# **Aisthesis**



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## Finnish Aesthetics in Academic Databases

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Abstract. The academic databases such as Scopus or Web of Science are commonly used to measure performance of universities, departments, and even single researchers. However, to what extent such databases can represent real outcomes of aforementioned units especially in the field of art and humanities where local languages and cultural phenomena play an important role is not clear. This article focuses on understanding how research in this field, as seen through the case of aesthetics in non-English speaking countries, Finland in particular, is represented through major academic databases. This question is tackled by applying a data mining approach. First, we identify major academic databases, and afterwards test what is the proportion of Finnish aesthetics presented in those databases. Our approach allows us to critically look into representation of local art or humanities related research in general academic databases, and understand to what extent we can trust those sources in representing real pictures of the field. Results strengthen the well-known fact that most common academic databases draw a rather poor picture. In more particular this article shows that there are certain factors that influence analysis of the field: (1) spread data, (2) multilingual content, (3) non-standard categorization, (4) variability of venues, (5) different publishing patterns, and (6) unsuitable impact metrics. However, our results propose that alternative databases can be formed from university or meta-data databases. We also provide further directions for designing of such databases.

Keywords. Academic databases, aesthetics, Finnish aesthetics, publishing.

#### 1. INTRODUCTION

If you are an aesthetician who is based in Finland (or Italy, Slovenia, Greece, France or any other non-English speaking country), most probably you are aware of the major actors, their works, and philosophies defining the field. But if you are an outsider to the field and you want to get an understanding of it, or of any other area in humanities that is not purely in English, what kind of view you would get using common search venues – academic databases?

Researchers are interested in the academic databases due to the impressive amount of well-structured and easy to access data they can offer. Such combination lays a very promising environment for the research. As academic database such as Scopus, Web of Science,

or ProQuest contains huge amount of records, researchers treat them as they would combine all, or close to that amount, academic or otherwise relevant publications. However, that is not always the case in reality. For instance research shows that only majority of humanities research is indexed in academic databases (Franssen, Wouters [2017]). Therefore, the question arises – Is the situation the same in aesthetics and elsewhere in arts and humanities?

In the worst case, such performance evaluations that diminish the real research output can drastically affect funding allocation of research organizations. Moreover, academic databases are not only used for identifying relevant publications for evaluation purposes or literature reviews, but also for delivering research output (e.g. Muñoz-Muñoz, Mirón-Valdivieso [2017)]). Thus, if a database misrepresents a particular subject area, can trust the results provided by it?

This leads to the aim of this project – to critically look into research representation through academic databases while using the case of Finnish aesthetics. To what extent correct or wrong picture, we can get if we will base our understanding on academic databases. That brings an important question to tackle – how Finnish aesthetics is represented in academic databases and what kind of view we can get by trying to perceive Finnish aesthetics through these sources?

For tackling this question, we collected data from 10 different databases including and major Worldwide databases and Finnish ones (please look at table 1 for databases and their descriptions). We firstly created citation map based by the countries to understand how research is spreading across the countries based on an academic database and citations gathered from it. Afterwards, we've selected Finnish aestheticians and analyzed how their works are represented in Worldwide and Finnish databases.

#### 2. LITERATURE REVIEW

The primary advantage of academic databases is coverage. They cover all research fields, giving a

ready access to aggregated data. Unlike a number of other databases, which may cover some journals only in part, these databases systematically index all articles and other items in the selected journals (Archambault, Vignola-Gagné, Côté, Larivière, Gingrasb [2006]). Additionally, they offer an easy system to use, and even API access to the data, that allows for researcher to perform analysis with ease and include into analysis such metadata as research authors, titles, abstracts, references, institutions, countries of institutions, etc. or even full-texts to some extent.

There is much what to like such approaches. Such databases are creating a wanted environment for bibliometricians to perform their research, where one could implement performance metrics, compare fields, researchers, get bigger views of the area, or even implements gamification type system to track oneself performance and create higher engagement. However, such adopted perspective on the databases influences researchers' choices for publication venues, and directs them to publish in indexed in academic databases venues if they aim to make their publications more visible. This means that the databases are becoming as de facto standard for researchers not only to perform a literature review, but also as directions for publishing research results.

There were lot of attention from researchers directed in studying academic databases. Some studies have compared major databases – Scopus, Web of Science, Google Scholar, ProQuest – to understand which has advantage over the others. Researchers have compared academic databases in various fields, but often concentrating on medicine and information research (Bar-Ilan [2008]; Falagas, Pitsouni, Malietzis, Pappas [2008]; Meho, Yang [2007]). Furthermore, the core databases in the researchers' eyesight became Web of Science, and Scopus, which were compared based on coverage (Aghaei Chadegani et al. [2013]) or even additional features offered (Meho, Rogers [2008]).

There has been research done arguing that humanities and social sciences do not have the same coverage as natural sciences and engineering. For example in terms of citations (Nwagwu, Egbon [2011]), altmetrics (Hammarfelt [2014]), or bibliometric analysis studies found in the area (Larivière, Gingras, Archambault [2006]). Quite common approach is to treat humanities and social sciences as a single unit and compare it to the Natural Science and Engineering (NSE) research, while in fact, collaborative activities of researchers in the social sciences are more comparable to those of researchers in the NSE than in the humanities (Larivière et al. [2006]).

Although contradicting evidences exists, the peer-reviewed publication in a WoS-or Scopus indexed journal are still the norm with which humanities scholars are compared (Franssen, Wouters [2017]). These bibliometric studies deliver descriptive measures that might not have a clear relation to our understanding of research and publication practices in humanities. This implies that bibliometricians involved in the humanities should not rely on a theoretical framework built around the natural sciences, but rather develop an understanding of the way the humanities "work", independent of other scientific domains (Franssen, Wouters [2017]).

To tackle this issue we used an example of Finnish aesthetics. In general, aesthetics has often been defined as philosophy of art, art criticism (in the broad sense) and/or beauty. Some version of this trio can be found in many introductory books (e.g., Eaton 1988, Sheppard 1987, Stecker 2007). However, it is debatable whether aesthetics is necessarily only a branch of philosophy or can there be empirical, scientific versions of aesthetics; whether the three areas mentioned above (and their possible sub-fields) really cover all relevant issues of aesthetics; and where are the differences between aesthetics and disciplines such as art history, musicology and sociology of art. Moreover, does aesthetics always refer to an academic discipline or does it also cover non-academic publications and forums? In other words, the identity and borderlines of aesthetics are not easy to define. This also means that it is not self-evident what kinds of publications should be covered when we try to form an understanding of the field and its core issues through various databases.

#### 3. RESEARCH METHOD

We followed Velasquez and Evans (2018) as an example to form a rough guidelines for our research methodology. This study adopted a quantitative approach. We selected the works that related to Finnish aesthetics, and afterwards coded them. Coding was done based on the indexing in academic databases of selected works. To analyze and summarize the results we developed a webbased tools, which are accessible at http://dhoa.aalto.fi/citemap/ and http://dhoa.aalto.fi/finnish/.

#### 3.1 Citations tracking

To map countries we've collected research publications that refers to the word "aesthetics" from Scopus database. Further we've each publication references list. Then we grouped citations in two groups - the ones that could be found in Scopus database and the overall ones. We've calculated most common citations by the country in each of the group. We've tracked which countries are citing which ones, by analyzing every publication produced in that country, and its citations that could be found in Scopus database. If citation from reference list could be found in the database and has publication countries names in as a metadata - it was stored as country relationship. Further, all incoming citations for each of the country was summed, and map created where one could which countries are citing which ones the most.

## 3.2 Database comparison

To understand how Finnish aesthetics is presented in the databases, firstly we mapped Finnish aesthetics through the works of six Finnish aestheticians. (Table 1). The selection was done by the authors of this project and was based on idea to capture diversified profiles. We didn't aim to cover the biggest share of Finnish aesthetics works, nor the most influential works. Instead, we aimed to see how different profiles could be represented in different databases. For instance Yrjö Sepänmaa is an experienced researcher

Table1: Selected Finnish Aestheticians in databased analyzed for this article

Scholar	Publications	Books	Articles	Others
Max Ryynänen	25	15	10	0
Arto Haapala	73	47	23	3
Jyri Vuorinen	6	6	0	0
Ossi Naukkarinen	82	27	50	5
Sanna Lehtinen	10	4	3	3
Yrjö Sepänmaa	267	150	110	7

who has close to 300 publications, while Sanna Lehtinen just recently received her Ph.D and is only at the beginning of her career. While professors Ossi Naukkarinen often publishes in international peer-reviewed journals, Max Ryynänen for instance has plenty of publications in books as book chapters. Therefore, selection was done with the assumption that publications of some of the researchers are represented well in one type of databases, and other researchers' works in other ones.

Later we searched for each of the works from the selected researchers in various databases and counted how many of them are indexed in them. For this, we employed data from Scopus, Google Scholar, Elektra, Arto, Helka, and internal university databases - Tuhat, Acris, and CRIS. We've selected the biggest academic databases worldwide and in Finland. While worldwide academic databases - Scopus, Web of Science and Google Scholar was a straightforward choice due to their already established recognition, Finnish academic databases where selected based on the authors' knowledge as well as librarians' of a host institution recommendations. Which of the universities' databases were chosen was depending on researcher's affiliation. Ossi Naukkarinen and Max Ryynänen are affiliated with Aalto University, while Aaro Haapala, Jyri Vuorinen, and Sanna Lehtinen with University of Helsinki, and Yrjö Sepänmaa with University of Eastern Finland. Each of the researchers was contacted, and they either sent us their list of publications by themselves, or directed us to their internal university databases from where the list could be obtained. Publications were grouped to 3 groups - Books, Articles, and Other (Table 1). "Books" relates to

Table 2: Databases used for the research

Database	Description			
Scopus	Scopus is Elsevier's abstract and citation database. Scopus covers			
	over 69 million records, around 22.000 peer-reviewed journals a			
	more than 150.000 books. www.scopus.com			
Web of Science	Web of Science is an online subscription-based scientific citation			
	indexing service maintained by Clarivate Analytics that provides a			
	comprehensive citation search. It covers 151 million records from			
	around 34.200 journals and 94.000 books.			
	www.webofknowledge.com			
Elektra	Elektra collects, publishes and archives the articles of the leading			
	Finnish scientific journals in electronic form. elektra.helsinki.fi			
Helka	Helka is Helka-libraries' shared collection and circulation service. The			
	Helka catalogue includes collections of Helsinki University Library,			
	National Library, Institute for the Languages of Finland, The Finnish			
	Heritage Agency Library, Finnish Literature Society, Library of the			
	Labour Movement and Baltia-kirjasto. It has 3.2 million references.			
	helka.finna.fi/			
Arto	ARTO is the reference database and metadata reserve of Finnish			
	periodical and monograph articles. arto.linneanet.fi			
Google Scholar	Is a freely accessible web search engine that indexes the full text or			
	metadata of scholarly literature across an array of publishing			
	formats and disciplines. scholar.google.com			
Acris	Database for scholar affiliated with Aalto university acris.aalto.fi			
Tuhat	Database for scholar affiliated with University of Helsinki			
	tuhat.helsinki.fi			
CRIS	Database for scholar affiliated with University of Eastern Finland			
	wiivi.uef.fi/crisyp/disp/_/en/welcome/nop?kieli=1&menuid=0			

monograph, chapters in the book, or books translations where scholar is one of the authors for them, "Articles" – to research reports published in peer reviewed academic journals, and "Other" – to conference proceeding, and articles in non-academic journals.

From the gathered list we took one by one entry and tested it whether its indexed in each of our selected academic databases in two ways. Firstly, it was checked whether that publication could be found by authors name or its title, if that was the case then this entry got "Direct" indexing label. Secondly, it was checked whether the publication can be found by its collection title – book title, journal title and volume, or conference proceedings title. If the publication could be found by its collection title, but not publication itself then this entry received "Indirect" indexing label. The process can be seen in Figure 1.

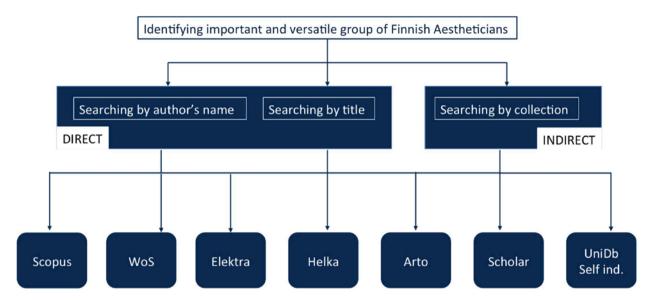


Figure 1: The process of searching indexed publications

#### 3.3 Language detection

Furthermore we've taken the collected Finnish aesthetics related titles and references lists from Scopus and Elektra databases, and titles only from our selected aestheticians works, and analyzed what languages were used in Finland based publications. Such procedure was done by feeding the collected list to program that auto detects language.

#### 4. RESULTS

If we look at academic databases (and try to understand Finnish aesthetics through them), we will see that most of the publications covered by the main academic databases are written in English, and dominated by Anglo-American scholars. To showcase this phenomenon, we collected all entries that refer to aesthetics from one of the biggest academic database – Scopus, and visualize that in the map (Figure 1). This figure represents, which works are cited from a particular country – in this case Finland. As you can see, the color for Finland is rather bright and colors for United States, United Kingdom and Germany are much darker. The darker the color, the more citations

country receives from Finland. Thus, scholars tend to cite Anglo-American literature.

Another important point is that 96% of articles in Scopus for the area of Aesthetics are written in English. Moreover, there are only 76 works in Scopus that are made in Finland and related to aesthetics. If we take Scopus data as information for granted this could raise a point that Finnish researchers are not interested in this area. However, if you ask any Finnish aesthetician, she or he will acknowledge that it's not the case. In Finland, there is a long history in this field (see Naukkarinen and Immonen 1995; Kuisma 2006), one can study aesthetics as a major in the University of Helsinki and plenty of courses are available in other universities, and there is an active learned society for it, Finnish Society for Aesthetics. Additionally, there are Finnish journals such as Synteesi, Taide and Niin & Näin that are partly covering topics relevant for aesthetics, and also anthologies and monographs are regularly published. Scopus simply does not have much of this in its radar.

Scopus and Web of Science databases are among the largest in the world. However, these databases have the least indexed works of our selected scholars. Overall there were 10 works indexed in both databases combined. And most of them (8) were published within the last decade.



Figure 2: Most cited countries by Aestheticians from Finland based on Scopus data. Dynamic version of the map can be seen here http://dhoa.aalto.fi/citemap/1

Based on this we can make an assumption that some researchers started to publish in indexed journals recently. However, only 3 out of 6 selected researchers have any of the publications in these databases.

Similar results occurred related to Elektra database. It is the largest academic database in Finland that provides downloadable full-texts. Few of explanation's can be that Elektra's offering full-text access for all its entries, and that might be one of the reason for its lower number. On the

other hand, we haven't noticed any of Finnish aesthetics related journals that are indexed in Elektra, although some of them offering open access articles. One of the reasons, that this database is more concentrated on natural or social science, instead of humanities and arts. Finnish aesthetics is a narrow field, and the Elektra database managers haven't thought about all possible subjects of research, that could lead to identifying publication venues for them.

Scopus and Web of Science databases might have another reason for such low score. Journals to be indexed in these databases must undergo specific procedures and follow particular rules, where for aesthetics related venues the main aim is not necessarily to comply with them. Although journals such as the US based *Contemporary Aesthetics* is well-known among aestheticians worldwide and offering content in English, it is not indexed in any of the databases.

Out of the worldwide known databases only Google Scholar indexed quite an amount of the researchers work. Google Scholar uses partly voluntarily indexing. Robots crawl trusted websites

<sup>&</sup>lt;sup>1</sup> Figure 2. Has several available functions and it was done by getting data from Scopus academic database. In particular we tracked works and their references, in order to a) indicate what countries are most cited by particular countries, and b) works that are cited the most in that country. For instance if there is an author in the article that is affiliated with Finnish university, from which other countries publications are cited in that author's work, and what are the most cited publications among that country's researchers. Most cited works, can be two types, the ones that are only in Scopus database (Scopus cros-refs) and the overall ones (All refs). Also there is an ability to see, from which countries works received the most citations overall (For All countries).

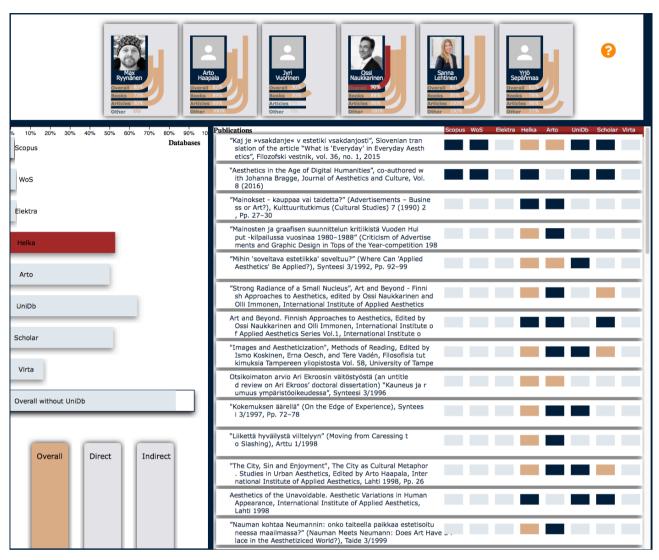


Figure 3: Selected aestheticians publication indexing in academic databases. Dynamic version can be seen here: http://dhoa.aalto.fi/finnish/2

- the databases that supposed to be academic, and takes a list of publications for Google Scholar database. Google increases amount of publication by snowballing – taking the articles that are cited by already indexed articles in the Scholar database. One also can recommend its own database/ webpage, and if the system decides that its academic, by Google decided standard, they can be included into the database.

Other Finnish databases – Helka and Arto don't have much differences in indexing the works. One indexes more contributions to books for one researcher, while another for other schol-

<sup>&</sup>lt;sup>2</sup> Figure 3. shows how works of selected Finnish aestheticians are indexed across different academic databases. It has two type of results – (a) amount of works indexed in various academic databases, and (b) and titles of those works. The image has several selections, where combination of them manipulates those results. (1) The choice among authors defines which works will be used and scores on which will be presented. (2) Choice on author's type of publications, e.g. Books, Articles, etc. limits the results to only those particular publications. (3) Selec-

tion of different databases, e.g. Helka, Arto, Scopus, limits works indexed only in selected database. (4) Selection on type of indexing – Direct, Indirect or Overall, presents works that has particular index.

ar. Same can be said about indexing articles. But these databases except few cases indexing around half of the works.

The biggest share of works is indexed in university databases. Except in Jyri Vuorinen's case, these databases are always the highest among all other databases with regards to amount of indexed publications. The reasons are straightforward. Scholars usually add publication entries to these databases by themselves. And motivation can be various, ranging from seeking recognition towards university policies implying researchers to frequently update their publication lists. Another reason due to such results, that the "real" publication list for some scholars was taken from these systems - Arto Haapala's and Sanna Lehtinen's from "Tuhat" system, and Yrjö Sepänmaa's from "CRIS". When contacted these scholars confirmed that full list of their publications is in these databases and there is no need for forwarding another list. However, there is still the questions how scholars categorize their own and other scholars' publications. For example, Ryynänen is doubtful whether all his publications can be considered to belong to the group of aesthetics. There is no simple answer to this, and there will always be borderline cases. This is why all descriptions of any academic fields, based on publication metadata, are approximations with fuzzy borderlines.

While analyzing results we've noticed that aesthetics researcher's publications can have very untraditional type or venues, compared to natural or social sciences, or publications in exhibition journals, translations. It was also common to have more books publications in the form of monographs or book chapters, than academic articles. Only one scholar – Ossi Naukkarinen, have more journal articles than contributions to books (Table 2).

Looking at the different languages, we noticed that the further we are going towards the "real" Finnish aesthetics, the higher extent of local language is used. Most of the publications (97%) related to aesthetics in Scopus database are in English, however references that used in these articles have slight trace of Finnish language, which would indicate that there are important

works on aesthetics in Finland that could be a beginning point of the study. If we go to the biggest academic database in Finland that allows access to full-texts -Elektra, we can notice that 44% of publications (articles and books) that relates to Aesthetics are in Finnish. Now if we have a look at selected Finnish aestheticians publishing patterns, we can notice that there are more material in Finnish than in English language. Other interesting point - Elektra has 1056 publications that relates to aesthetics while our 6 selected scholars have 453 alone. And we can guess that there are way more of publications coming from other Finnish aestheticians. We can also see that only small amount of works are indexed in Elektra, thus we can speculate that if we could combine all aesthetics works produced in Finland it could easily reach 5 to 10 thousands.

### 5. CHALLENGES OF REPRESENTING AESTHETICS

We can summarize outcomes of our analysis, in several statements, that can describe issues that are hindering current identification of the field of Finnish aesthetics:

- (1) Spread data There are multiple data sources across which data is spread, and each of the sources can have unique entries, which other databases don't posses. Therefore, none of the single database could be used to represent research on Finnish aesthetics.
- (2) Multilingual content There are several language used in representing the works Finnish, English, Swedish and most probably occasionally others such as German and French. Therefore, identification of works, such as category name, or search keywords, must be designed accordingly for multiple languages. If AI systems are used to process information from the database, the systems must be trained to various languages. In other countries relevant languages might be Chinese, Korean, Polish, Italian, Slovenian, Spanish, etc.
- (3) Non-standard categorization There are high varieties of different kind of publications

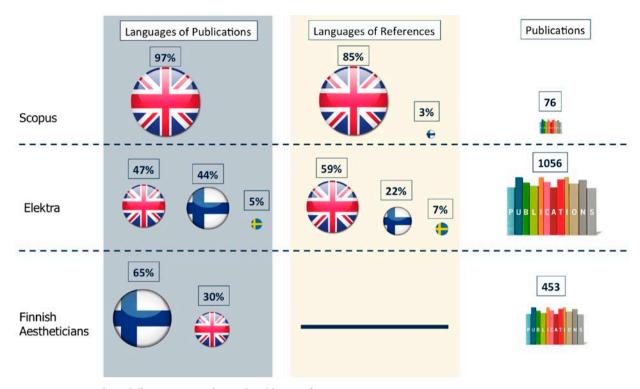


Figure 4: Languages from different sources of Finnish publications<sup>3</sup>

e.g. book translations, book reviews, articles in art exhibition journal; which cannot be found in more traditional sciences. Categorizations to group various kinds of publications should be developed.

- (4) Variability of venues There are none of predefined journal lists where most of the important works to aesthetics would be published, compared to, e.g. Financial Times 50 for Business and Management fields or Top 8 Information Systems basket for Management of Information Systems area. This issue doesn't allow tracking possible venues from which most of the publications could be integrated into one source.
- (5) Different publishing patterns The potential sources for the publications cannot be predicted, as most of the publications are published in the

type of books or book chapters. Its challenging to determine the source and to gather timely updates as with journal articles for instance.

(6) Unsuitable impact metrics - There is a need for a different research metrics than traditionally has been used. In Arts and Humanities area citations are less frequent than in Natural or Social Sciences. Scholars using lower amount of references in the field, and those are usually directed towards grounding, well known works and theoreticians, e.g. Niche, Bourdieu, rather than to the recent works related for the research question at stake. Thus, applying such as h-index, won't show the real impact the author's publications have made.

#### 6. DISCUSSION AND CONCLUSION

If we would trust the biggest academic databases worldwide – WoS and Scopus, the picture of Finnish aesthetics would be rather narrow, as only few percent of our selected aestheticians works are indexed there. Same can be said about Elektra

<sup>&</sup>lt;sup>3</sup> Figure 4. For detecting languages we fed titles of the articles and used citations in them from different sources to "languages" python library. However, it was not possible to check languages of citations of selected Finnish aestheticians.

- the largest access to publications offering database in Finland. Thus, results indicate that major academic databases - WoS and Scopus, are very limited in representing the field. Similar results were presented by other research that was understanding the difference in representation between humanities and natural sciences areas (Franssen, Wouters [2017]).

There are several views on this phenomenon. One of them is that humanities field can be described as «relatively young, and scarcely organized as coherent disciplines» (Line [2000]), which may not relate to the age of the whole field, considering the long humanities traditions since Antiquity, but rather to variety of subjects and fluid structure. Anyhow, this statement implies that with the time the field will be structured and adopt natural sciences publication practices. Our research results suggest that there are some evidences to support this notion, as it showed that some researchers have already started to publish in the indexed journals in recent years. However, the opposite view proposed by other recently published research have strong grounds (Franssen, Wouters [2017]; Sivertsen [2016]), and our research also shows that only half of selected scholars engaged in publishing in the indexed journals at all. We can see that although scholars tend to engage into publishing research in the indexed journals, still the amount of these publications are minor compared to all research output produced by them. This perspective suggests that it is highly unlikely that humanities publication practices in a near future will, eventually, become the same as the ideal-typical monolithic publication profile of the natural sciences.

Aesthetics, as well as other arts and humanities related researchers, are more keen to publish in local language, due to the reason that the research is oriented to the audience to that particular region or country (Larivière et al. [2006]). The concepts and subjects covered in the art and humanities research can be expressed and understood only in the culture that is shaping them (Line [2000]). For inclusion to academic databases journals must operate to high extent in English,

and only in rare cases indexed articles are written in another language. However, while English language could be the reason for lack of content in international databases, humanities research case in Canada (Larivière et al. [2006]) showing that the indexing of English humanities works are not that different from the work written in other languages. These findings imply that research publications in English language are facing same issue – only small amount of works can be found in Academic databases, as research written in other languages.

Different patterns of research dissemination are one of the key arguments as well. Our research, as well as other ones related to general humanities (Huang, Chang [2008]; Larivière et al. [2006]; Sivertsen [2016]) indicate that researchers' are more keen to publish books rather than journal articles. Moreover, publication forms could be extended to newspaper articles or articles for in exhibition galleries journals as our research shows. And publication in books could be as monograph, book chapter or even book translation. The academic databases usually don't cover these other forms of publication as systematically and exhaustively as databases such Web of Science or Scopus do for journal articles (Larivière et al. [2006]; Nederhof [2006]). However, we've found that some databases in Finland such as Helka or Arto, offers coverage of books and articles and around half of all the works we selected for analysis could be found in these databases.

The main contribution of this research is showcasing existence of alternative sources to counter the well-known academic databases. University databases are the most promising venues for creating publication search tools among them. They are updated by scholars themselves, which includes various type of journals without mediators selecting them. Combination of these databases could lead to the biggest source of academic reports. However, they have few important flaws that restricts usage of them as general academic research catalog. Not all databases are fully accessible by public users. For instance "Acris" is internal Aalto University system, and

to see full content of the system one must login with credentials given by the university. The design in which systems are developed can differ widely, for instance in "Tuhat" and "Cris" it's much easier to locate full publication list of an author, than in aforementioned "Acris". The same challenge applies for integrating information, if we would aim to combine different sources for the universal one. Meta-data used by university systems differs widely, and details that one system can provide as well. Publications are differently described, has different type of categories, it has varying number of features. Moreover, same research can be named in slightly different way - author names can be missing, or instead of full first name, it can be written only with first letter, or words in title misspelled. These, issues create challenges for automatically integrating works into one single database. Thus, in the currents situation this assumption just asks for more research to be done in order to develop unified database that could be suitable for arts and humanities researchers.

The other direction should tackle agreements and decisions made on developing structure and standards for accepting and distributing publications into the right categories. The role also could be played by associations of aesthetics, which most of the countries that have strong grounds in this field have. For instance Finnish aesthetics has its own society gathering local aestheticians and having knowledge on important venues, topics, and authors of the field, could periodically issue list of aesthetics publications and thus create a database. Similar groups can exists in other place, or departments, which would take responsibility in defining the sources of the knowledge. Here challenges for research are coming from separate institutions involved in the process, where its own has different motivations and restrictions. For instance, scholars might have their personal lobbying intentions in pushing their own research into public attention. Thus, who and how will decide, on what venues should be right and what must be included into databases, and how that decision will be approved by that local areas, in this case all Finnish universities that are researching aesthetics. While in first option we have rather technical restrictions to handle the integration of the right information, in the second option we might deal human related restrictions, as there are at least 3 different actors involved – database owners, publishers, and scholars.

#### 7. CONCLUSION

There is no final answer to this but at least it seems clear that the main academic databases are seriously incomplete. Our research identifies that humanities scholars, and in our case aesthetics, tend not to publish in indexed journals, due to the audience for which the knowledge is created. However, that might lead to the disagreement between scholars and institutions that tend to evaluate research performance based on the data from recognized academic databases. The issue relates to the direction towards which authorities and arts and humanities research institutions tend to head. The policy makers demand publishing in the specialized journals on the international level in order to be confronted with and inspired by the scholarly standards, critical discussions and new developments among other experts in the field. But that would mean that arts and humanities would lose their uniqueness by disconnecting from the surrounding culture and society and mainly communicating in international journals that are targeting peers abroad. With this research we are proposing that there are other sources of data based on which, databases could be formed, or research performance evaluated, and which would allow to secure traditional practices.

The study found that combination of university databases – self-reported publication lists, could lead to sufficient database to evaluate research performance. This would allow for national agencies to (1) avoid using privately own database, and (2) use national related publication patterns instead of worldwide ones.

Further studies could investigate unanswered question of this study – do humanities fields need to change in order to adopt to academic databases

structure or different approaches must be developed for quantifying fields performance without disturbing its identity.

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