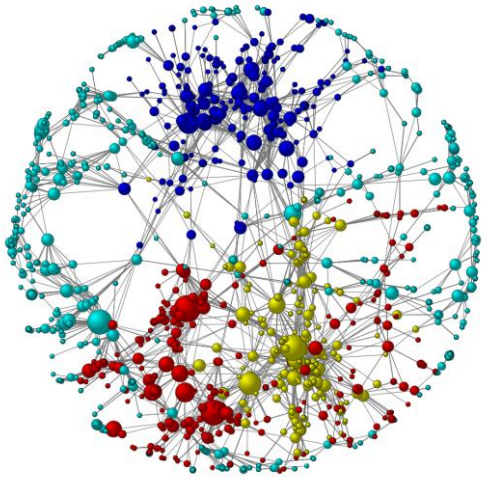
# Researcher Identity Management in the 21st Century Networked World:

# A Pilot Study of American University in Cairo Faculty.



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**American University in Cairo Libraries**
**New Cairo, Egypt**

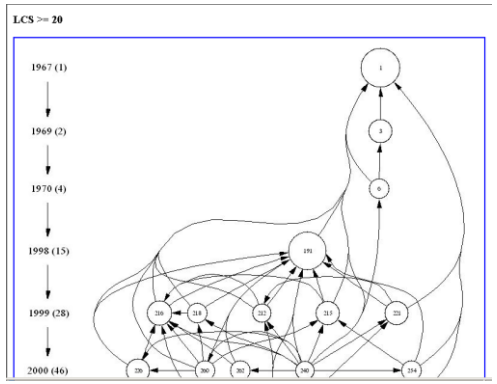
**SWIB15**
**24 November 2015**
**Hamburg, Germany**

# Outline

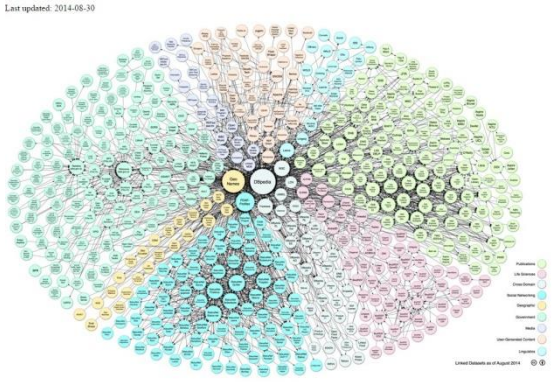
- Background: my professional and research interests
- Overview of the pilot study
- The population and the sample set
- Review of the author identifier systems
- Preliminary findings
- Implications for the Linked Data environment
- Future data analysis

# The genealogy of my professional and research interests.

PLACES & SPACES
MAPPING SCIENCE

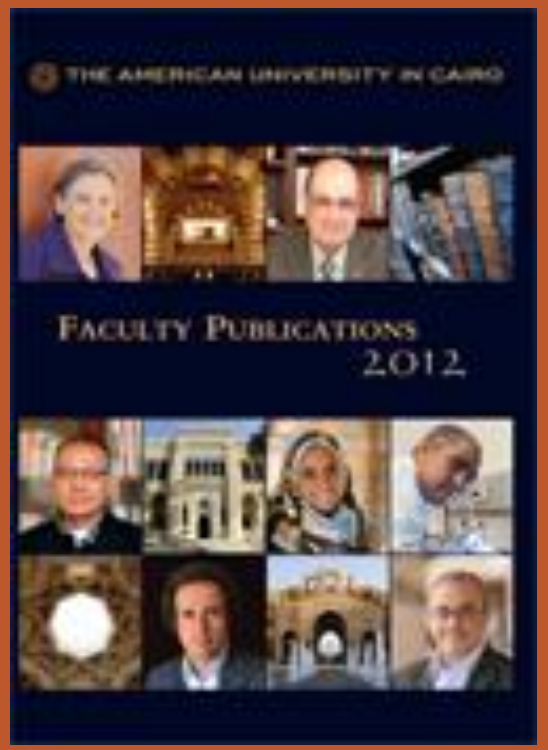



SWIB14
Semantic Web in Libraries




- **Scholarly Communication and Citation Analysis**
- **HistCite: Mapping the Knowledge Domain** (Garfield, 2004). I used HistCite to identify core literature on human trafficking for researchers at University of Nebraska-Lincoln
- **SWIB14 ->BIBFRAME, Linked Open Data and the Semantic Web in GLAM**
- **Authorities Data in Cataloging**
- **Researcher Identifiers Systems** (Smith-Yoshimura and others, 2014)

# The Pilot Study




**Research Questions**:

1) How have the faculty at the American University in Cairo (AUC) distributed and shared their scholarly and creative works?

2) How are their names identified in various author identifier systems and/or on the Web?

**Research Goal: To explore how best to represent the faculty and their scholarly and creative works as Linked Data.**

**The Population**: AUC faculty members with publication records.

**The Sample**: AUC Faculty Publications: 2012 Calendar Year.

**The Pilot Study's Random Sample:**

**55 AUC faculty members listed in *Faculty Publications 2012***

# Pilot Study: Data Collection and Analysis Methods

Fifty-five faculty names were randomly selected and searched in author identifier systems to answer:

1. **If they are registered and/or self-registered in these systems;**
2. **If their names are consistent or with variants and how the variants are handled;**
3. *Which metadata are used;*
4. *Which sources of data are used to verify the names;*
5. **Which other data to consider.**

***For this presentation, the data analysis was based on nos. 1, 2 and 5.**
****Data from nos. 3 and 4 were used, as needed, to verify some names and for additional data interpretation.**

# Notes on Data Collection and Analysis (1)

- The following data in

AUC Faculty Profiles were used to verify the faculty's identity in the i.d. systems:

  - Names
  - Photos
  - Work history
  - Publications
  - Other relevant information.

- **Some Limitation of *AUC Faculty Profiles***:
  - A roster as of July 2015
  - AUC faculty listed in the 2012 publication, who already left AUC, are no longer included in the profiles.
  - The data are not open (derived from ***E.Repertoire***, a research and faculty activities database supported by **Digital Measures**).

# Notes on Data Collection and Analysis (2)

- The majority of **publications are in English.**
- **Professional i.d. services** (LCNAF, VIAF, ISNI and also Google Scholar) do accommodate **multilingual data and non-Roman scripts**.
- In the **self-registered i.d. services** (Google Scholar and ResearchGate), AUC faculty in the sample created **their profiles in English only**.
- **Limited to the i.d. systems with open data**.
- Limited to **the Romanized form of names** (authors' own spelling), especially for the Arabic names.
- Names in Arabic scripts were used for verification, whenever available.

# Researcher Identity Services Included in the Pilot Study

# Selected Professional and Self-registered Services

- Library of Congress Name Authority File (LCNAF)
- Virtual International Authority File (VIAF)
- International Standard Name Identifier (ISNI)
- ResearchGate
- Google Scholar

# Library of Congress Authority Records

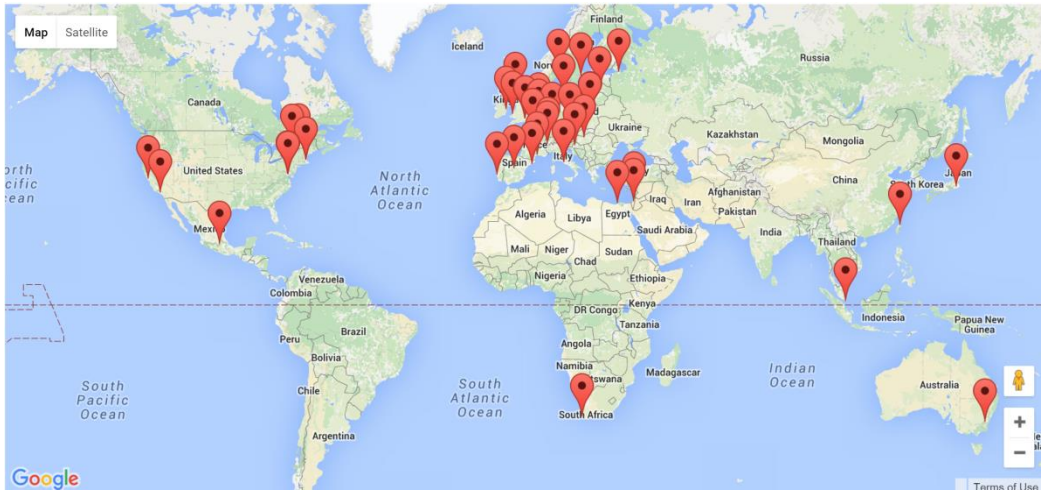
"An authority record is a tool used by librarians to **establish forms of names (for persons, places, meetings, and organizations), titles, subjects, and genres and forms** used on bibliographic records. Authority records enable librarians to provide uniform access to materials in library catalogs and to provide clear identification of authors and subject headings. …

Authority records also provide cross references to lead users to the headings used in the catalog." -- LCNAF – FAQ: http://authorities.loc.gov/help/auth-faq.htm#1

# LC Name Authority:
# Professor Ana Gil-Garcia.

**LC control no.:** no2002012579
**LCCN permalink:** http://lccn.loc.gov/no2002012579
**Personal name heading:** Gil-Garcia, Ana
**Variant(s):** Garcia, Ana Gil-
**Found in:** Helping middle and high school readers, c2001: t.p. verso (Ana Gil-Garcia)

# VIAF: Virtual International Authority File




"The VIAF® (Virtual International Authority File) **combines multiple name authority files into a single OCLC-hosted name authority service.**

The goal of the service is to lower the cost and increase the utility of library authority files **by matching and linking widely-used authority files and making that information available on the Web."**
– VIAF's homepage (https://viaf.org/ )

VIAF Contributors

- Library of Congress/NACO
  - National Library of Mexico
  - British Library
  - National Agricultural Library (U.S.)
  - National Library of Medicine (U.S.)
  - National Library of New Zealand
  - National Library of Scotland
  - National Library of South Africa
  - National Library of Wales
- German National Library
- National Library of France
- National Library of Sweden
- National Library of Australia
- National Library of Spain
- National Library of Portugal
- Central Institute for the Union Catalogue of the Italian libraries
- National Library of the Czech Republic
- National Library of Israel
  - Israel Museum
- Library of Alexandria, Egypt
- Vatican Library
- Swiss National Library
- Library and Archives Canada
- Union List of Artist Names [Getty Research Institute]
- NUKAT Center of Warsaw University Library
- National Széchényi Library, Hungary
- RERO - Library Network of Western Switzerland
- Sudoc [ABES], France
- Flemish Public Libraries
- National Library of Norway
- DBC (Danish Bibliographic Center)
  - Danish Agency for Culture
- National Diet Library, Japan
- National Library Board, Singapore
- National Library of Latvia
- National Library of Poland
- National Library of Catalonia
- Lebanese National Library
- Perseus
- Syriac Reference Portal
- Wikidata
- National and University Library in Zagreb

# ISNI: International Standard Name Identifier


**ISNI: 0000 0001 2314 4259**

"ISNI is an ISO certified global standard for identifying the millions of contributors to creative works and those active in their distribution, including writers, artists, creators, performers, researchers, producers, publishers, aggregators, and more. It is [a] part of a family of international standard identifiers that includes identifiers of works, recordings, products and right holders in all repertoires, e.g. DOI, ISAN, ISBN, ISRC, ISSN, ISTC, and ISWC." – ISNI Homepage (http://www.isni.org/ )

# VIAF and ISNI

## (Angjeli, MacEwan and Boulet, 2014)


| | | |
|---|---|---|
| Leader | | 00000nz a2200037n 45 0 |
| 001 | | ISNI\|0000000045550365 (VIAF cluster) (Authority/Source Record) |
| 003 | | ISNI |
| 005 | | 20151009134758.0 |
| 008 | | 151009nneanz\|\|abbn n and d |
| 035 | | ‡a (ISNI)0000000045550365 |
| 035 | | ‡a (OCoLC)0000000045550365 |
| 100 | 1 | ‡a Gil-Garcia, Ana |
| 400 | 1 | ‡a Garcia, Ana Gil- |
| 921 | | ‡a educational research service ‡b Educational Research Service ‡9 1 |
| 922 | | ‡a US ‡9 1 |
| 943 | | ‡a 200x ‡9 2 |
| 950 | | ‡a riggs ernestine gates ‡A Riggs, Ernestine Gates ‡d 1938- ‡9 1 |
| 995 | | ‡a http://viaf.org/viaf/14431747 ‡2 viafid ‡9 1 |
| 996 | | ‡2 BNE\|XX997508 |
| 996 | | ‡2 LC\|no2011006191 |

# ResearchGate

**“ResearchGate is built by scientists, for scientists.**

It started when two researchers discovered first-hand that collaborating with a friend or colleague on the other side of the world was no easy task.

Founded in 2008 by physicians Dr. Ijad Madisch and Dr. Sören Hofmayer, and computer scientist Horst Fickenscher, ResearchGate today has more than 8 million members. ” – About page: http://www.researchgate.net/about

## Issues to consider:

- **Not an open-access service.** One needs to have an account with ResearchGate to access authors’ full profiles and publications.
- **Free, but not innocent**. Investors include Bill Gates (Empson, 2013).

# Professor Clement Henry


Clement Henry 11.57

University of Texas at Austin, Austin · Center for Asian A...


OVERVIEW CONTRIBUTIONS INFO STATS RG SCORE

**27** PUBLICATIONS | 260 Reads | 82 Citations | 6.35 Impact Points | View stats


**University of Texas at Austin**
Center for Asian American Studies
Austin, TX, United States


## FEATURED PUBLICATIONS

View all

**Article: Ben Ali's ``New Tunisia'' (1987—2009): A Case Study of Authoritarian Modernization in the Arab World by Steffen Erdle**

Clement M. Henry ·

4 Reads 0 Citations

**Article: Ben Ali's "New Tunisia" (1987-2009): A Case Study of Authoritarian Modernization in the Arab World (review)**

Clement M. Henry ·

## SKILLS AND EXPERTISE (1)

View all

Public Policy Analysis

## TOP CO-AUTHORS

View all

Catherine Boone 19.36 · 21.22 · (2)
The London School of Economics and P...
Follow

Robert Springborg (2)
Invite

## 14 FOLLOWERS

View all

# 11.57
## RG Score

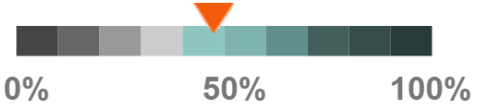
**A new way to measure scientific reputation.**

The RG Score takes **all** your research and turns it into a source of reputation.

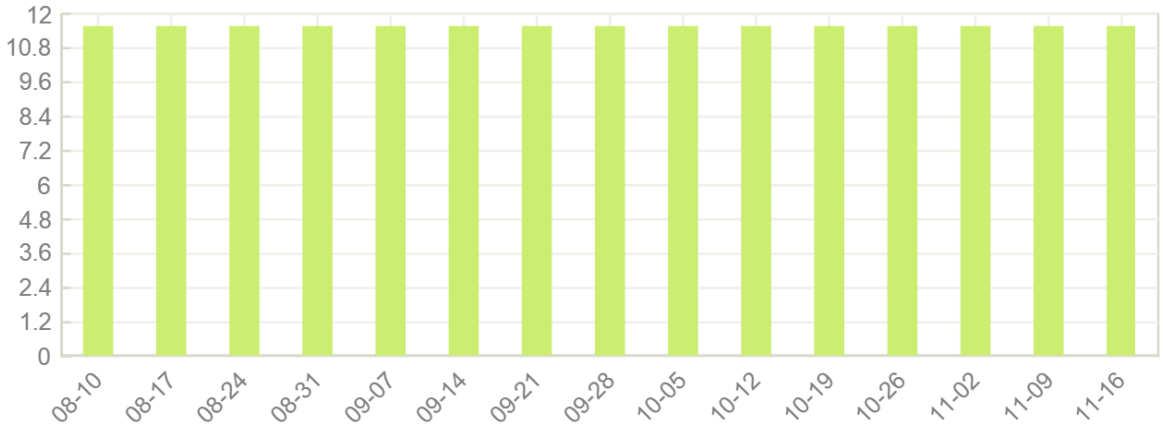



**PERCENTILE**

Clement Henry's score is higher than 47.5% of ResearchGate members'.




**RG SCORE OVER TIME**




### How does the RG Score work?

Your RG Score is calculated based on the publications in your profile and how other researchers interact with your content on ResearchGate.

See your RG Score

# Google Scholar*

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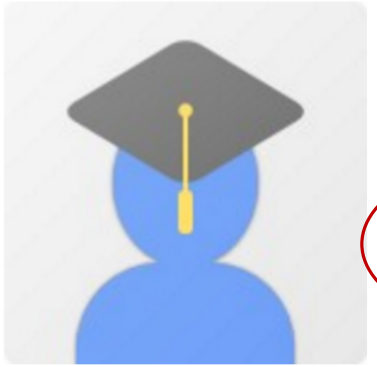
“From one place, you can **search across many disciplines and sources: articles, theses, books, abstracts and court opinions, from academic publishers, professional societies, online repositories, universities and other web sites.** Google Scholar helps you find relevant work across the world of scholarly research.” – About page: https://scholar.google.com/intl/en/scholar/about.html

***Publications in ResearchGate are indexed by Google.**

# Google Scholar:
# Professor Henry's two profiles.



**Clement** Moore **Henry**

Chair, Political Science Department, American University in Cairo
Verified email at aucegypt.edu
Cited by 1998

islamic finance  Middle East  North Africa  banks.

**Clement** Moore **Henry**

University of Texas at Austin Emeritus
Verified email at mail.utexas.edu
Cited by 888

political economy of MENA  Islamic finance  Algeria

# Google Scholar:

## Professor Henry‘s AUC profile = the more active profile.

### Clement Moore Henry

Follow

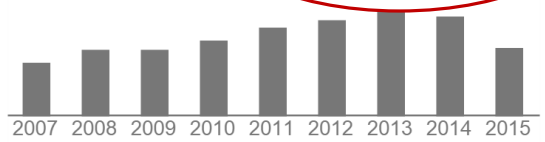
Chair, Political Science Department, American University in Cairo
islamic finance, Middle East, North Africa, banks.
Verified email at aucegypt.edu

| Title 1–20 | Cited by | Year |
|---|---|---|
| Globalization and the Politics of Development in the Middle East<br>CM Henry, R Springborg<br>Cambridge University Press | 422 | 2010 |
| Authoritarian politics in modern society: the dynamics of established one-party systems<br>SP Huntington, CH Moore<br>Basic Books (AZ) | 218 | 1970 |
| Islam and the moral economy: The challenge of capitalism<br>C Tripp<br>Cambridge University Press | 192 | 2006 |

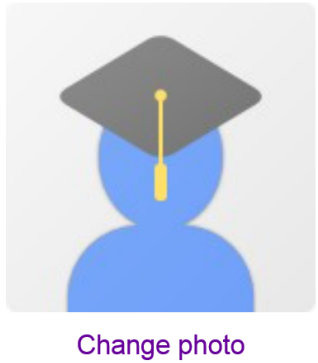
Google Scholar

Get my own profile

| Citation indices | All | Since 2010 |
|---|---|---|
| Citations | 1995 | 858 |
| h-index | 17 | 12 |
| i10-index | 32 | 14 |



# Google Scholar's Privacy Choice


https://scholar.google.com/citations?user=zH7SxhQAAAAJ&hl=en

# AUC and the Faculty: Facts and Figures 2014-15

- AUC is one of the liberal arts institutions in **AMICAL Consortium**
- **Founded** in 1919
- **Full-time Enrollment**: **6,907:**
  - Undergraduate students 5,627
  - Graduate students 1,280
- **Undergraduate, Graduate and Non-degree Programs**
- **Graduate Programs**: PhD, Master, Diploma and Non-degree programs. (*PhD programs started in 2010 in Engineering and Applied Sciences departments.*)
- **Language of instruction**: English

| | |
|---|---|
| **Number of Teaching Faculty** | **422** |
| **Total Number of Faculty** | 491 |
| **Faculty-to-Student Ratio** | 1:12 |
| **Percentage of Faculty Who Hold PhDs** | 72% |
| **Percentage of Egyptian Faculty** | 51% |
| **Percentage of American Faculty** | 29% |
| **Percentage of Faculty from Other Countries** | 20% |

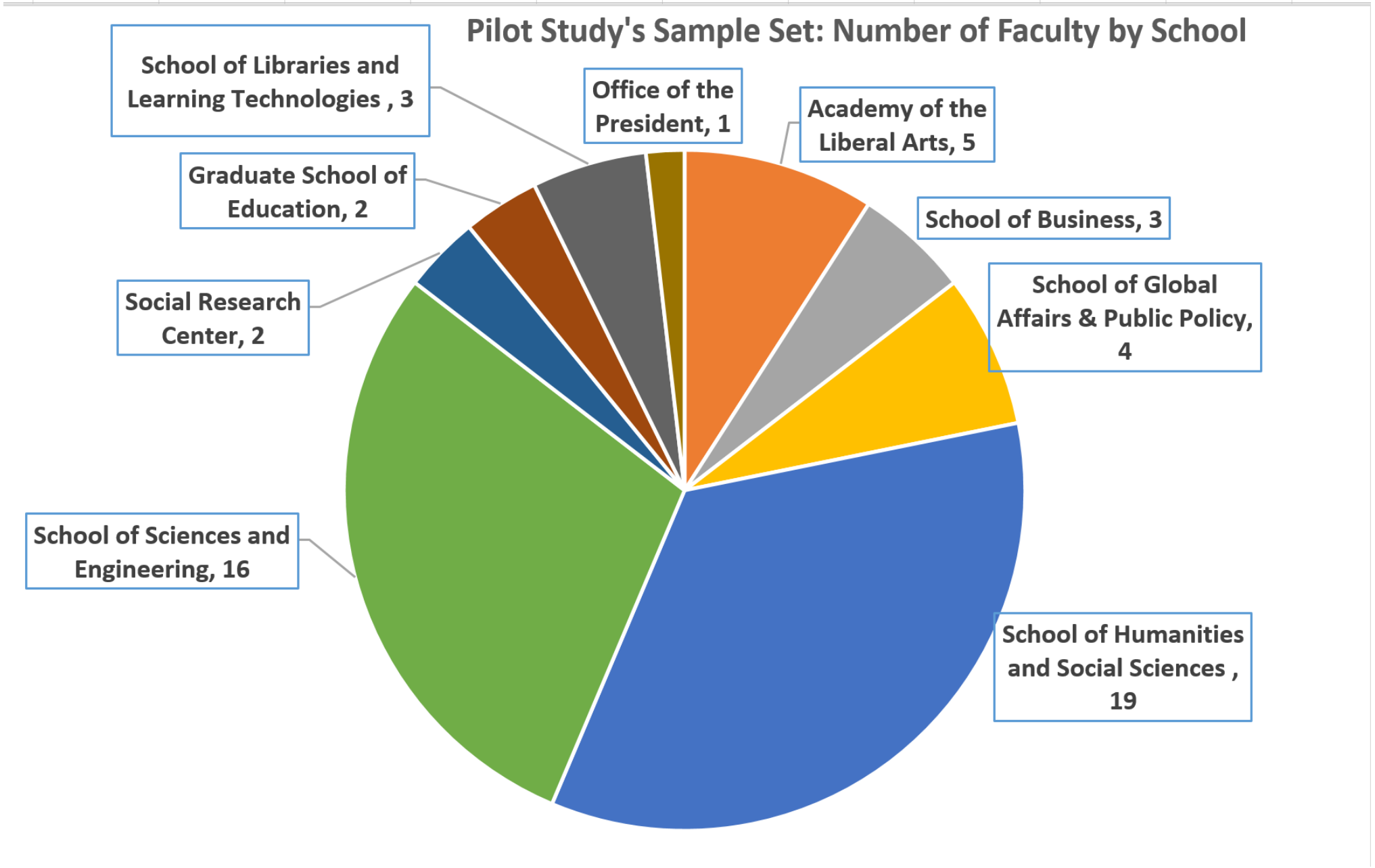
# AUC Faculty Publications: 2012 Calendar Year.

(The most current year available, due to changes in the administration.)

Table Three: Average Number of Publications in 2012 by School (All Faculty)

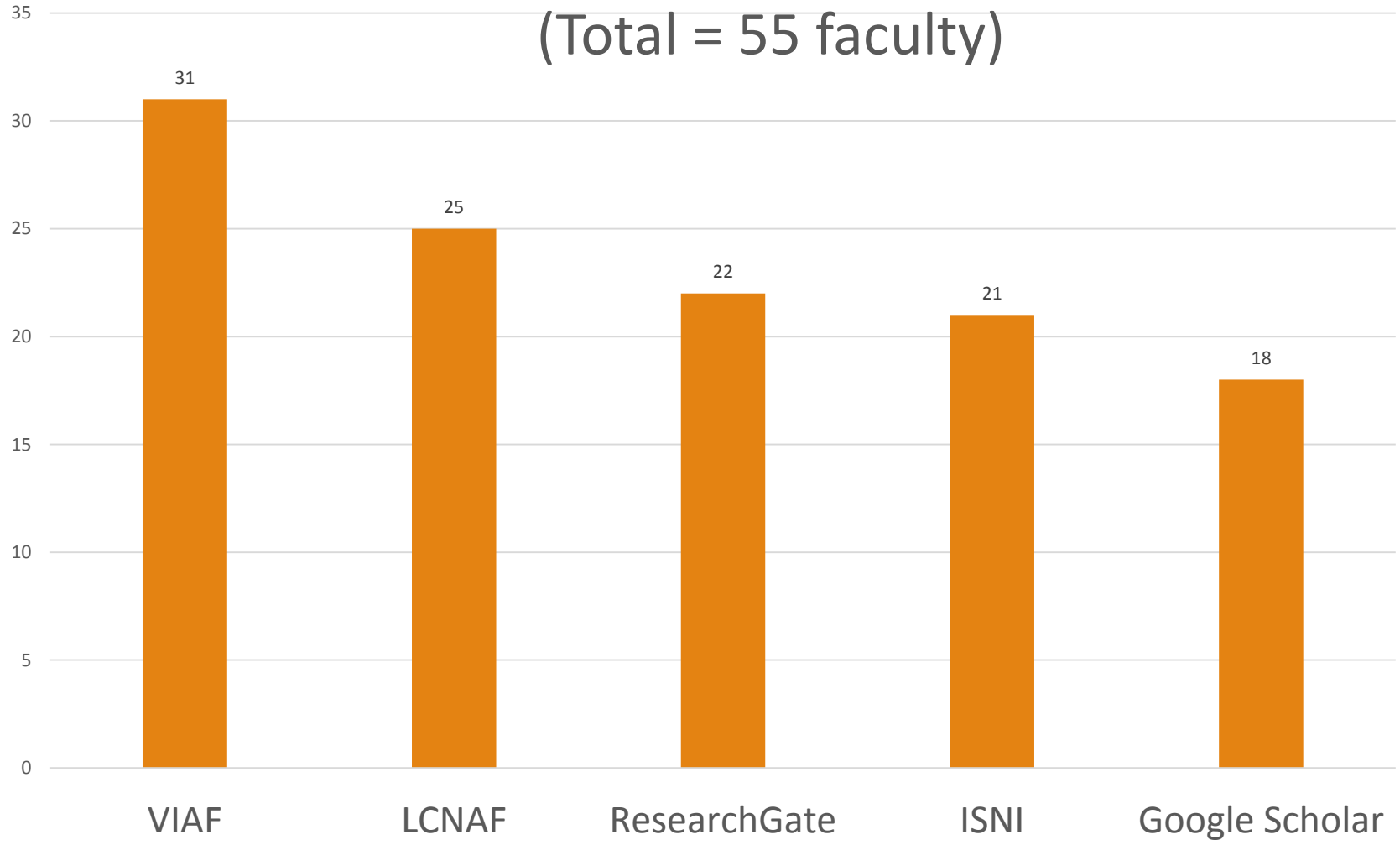
| | No. of Faculty | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **School** | All | Published | %Published | BK | EB | BC | BR | RJ | CP | NM | AW | CS | ME | CW | EN | TR | PT | TL | OP |
| **ALA** | 120 | 31 | 25.8% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| **BUS** | 59 | 35 | 59.3% | 0.1 | 0.0 | 0.2 | 0.0 | 0.9 | 0.4 | 0.3 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| **GAPP** | 39 | 19 | 48.7% | 0.0 | 0.0 | 0.1 | 0.1 | 0.5 | 0.2 | 6.6 | 0.0 | 0.0 | 1.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.3 |
| **HUSS** | 117 | 79 | 67.5% | 0.1 | 0.1 | 0.4 | 0.1 | 0.6 | 0.1 | 1.1 | 0.1 | 0.0 | 0.6 | 0.8 | 0.3 | 0.0 | 0.0 | 0.1 | 0.2 |
| **SSE** | 114 | 86 | 75.4% | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 1.4 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 |
| **GSE** | 9 | 2 | 22.2% | 0.0 | 0.0 | 0.2 | 0.0 | 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| **LLT** | 14 | 4 | 28.6% | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| **Grand Total** | 472 | 256 | 54.2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

**HUSS & SSE dominate in number of faculty who published.**



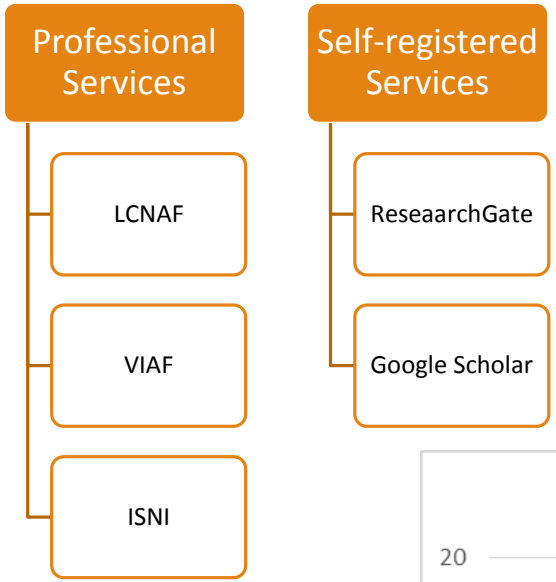

**Total number of faculty in the sample = 55**

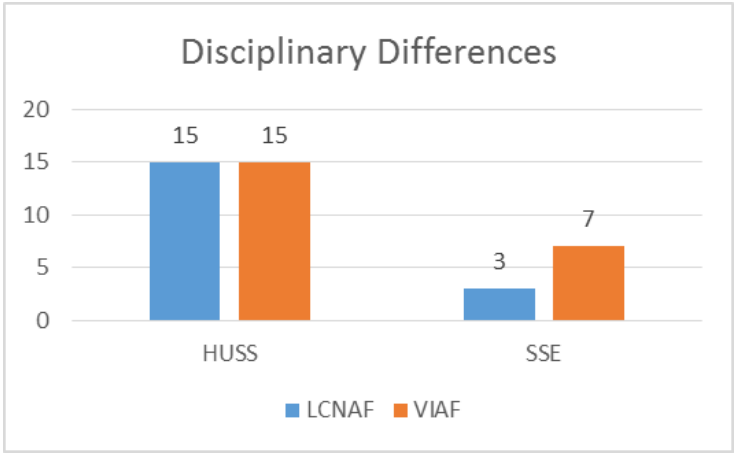
# AUC Faculty Found in the Selected Researcher Identity Services: Pilot Results (Total = 55 faculty)



# Preliminary Findings

- **Service categories emerged from the data; professional and self-registered services.**
- **Accomplished authors/researchers** are listed in more services than others.
- **Disciplinary differences:**
  - **HUSS faculty are better represented in LCNAF and VIAF than SSE faculty.**
  - **SSE faculty**, who are not in LCNAF, are represented **in VIAF**.
- **Publication types:** Most **SSE** faculty publications, especially in Engineering, are conference proceedings. Thus they are not well-represented in LCNAF and VIAF.



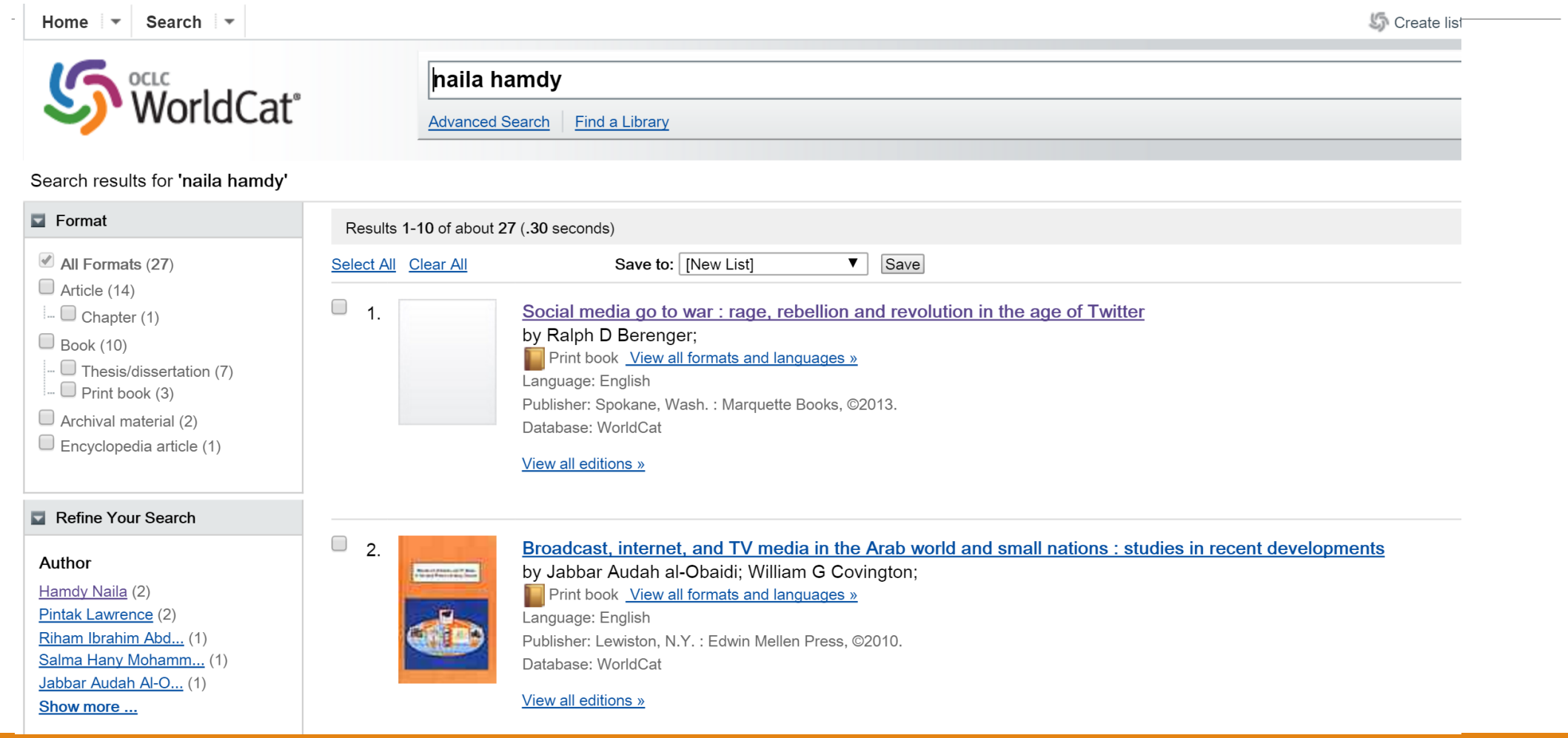



# Preliminary Findings (cont.)

- **LCNAF and VIAF** are better for **creators of whole books** than with authors of book chapters.
- Authors of book chapters are likely to be listed only in the content note area of catalog records (for AACR2R and RDA-based cataloging with MARC21), not as added authors with their own metadata fields.

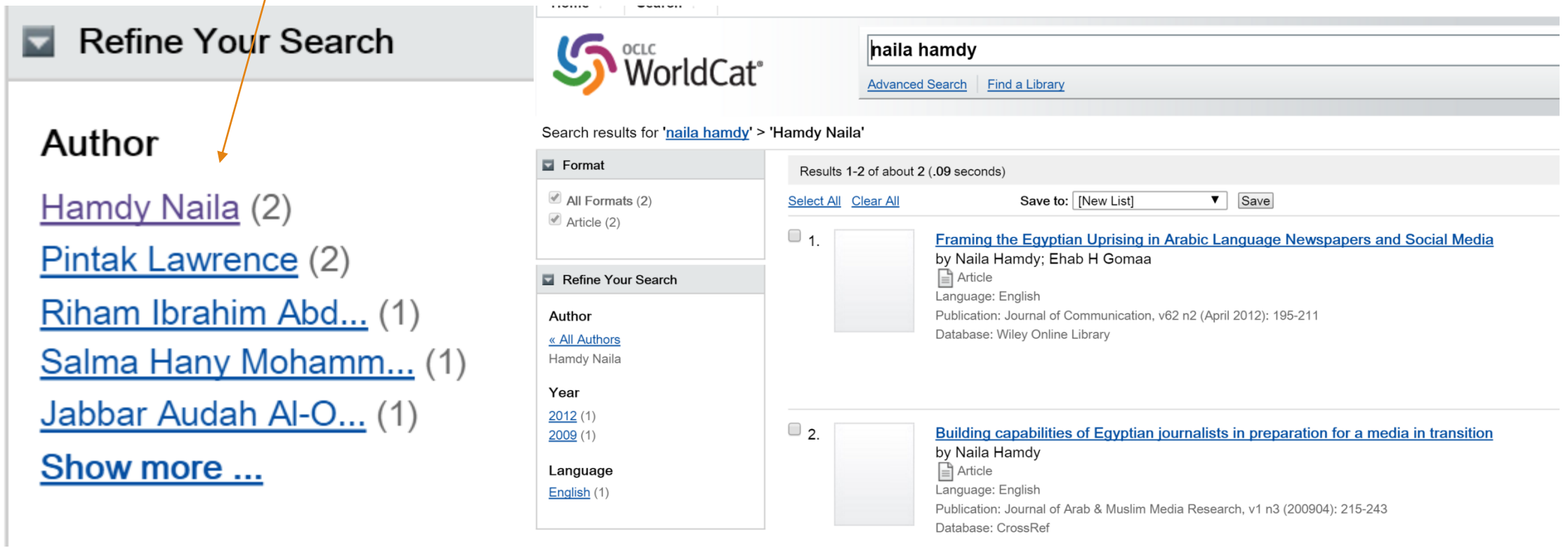
***Women and social media in the Egyptian revolution* / Naila Hamdy and Lindsey Conlin.** In Berenger, R. D. (2013). *Social media go to war: rage, rebellion and revolution in the age of Twitter*. Spokane, Washington : Marquette Books. http://www.worldcat.org/oclc/828932544 (as listed in MARC 505 – content note). (1 of 39 contributors of this book).

# Naila Hamdy's Book Chapter in Result no. 1



**Professor Naila is listed as an author of the journal articles; but not the book chapter.**

On the plus side, search results for books and articles are listed together, and the Linked Data includes the abstract.



# Implications

- ✓Enhance catalog records: add faculty names as added authors for writers of book chapters
- ✓**User services for Researcher Identity Management**. For an example: **Utrecht University Library's** ***Research impact & visibility: researcher profiles.***
- ✓**Promote AUC Digital Archive and Research Repository (DAR) for faculty publications.**
- ✓**Mobility & morbidity factors**. Consider archiving the webpages of AUC faculty profiles for those who left AUC or passed away.
- ✓**Linked Data's challenge**: to map linkage among the researcher i.d. services, disciplinary-specific databases and institutional repositories **to form a single author space as Linked Data for each faculty member.**
- ✓**LCNAF, VIAF, ISNI, ORCID with SCOPUS** are making a good effort to link authors' identities and publication profiles.
- ✓Next, to cross **link with the self-registered services?**

# Self-registered Services

## PROS

- Create one's **own research identity**
- **Ease of use**
- **Automatic updates** for new publications (Google Scholar and ResearchGate)
- **E-mail updates on usage, statistics, and citation activities** (too many e-mail notifications from ResearchGate, however)
- **Usage reports and charts**
- **Free**
- Closed system – some **protection for the faculty's works**
- **Social network and collaborative** functions (ResearchGate)
- **Citation linkage** (Google Scholar and ResearchGate)

## CONS

- English-language dominant
- Incomplete data and/or publications
- May or may not be updated by the researchers over time

# Further Analysis with Additional Data

- ✓**Tenure or non-tenure factor** for publications
- ✓Search for AUC faculty in **other systems**, such as ORCID, SCOPUS, arXiv, for example
- ✓**Metadata** used for each system (Heller, 2015)
- ✓**Name variants**
- ✓**Types of publications**, research products (e.g., patents) and creative works
- ✓**Places and languages of publication**
- ✓**Types of disciplines vs. platforms used**
- ✓**Non-Roman scripts for names** in Arabic and other languages in the publication, if available.
- ✓Implication for the **AMICAL Consortium**.

# Conclusion

Researchers in the 21st Century tend to have scattered identities and publication profiles; at their local institutions and other professional and self-registered services.

**The challenge, as we go toward the Linked Data model, is how to maintain multiple identities per each researcher, to cross link the data and to provide perpetual access to the i.d. systems for all AUC faculty; not only for the accomplished writers and/or creators.**

# References (1)


- Angjeli, Anila and Mac Ewan, Andrew and Boulet, Vincent (2014). *ISNI and VIAF – Transforming ways of trustfully consolidating identities*. Paper presented at: IFLA WLIC 2014 – Lyon - Libraries, Citizens, Societies: Confluence for Knowledge in Session 86 - Cataloguing with Bibliography, Classification, Indexing and UNIMARC Strategic Programme. In: IFLA WLIC 2014, 16-22 August 2014, Lyon, France. http://library.ifla.org/id/eprint/985
- Empson, Rip (2013). "Bill Gates, Benchmark And More Pour $35M Into ResearchGate, The Social Network For Scientists" *TechCrunch,* June 4. http://techcrunch.com/2013/06/04/bill-gates-benchmark-and-more-pour-35m-into-researchgate-the-professional-network-for-scientists/.
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- *Places & Spaces: Mapping Science*: http://scimaps.org/
- *Research Randomizer*: https://www.randomizer.org/
- Smith-Yoshimura, Karen; Micah Altman; Michael Conlon; Ana Lupe Cristán; Laura Dawson; Joanne Dunham; Thom Hickey; Daniel Hook; Wolfram Horstmann; Andrew MacEwan; Philip Schreur; Laura Smart; Melanie Wacker; and Saskia Woutersen (2014). *Registering Researchers in Authority Files*. Dublin, Ohio: OCLC Research. http://www.oclc.org/content/dam/research/publications/library/2014/oclcresearch-registering-researchers-2014.pdf
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# Credits

- Cover image: social network
- Places & spaces: http://scimaps.org/home.html
- Garfield's historiograph (Garfield, 2004, p. 132)
- SWIB14: http://swib.org/swib14/
- Linked Open Data Cloud: http://datahub.io/group/lodcloud
- Magnifying glass on a map
- Adele's ISNI: Jason Davies' Word Cloud Generator
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# Thank YOU
# Danke schön

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