוניות

תחנות מרכזיות  קו  מוצא יעד

עלייה:  כרמיאל

ירידה:  תל אביב - ארלחורוב

יומי:  שישי

הדפס | נקה | חפש

8%

חפש

עזרה

## Recommendations

How can you build in the best usability in BDBL sites?

# Design Issues

- Make language links obvious:
  - large
  - correctly placed (top)
  - text-based rather than flag
- If using vertical navigation, flip when localizing
- Top is safest (non-scrolling)
- Watch for illogical order or sequence

# Design Issues for Older Users

- Avoid hot colors with animation
- Increase font size and white space
- Make link hotspots larger
- Eliminate below-the-fold links
- Reduce in-text (content area) links

# Translation Issues

- Do full localization
  - content
  - interactive features
  - avoid text mixes
- Consider effect of language bloat on layout
  - Hebrew-to-English = 30% increase
- Make search engines smarter re: transliteration variations

# In Other WORDS

Training, Consulting, Technical Writing,  
Translation, Graphics, and Placement

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