



Examining Web User Flows and Behaviours in CLARIN Ecosystem

Go Sugimoto (Austrian Centre for Digital Humanities) CLARIN Annual Conference 2017, Budapest, Hungary 2017-09-20





Agenda

- 1. Motivation
- 2.Method
- 3. Statistics & Interpretation
- 4. Conclusion





1. Number Game 2.0.x

We now have some ideas about the user traffic. It is a good step forward for the evaluation of CLARIN. Don't let it die there.

Move on!

CLARIN Virtual Language Observatory

Welcome to the VLO!

Previous studies

h hundreds of thousands of language resources, or continue to so your area of interest or discover new resources.

- Eckart et al. (2015)
- Sugimoto (2016)

Analysis only for

- a single website
- a technical website (=VLO)



EVIMAKAEDA DEILIO COLha?

(Part of Hamburger Zentrum für Sprachkorpora (HZSK))

⊕ A selection of short audio and video recordings in various languages to be used for instruction or demonstration of the EXMARaLDA system.; HIAT (simplified); HIAT; free comment; suprasegmental information; accentuation/stress; English translation; Standard German translation; German translation; Englisch translation; code-switch

P

The Hamburg MapTask Corpus (HAMATAC)

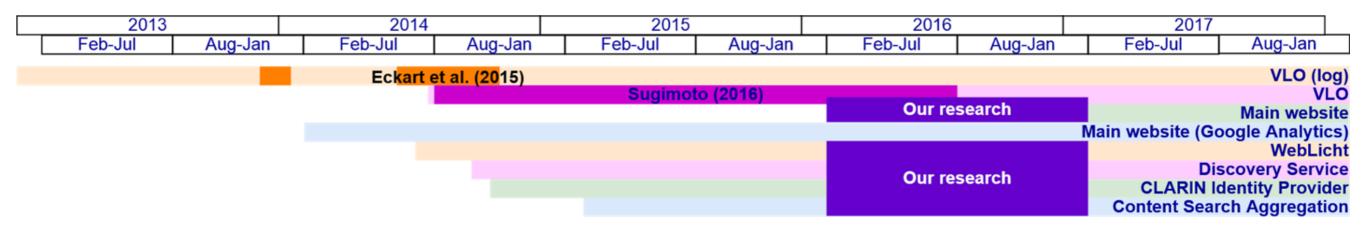




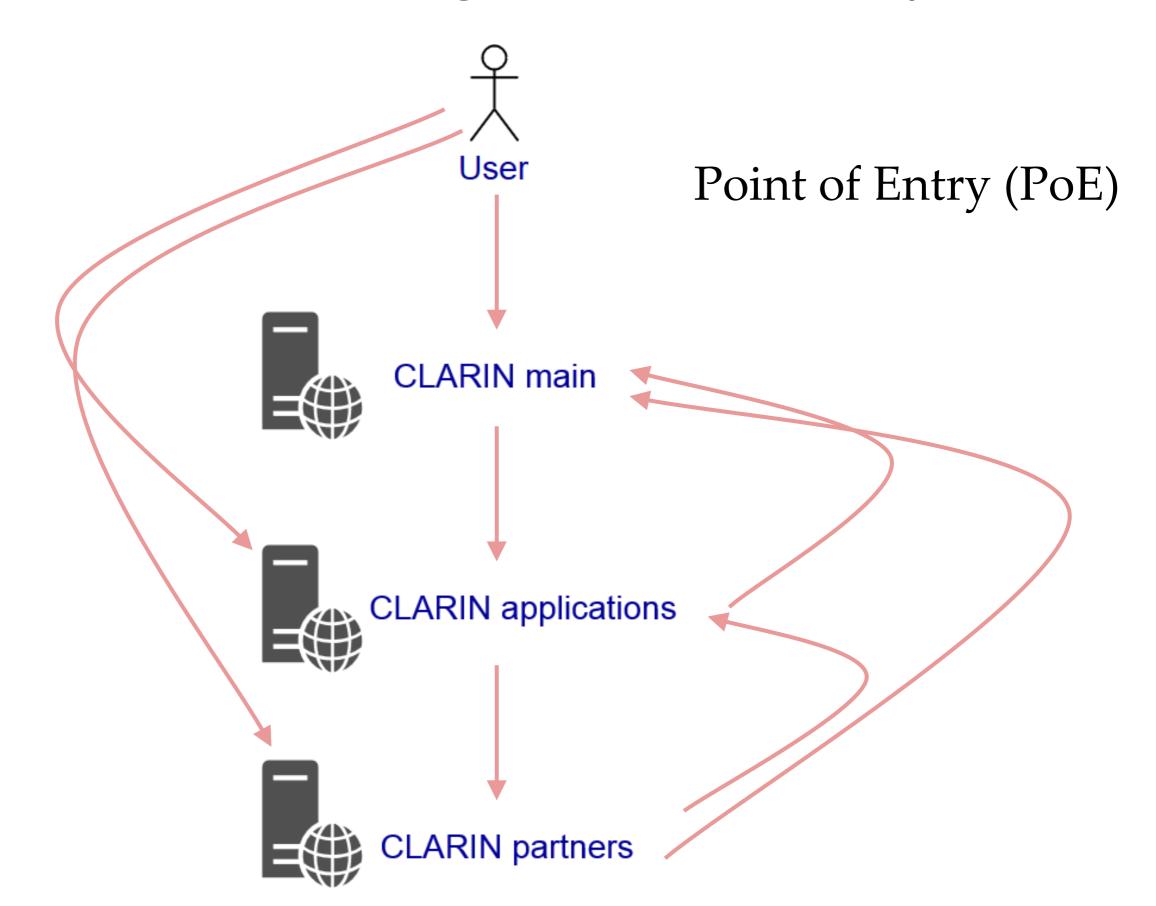




Web Analytics overview



2. Method -Measuring CLARIN ecosystem





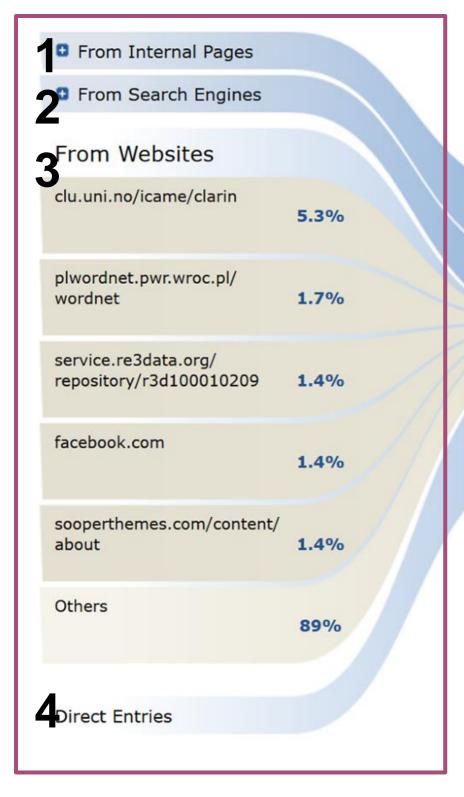


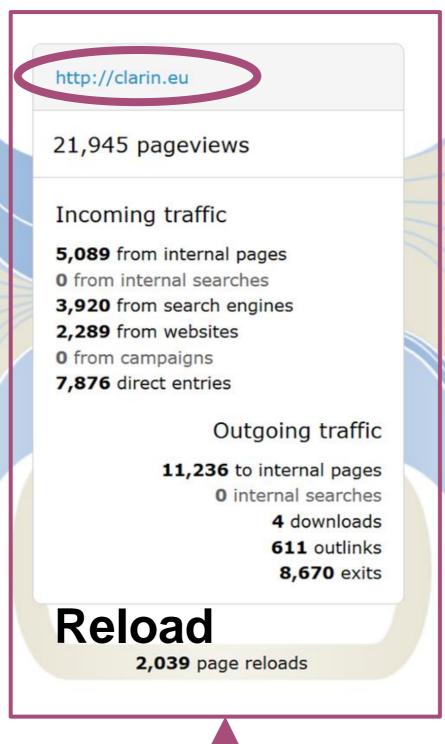


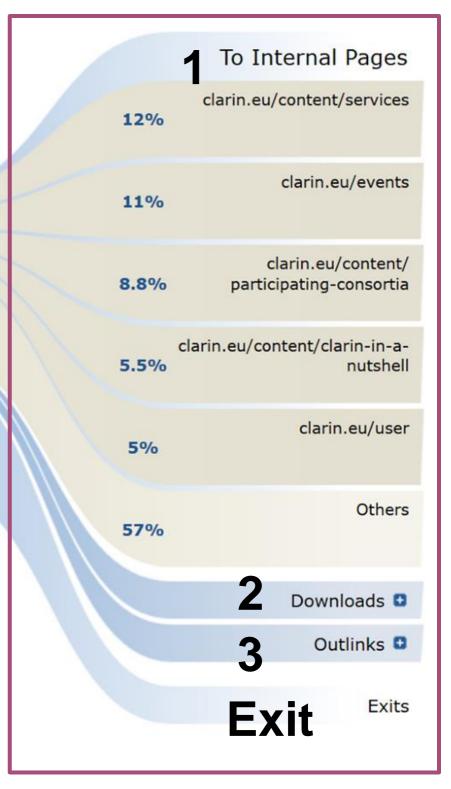
1 February 2016 - 31 January 2017

Comparative study (Traffic in and out of):

- Clarin.eu (main website)
- Virtual Language Observatory (VLO)
- Weblicht
- Content Search Aggregation
- Identity Provider
- Discovery Service







Where you were BEFORE



Where you were AFTER





ICAME corpora in CLARIN

ICAME corpora have found a new home of the CLARIN project through the Norwegian part, CLARINO.

The corpora are available for academic use.

The corpora are available in the Corpuscle program (login from the top line).

Users from many universities can log in with their ordinary user id through the <u>eduGAIN</u> or <u>CLARIN Service Provider Federation (SPF)</u>. Go to the <u>Corpuscle</u> home page and choose eduGAIN or CLARIN SPF from the top login line and search for your university.

Norwegian users can use Feide login through eduGAIN (if you don't find your institution on the login page contact Knut.Hofland@uni.no). .

If you are not able to use eduGAIN or CLARIN SPF register for an CharinIdP account and be manually approved.

OpenIdP is another choice, but this may be terminated on short notice.

At the moment the following corpora are available for searching (most also for downloading through the "Overview" option in the menu to the left for each corpus):

- The Brown family (Brown, LOB, FLOB, Frown, BLOB and BE06) prepared at Lancaster (BLOB and BE06 not for downloading)
- FLOB and Frown with origial POS tagging
- ACE (Australian Corpus of English)
- COLT (Corpus of London Teenage Language)
- · Helsinki Corpus of English Texts
- Helsinki Corpus of Older Scotts
- Helsinki CEECS (Corpus of Early English Correspondence Sampler)
- London-Lund Corpus

5.3% of referrers

http://clu.uni.no/icame/clarin/

http://clarin.eu

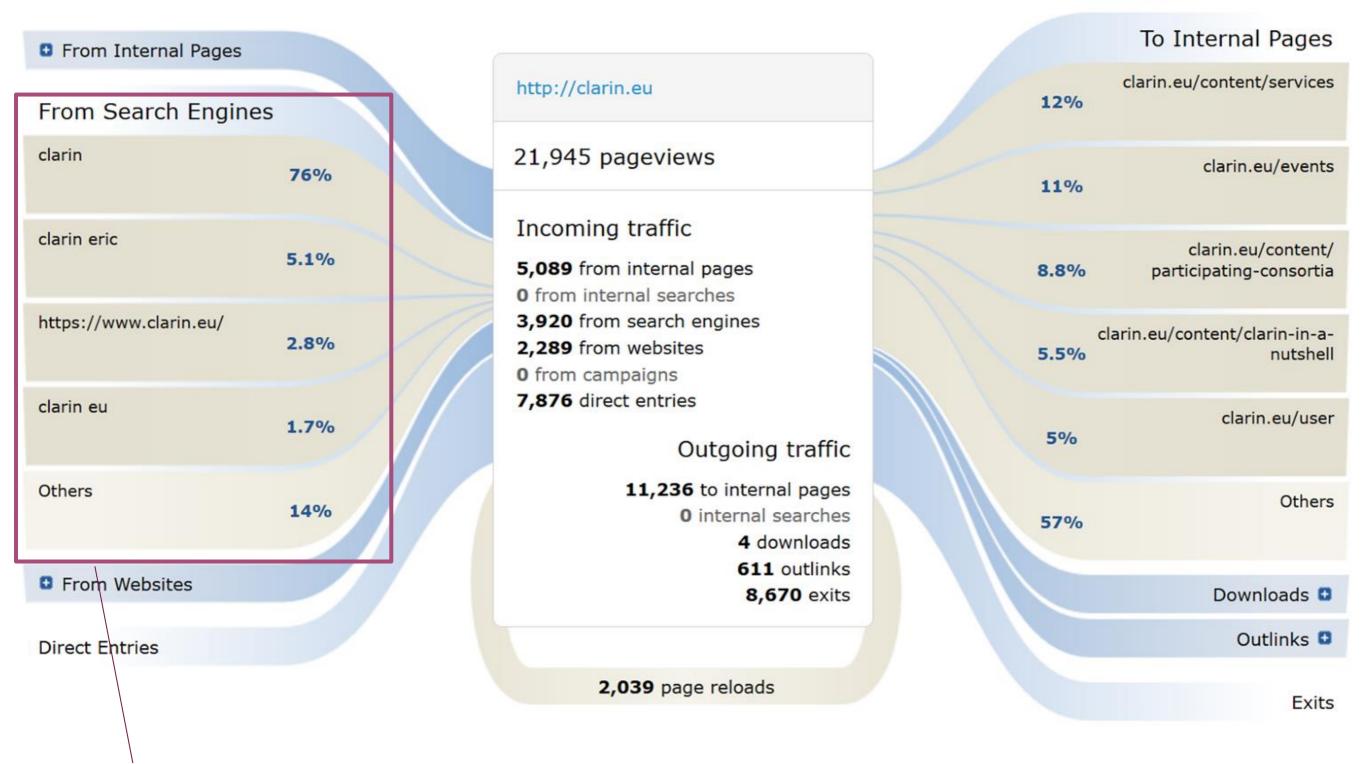




Outgoing Traffic

```
51% Internal pages
     12% Services
     11% Event
    8.8% Consortia
     5.5% Nutshell
     5% Users (probably log-in)
2.8% Outlinks
     30% VLO
     3.8% CLARIN-D
     Some noises
40% Exit
```

Depends on what is put (or promoted) on the home page which changes frequently



Do they know CLARIN already?

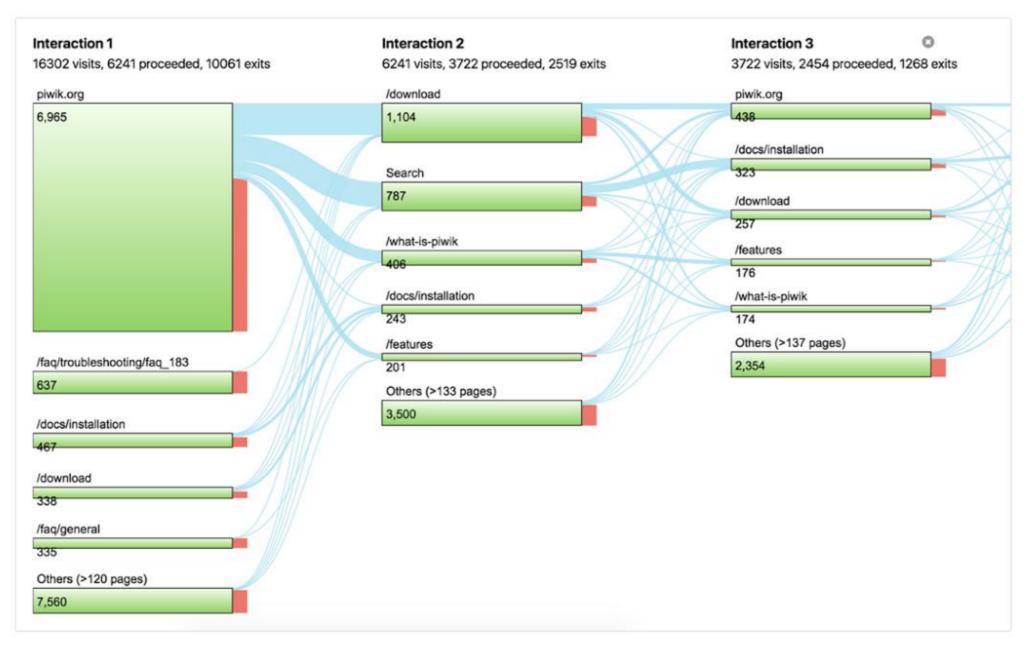
100% - (Reload and Internal pages) = 14817 (external access)

Search engine with CLARIN + Direct Entry = 8028 (existing users?)

= 54.2% minimum + other channels



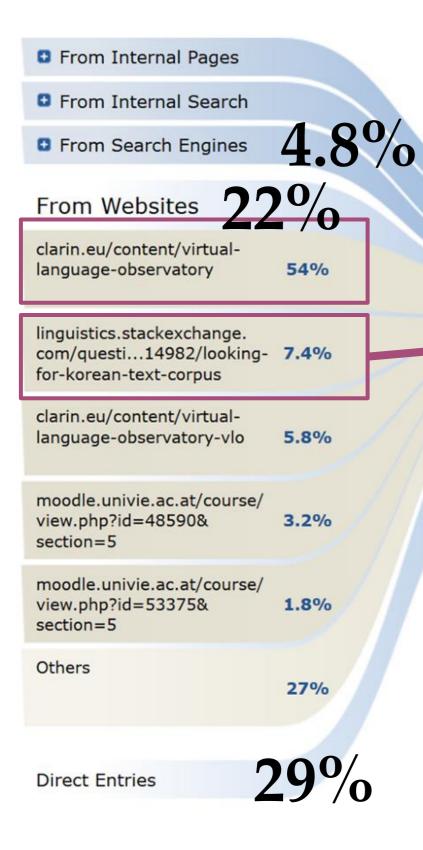




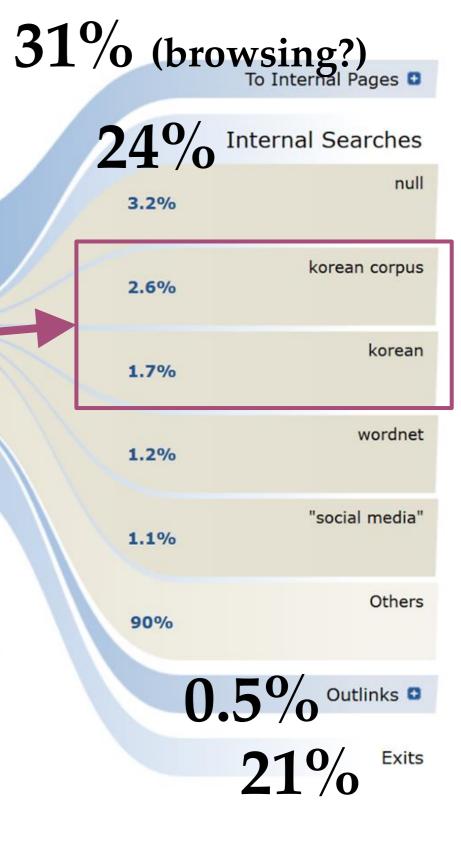
User Flow Plug-in (€79 /year) is more powerful than Transition Reports
It can check the position a page was viewed how often and how users
navigated through your entire website. Multiple-user paths can be tracked.

	URL	Unique Clicks	Percentage
1	vlo.clarin.eu	998	11.2%
2	hdl.handle.net	615	6.9%
3	centres.clarin.eu	439	4.9%
4	catalog.clarin.eu	404	4.5%
5	www.clarin.eu	386	4.3%
6	infra.clarin.eu	255	2.9%
7	lindat.mff.cuni.cz	227	2.6%
8	www.clarin-d.de	215	2.4%
9	docs.google.com	181	2.0%
10	weblicht.sfs.uni-tuebingen.de	118	1.3%

Top 10 outlinks from the CLARIN.EU domain



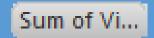
http://vlo.clarin.eu									
5,056 pageviews									
Incoming traffic									
394 from internal pages 637 from internal searches									
The state and the state of the									
1,102 from websites 0 from campaigns									
1,477 direct entries									
Outgoing traffic									
1,589 to internal pages 1,218 internal searches 0 downloads 23 outlinks									
1,074 exits									
1,175 page reloads									



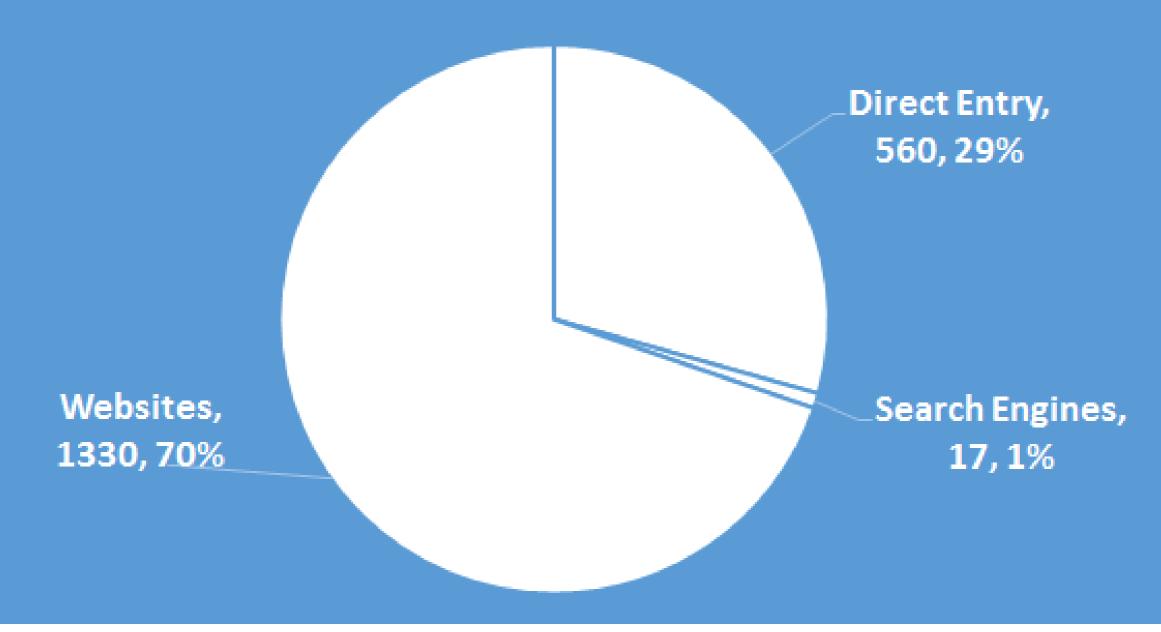
At VLO home page

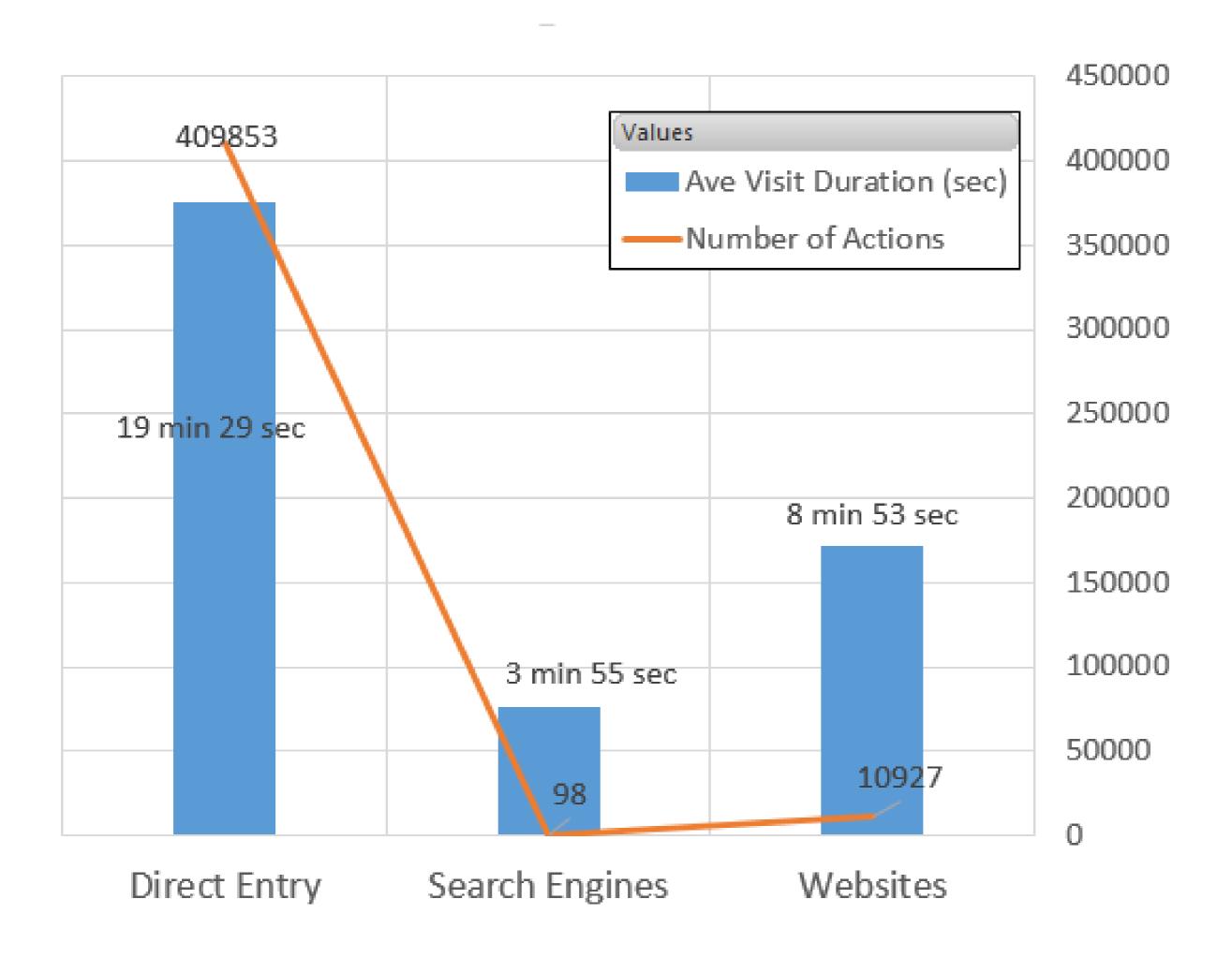
Ranking	URL	Unique Clicks	Percentage
1	hdl.handle.net	297	41.4%
2	infra.clarin.eu	118	16.4%
3	www.clarin.eu	96	13.4%
4	clarinportal.informatik.uni-leipzig.de	20	2.8%
5	www.sil.org	15	2.1%
6	clarin-pl.eu	12	1.7%
7	urn.fi	11	1.5%
8	diglib.hab.de	10	1.4%
9	clarinws.informatik.uni-leipzig.de:8080	8	1.1%
10	metashare.ut.ee	8	1.1%

Top 10 outlinks from the VLO domain

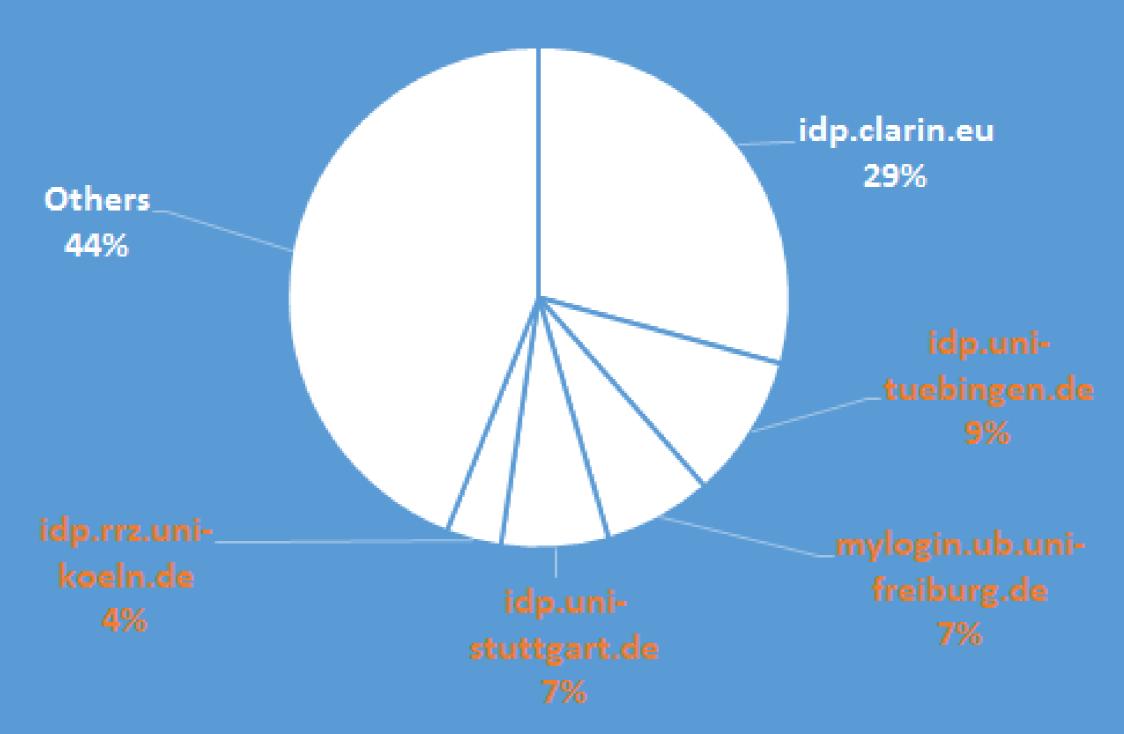


WEBLICHT - TYPES OF INCOMING TRAFFIC





WEBLICHT - WEB REFERERS







Limitations and Dirty Jobs for Analyses

- Duplicates, flatening, and development with CMS
 https://www.clarin.eu/content/factsheet-clarin-plus (287 visits)
 https://www.clarin.eu/node/4213 (235 visitis)
- Handle PIDs have no clue for the content, while URLs include clues (domain names etc)

PAGE URL	PAGEVIEWS	▼ UNIQUE PAGEVIEWS
⊕ content	42,002	28,722
✓ /index	22,434	16,019
⊕ event	10,079	7,524
⊕ news	4,961	3,779
<pre>/events</pre>	3,209	2,242
⊕ search	2,998	2,233
□ node	2,905	2,089
№ /4213	X	158
№ /3760	Open Transitions See what visitors did before and af	er viewing this page





4. Conclusion

- Piwik (transition view) -simple yet powerful tool for user assessment
- CLARIN complex web ecosystem with many PoE
- Good starting point for the better understanding of the users
- Tricky to analyse & interpret data. Don't use default data blindly (as most people do...)
- Open Evaluation! Agile Evaluation!





Future work

- Combine with other surveys (questionnaire etc)
- Use/buy plug-ins for better analyses
- Web Analytics to synch with Outreach & Dev team
- Case study with the institutions in the consortium (1. Piwik data exchange to track the user flows at the partner site. 2. Distinguish the CLARIN users by IP address from non-CLARIN users etc)
- Social media analytics

Your ideas & collaboration welcome!





Köszönöm!

Original title of this paper: "Donau in Blue" was abandoned with regret. The concept was:

- User flow = Danube river
- The Blue Danube (Strauss II) + Rhapsody in Blue (Gershwin)
- Vienna to Budapest

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Extra information





1.4% of referrers. No link! (website changed? noise?)

http://www.sooperthemes.com/content/about -> http://clarin.eu

Try our products for free: trysooperthemes.com – No credit card needed.									
SooperThemes Drupal Themes Drupal Modules Download Pricing Help Center Contact Log In Join Now To Download									

About SooperThemes

1

10

1123

100%

Drupal Theme

Years Experience

Happy Customers

Dedicated



AUSTRIAN
ACADEMY OF
SCIENCES



v of

"clarin"

"digital language resource"

CLARIN ERIC

https://www.clarin.eu/ -

CLARIN makes digital language resources available to scholars, researchers, students and citizenscientists from all disciplines, especially in the humanities

Services https://www. CLARIN port resources in i

ces. Store language

Portable shttps://www. The Clarin by comfortable.

that are durable, stylish, and

Clarin | D. Google.com

Searches related to clarin

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diario nacion

diario perfil

diario infobae

clarin empleos

diario cronica

clarin clasificados

pagina 12

CLARIN ERIC |

https://www.clarin.eu/ ▼

CLARIN makes **digital language resources** available to scholars, researchers, students and citizenscientists from all disciplines, especially in the humanities ...

Language

www.springer.

Language Res

Academic Sea

Bottom/middl.

exercises of Page 3 in Dert J. Blake

Robert J. Blake Technology and

Hawai'i, Nation

Google.com

digital language lab software

digital language definition

stanford digital language lab

language lab software for schools

computer language used in internet

lathrop library

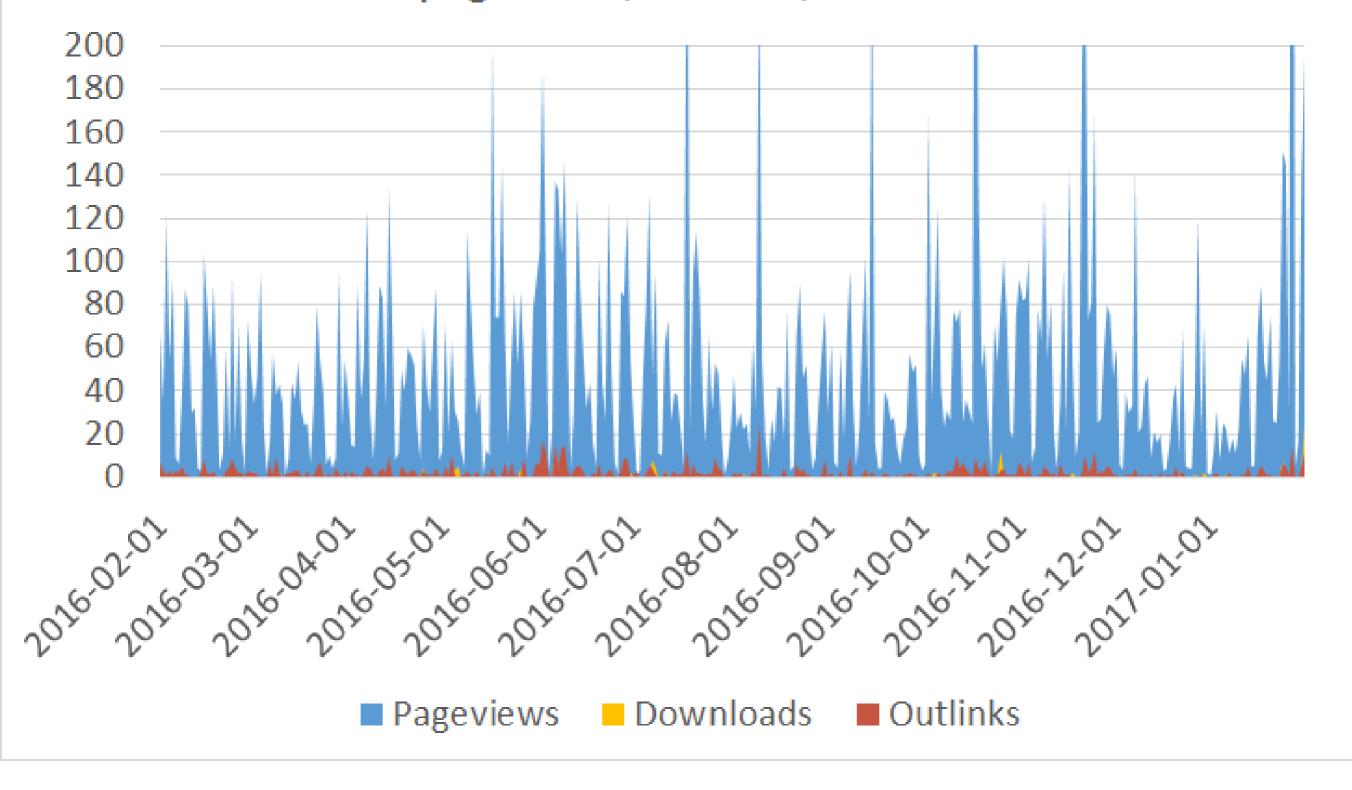
binary language

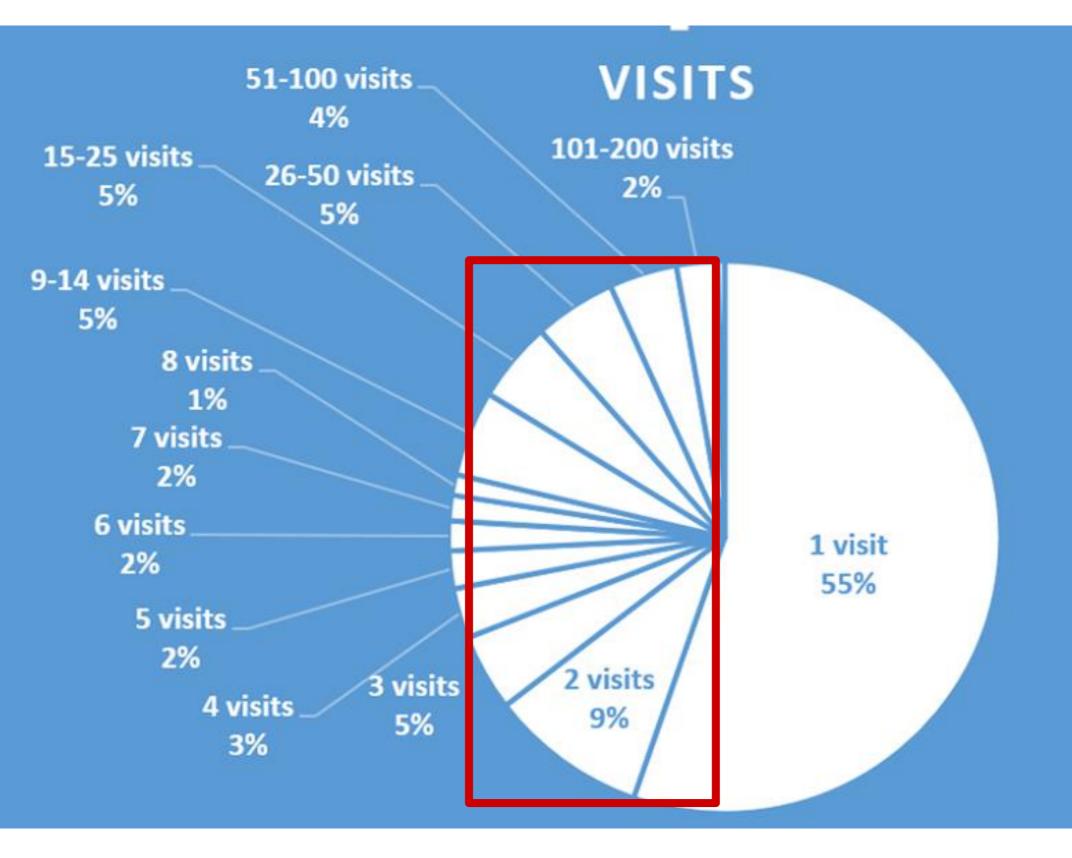




- Search Engine Optimisation (SEO)!
- Existing users not new users? (likely)
- Are they CLARIN members? (likely)

VLO pageviews, outlinks, downloads





ÖAW

AUSTRIAN ACADEMY OF SCIENCES



Ⅲ Dashboard

∞ Visitors

Actions

Pages

Entry pages

Exit pages

Page titles

Site Search

Outlinks

HTML <title>

GOOD

Factsheet: CLARIN-PLUS | CLARIN ERIC

522

327

43%

00:00:53

28%

0.57s

BUT

CLARIN ERIC	11,560	8,240	42%	00:00:43	49%	0.36s
CLARIN ERIC CLARIN ERIC	10,891	7,766	46%	00:00:48	56%	0.37s





More questions than answers?

Is CLARIN addressing

- the community of CLARIN, linguistics,
 (Digital) Humanities, or Cultural Heritage, etc?
- Europe or also outside Europe?
- Researchers, (higher) Education, Citizen (science) etc?

Did the users find and use information (in general, resource, tool)? Why do the users come and go?