

# Identifying User Demographics in Digital Collections with Google Analytics

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## INTRODUCTION

Digital Collections began tracking usage of digital collections through Google Analytics in July of 2008. However, due to calibration issues and changes in Google Analytics, complete usage data is only available from October 2013 onward. This data is drawn from reports examining user statistics by semester for the years 2013 through 2015. This data provides insight into how users interact with digital collections.

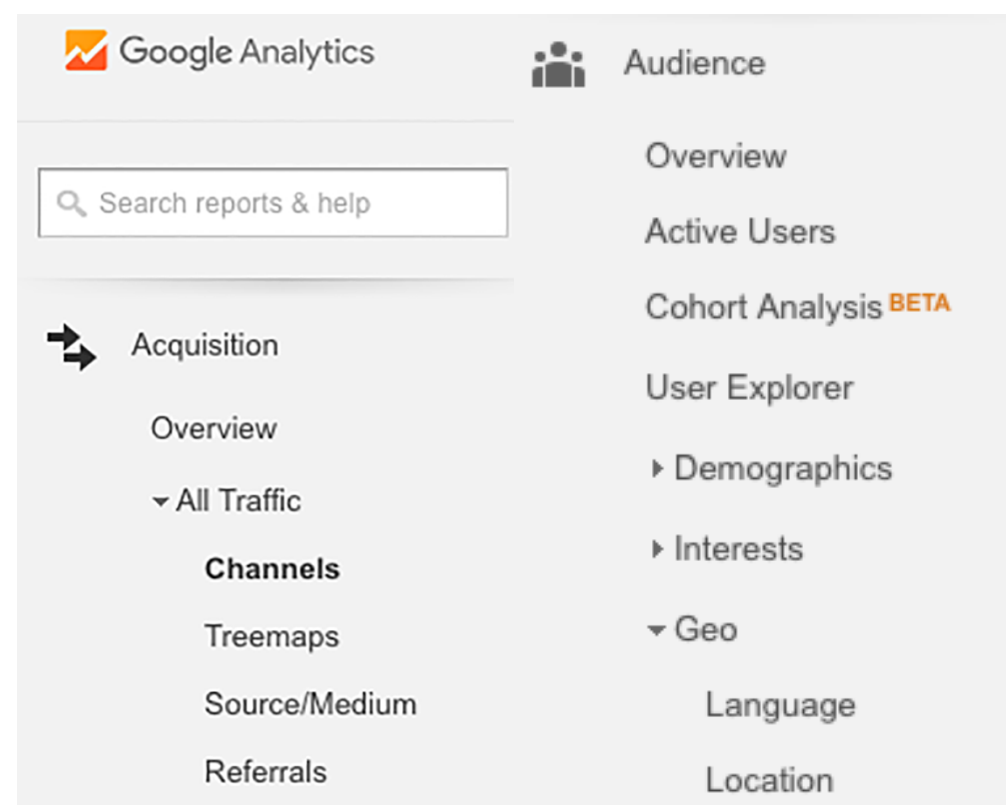
## METHOD: ACQUISITION AND AUDIENCE

Two questions serve to uncover emerging demographics in digital collections:

- How were users getting to UMD Digital Collections?
- Where were users coming from?

Users access <http://digital.lib.umd.edu> in three ways: organic (search engines), direct (manual URL), and referral (embedded link). Referral traffic is a smaller percentage of users than direct and organic traffic, but information about the specific interests of these users is more easily obtained. For referral traffic, Google Analytics provides the destination page as well as the source page the user left to access Digital Collections.

## Google Analytics, Acquisition and Audience tabs

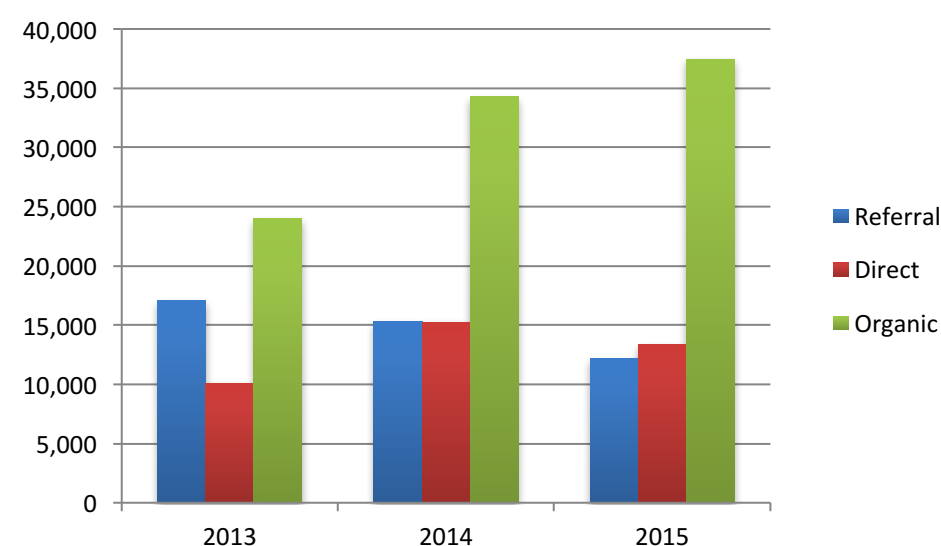


The Acquisition tab in Google Analytics allows for refining user traffic by category. The Referrals view filters by traffic originating from clicked links. The Audience tab organizes traffic by user type. The Geo view filters by traffic language or location.

Examining referral URLs can provide information that direct and organic traffic cannot, such as social media interactions, how non-English speaking users use Digital Collections, and how bloggers reference digitized objects. Occasionally social media referrals create a traffic spike, which is a link that generates a high volume of traffic for a short period of time. These referrals provide insight into how users share links to Digital Collections.

Users from all over the world access and engage with Digital Collections at UMD. Using the Audience tab in Google Analytics, the geographic location and default language of users can be analyzed. Within the geographic view, locations can be filtered to include or exclude particular metro areas. The language view provides a breakdown of default browser language of the user using codes. These codes often provide specific regional information by including a suffix, e.g., en-gb (English-United Kingdom).

## Traffic types by year



## FINDINGS AND EXAMPLES

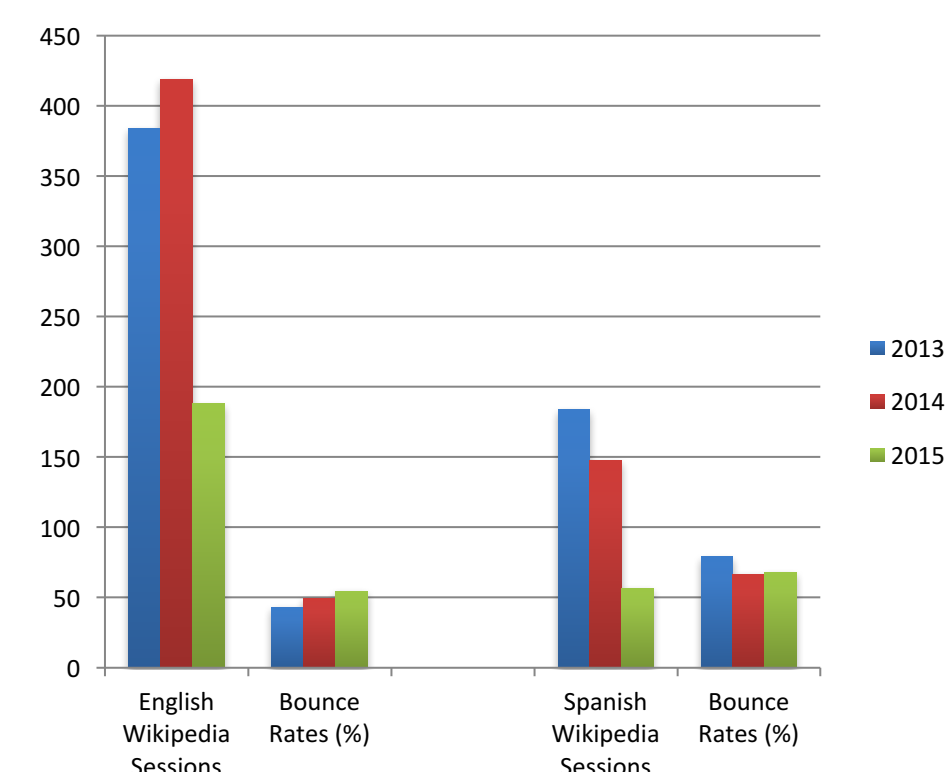
### Organic searches

The largest source of traffic originates from organic web searches, specifically and overwhelmingly from Google. Percentage of organic searches originating from Google:

- 2013: 90.97%
- 2014: 88.47%
- 2015: 84.49%

The top destination in Digital Collections resulting from a Google search in 2015 was "Le Corbusier: Phillips Pavilion, Brussels, 1958" (<http://digital.lib.umd.edu/worldsfairs/record?pid=umd:1011>). The second was the biography page of the Baroness Elsa von Freytag-Loringhoven digital library.

## Changes in Wikipedia referred usage by year

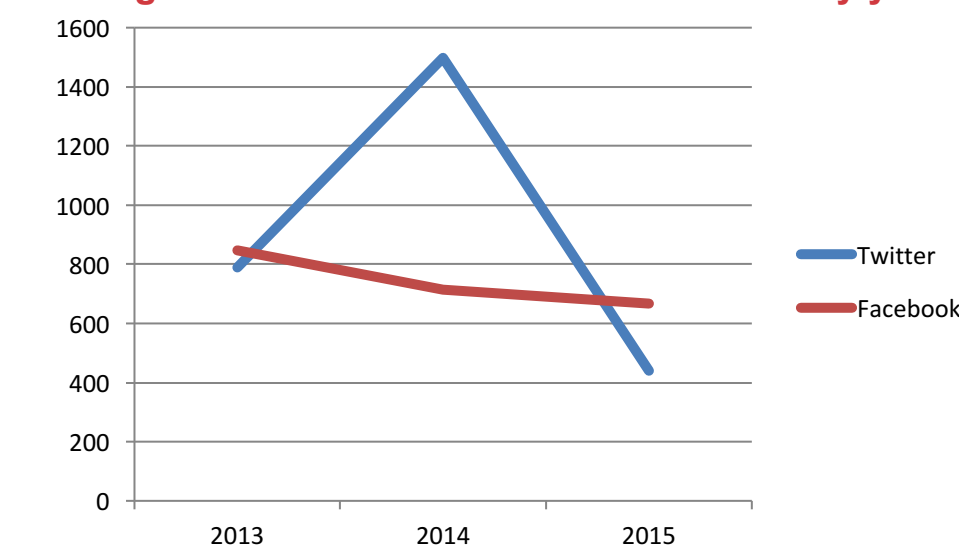


## Using referrals to discover potential language barriers

The English language Wikipedia site ([en.wikipedia.org](http://en.wikipedia.org)) and the Spanish language Wikipedia site ([es.wikipedia.org](http://es.wikipedia.org)) contributed similar amounts of user sessions. However, the Spanish language users left Digital Collections at much higher rate than English language users (79% compared to 43%). Users coming from the mobile versions of Wikipedia also left the site at a high rate (60% for [en.m.wikipedia.org](http://en.m.wikipedia.org) and 71% for [es.m.wikipedia.org](http://es.m.wikipedia.org)).

In 2014, referrals comprised 24% of all total sessions for the year and social referrals amounted to 5.32%. Twitter alone accounted for over 40% of social referrals for the year. Twitter and Facebook were consistently in flux from 2013 to 2015.

## Changes in Twitter and Facebook referrals by year



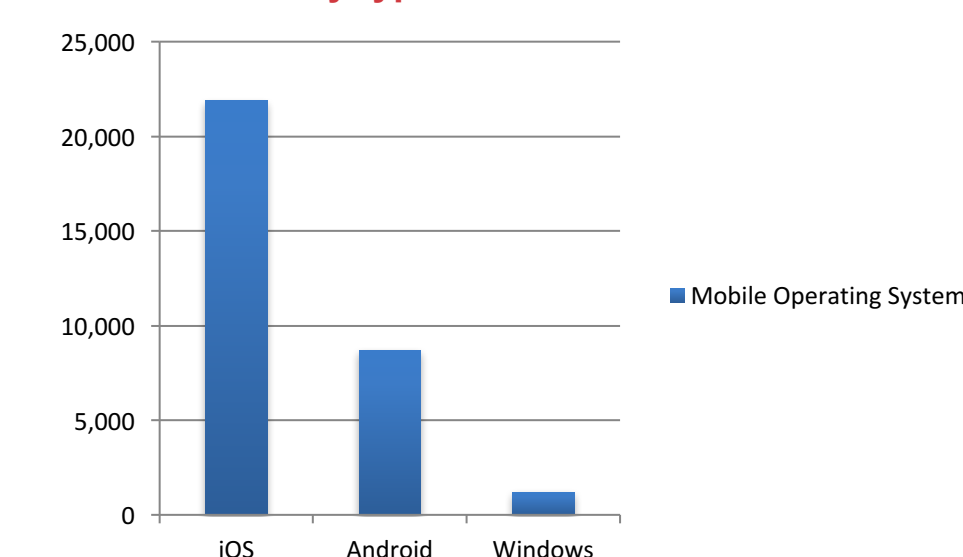
## Identifying users outside of College Park

Users outside of the Washington, D.C. metro area make up 71% of sessions for Digital Collections. Examples of top user locations include:

- Baltimore, MD
- New York, NY
- Japan
- Philadelphia, PA
- San Francisco, CA
- Canada

English-language individuals comprise 88% of users of Digital Collections. Additional user languages include Japanese (3.6%), Spanish (1.25%), German (1.07%).

## Mobile device by type



## Mobile users and Digital Collections

Between 2013 and 2015, the majority of mobile users accessed Digital Collections on an iPhone or iPad. 36.8% of users, however, interacted with Digital Collections using the Google Chrome Browser while 21.9% used Safari and 20.6% used Mozilla Firefox.

## CONCLUSIONS

Continuous analysis of how users interact with Digital Collections can inform future decisions on a variety of subjects, including, creation of pages that natively display in multiple languages (such as the Gordon W. Prange Collection), prioritization of trending topics, and making Digital Collections technologically more compatible with social media and mobile users.