

Scalar pragmatics in online academic job advertisements

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ABSTRACT

In this study, I navigate scalar pragmatics as a methodology applicable in sociolinguistics by critically exploring its relevance in the contrastive study of online academic job advertisements (Khaitova & Muller, 2022b). Scales in sociolinguistic analysis (Blommaert et al., 2015) provide a systematic framework that enables a comprehensive understanding of the subtleties of language use within a particular context. Scalar pragmatics, as implied in sociolinguistics studies, offers the usage and interpretation of ordered words in various contexts (Gal, 2016; Meek, 2016; Nakassis, 2016). While scales may seem to serve arbitrary goals (Blommaert, 2007, 2010) with no specific underlying structure, I argue that they are not arbitrary at all as scalar efficiency goes beyond categorization to classify and weigh (Carr & Lempert, 2016). I investigate how the dynamic and adaptive capacity of scalar pragmatics impacts meaning making within the context of online academic job advertisements. I also explore the relationship between representation in research and the agency of the researcher as a co-producer of knowledge, an interpreter, and a meaning maker of texts (Wodak, 2009; Gill, 2010; De Fina & Georgakopoulou, 2015).

Keywords: *scales, scalar pragmatics, meaning-in-use, academic digital discourse, the representation of research, methodology, critical discourse analysis*

Authors note:

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INTRODUCTION

Scales, as a research frame for understanding the nuances of language use within specific contexts (Blommaert et al., 2015), have gained recognition in the field of sociolinguistics, among other disciplines. In sociolinguistics, scales play an important role in the analysis of meaning, context, and indexicality (Blommaert, 2021). Sociolinguistic relations both reference scales and constitute them (Canagarajah, S., & De Costa, 2015). While scales have gained recognition in various disciplines, their purpose and usage have been subject to scholarly discussions and debates (Carr & Lempert, 2016). Some suggest scales help organize and analyze text by distinguishing between primary and secondary information, emphasizing how individuals understand their lives (Carr & Lempert, 2016). Indeed, scaling in sociolinguistics refers to the analysis and understanding of primarily verbal language use in relation to different levels of context. It merges time and space into one complex unit (Blommaert 2007). However, this understanding of scaling has also faced criticism. Anthropologists such as Tsing (2000, 2012, 2015) and sociologists like Badwan and Simpson (2019) argue that scales can enforce predictable scholarship and favor certain hierarchies over others. In this study, I critically evaluate the traditional understanding of scaling, particularly in the context of online academic job advertisements, which challenges the notion that scales alone are solely responsible for meaning-making. These job advertisements, as a form of digital discourse, require shifting the focus from a theoretical concept of scalar frames to the researcher's agency and their exploration of research steps to uncover the intended meaning conveyed by the digital text. To exemplify this shift in focus, consider the following excerpts from online job advertisements in Japan-based and US-based sub-corpora:

- (i) All **qualified applicants** are encouraged to apply and will receive consideration for employment without regard to **race, color, religion, national origin, age, sex** (including **pregnancy, gender identity** and **expression**, and **sexual orientation**), **disability status, protected veteran status**, or any **other characteristics protected by law**.

(US-2021-03-10-10, author boldface)

- (ii) [documents to be submitted] “as **PDF files**” (JP - 2020-08-06-6); format: as in [following] “**University format**” (JP - 2020-08-06-2) [in] **envelopes** marked with “**red ink**” (JP - 2020-08-11-23 author boldface).

We could examine these examples from the perspective of scalar pragmatics, focusing on signs and symbols employed to convey meaning within a particular context. In the first example, signs representing protected characteristics such as race, color, and religion are present, highlighting an ideology of equality. On the other hand, the second example focuses on expectations and requirements related to specific formats and references, indicating a scale of evaluation based on adherence to these specifications. We could depart from certain ideologies and regard the first instance from the point of view of the ideology of equality and the second one from the angle of conformity. This contrast illustrates how scales can be applied to different aspects of language use and interpretation. From a sociolinguistic point of view, one can see that in the first set, the specific categories, such as race, color, and religion, appear to offer potential applicants selection with no bias for a position. In contrast, the second example, through the mention of formats and materials, simultaneously establishes a scale of evaluation by emphasizing the importance of adhering to specified formats and materials for document submission.

In contrast, Khaitova and Muller (2022b) illustrate a novel approach to scalar pragmatics, which I discuss in this study. They challenge the conventional understanding of scaling and necessitate considering the researcher's agency and exploration of research steps to uncover the intended meaning conveyed by digital texts. By viewing texts as formed and organized through broader indexes entextualized at hierarchically local scales, Khaitova and Muller (2022b) expand the conventional study of social relationships (Meek, 2016), cultural practices (Gal, 2016), and geographic features (Philips, 2016) that I will exemplify in the following sections. Moreover, I suggest that Khaitova and Muller (2022b) illustrate the three-fold value of scalar pragmatics as a methodology. Firstly, scalar expressions allow researchers to consider elements beyond the written text itself; secondly, they help explore the dynamic and complex situated meanings and practices in academic digital discourse through multiple data sources. Finally, they bridge the ontological and epistemological gap between text and context, offering a comprehensive understanding of scalar pragmatics in the study of digital academic discourse, specifically in online job advertisements.

Building upon the insights of Khaitova and Muller (2022b; 'our study' further in the text) and the theoretical explorations I presented in Vietnam (Khaitova, 2022) I challenge the conventional understanding of scalar pragmatics and argue for its central role as a methodology. I maintain that scalar pragmatics, as a strategic framework encompassing methods, theories, and guiding principles, goes beyond theoretical concepts and provides a robust framework for analysis. Inspired by Lillis' (2008) methodology of ethnography, I argue for the three-fold value of scalar pragmatics. Firstly, scalar expressions enable researchers to consider different elements of writers' perspectives, such as their personal experiences and existing knowledge, and to analyze the discursive practices used by writers. Secondly, as a methodology, they allow for a more comprehensive understanding of the subject matter and can reveal insights that may not be apparent through a single data source. Finally, by theoretically exploring scalar pragmatics, I

claim that it fundamentally challenges the conventional conceptualization of text and context as separate domains within academic digital discourse. This necessitates the development of analytic tools that bridge the ontological and epistemological gaps between them. To achieve a nuanced analysis in this study, I adopt two analytical concepts. Firstly, the triadic semiotics of Pierce (1868) emphasizes the relationship between language and its practical use or consequences. By understanding the meaning behind the signs and symbols in the data, researchers can draw more accurate interpretations and conclusions. Moreover, they can help identify patterns and themes in their data that may not be immediately apparent, allowing for a more nuanced analysis. Secondly, the concept of language games (Wittgenstein, 1953) helps to better understand the ways in which language is used in social contexts. Examining the language games in different social situations, I can gain insight into the meanings of complex expressions. I can similarly offer a more nuanced analysis of qualitative data and a better understanding of the social and cultural contexts in which language is used. Additionally, the concept of language games points to the rule-governed character of language, which helps me identify patterns and themes in the data that may not be immediately apparent. These analytical concepts provide avenues for exploring the intricate relationship between text and context. They contribute to a more comprehensive understanding of scalar pragmatics in the study of digital academic discourse in general and online academic job advertisements.

To establish the context for the discussion in this article, I align the structure of my presentation to the structure suggested in Lillis (2008). I begin with a background section. Then I structure my discussion around scalar pragmatics in the three main sections: scalar pragmatics as scalar expressions; as methodology; and their theoretical exploration. In each section, I aim to illustrate the value of different levels of scalar pragmatics to academic digital discourse. Then I progress towards a key challenge faced by researchers committed to contextualizing academic texts: how to narrow the ontological and epistemological gap between text and context.

BACKGROUND

Here I set up the background of my study, which is informed and illustrated by our study and my presentation on December 9, 2022 (Khaitova, 2022). In our study, we discussed the influence of local and national considerations on the discourse found in higher education job advertisements in the United States and Japan. We suggested that while there may be a broader discourse of internationalization shaping the higher education discourse, the local context and national policies still play a significant role. We highlighted the methodological contribution by pioneering the application of scales in keyword analysis of higher education job advertisements. We mentioned that indexes and scales, traditionally used in disciplines such as anthropology,

sociolinguistics, and critical geography, helped organize the themes that emerged through the keyword analysis. We framed our study as primarily sociolinguistic, aiming to explore how texts are formed and organized through broader indexes that are entextualized at hierarchically more local, but overlapping, scales. During my presentation, I specifically discussed the concept of scalar pragmatics in the context of online academic job advertisements, focusing on the theoretical frames. My first proposition was framed by Peirce's (1868) triadic semiotics, while my second proposition was grounded in Wittgenstein's (1953) concept of meaning-in-use, which informed my understanding of scalar pragmatics. Selected slides and notes from the presentation illustrate this study in the sections that discuss scalar pragmatics as scalar expressions, as a methodology, and as deep theorizing (Figures 1, 3, 4, 5).

To ensure a focused examination, I adopted a selective extraction of data approach, prioritizing specific methodological and epistemological facets of the study. This allowed me to delve into the nuances of the research process and explore methodological considerations within the broader landscape of scalar pragmatics. In line with this approach, I will provide a summary of the research process in Khaitova and Muller (2022b) drawing on the overview presented by Lillis (2008, p. 357).

Summary of the contrastive study of online academic job advertisements

Research questions	Focus: critical analysis of higher education discourse, specifically online job advertisements, using keyword analysis:
Sub-corpora	184 online academic job advertisements, 92 US-based and 92 Japan-based.
Researchers	Mukaddam Khaitova and Theron Muller
Analysis sources	<ul style="list-style-type: none"> - Screening of advertisements - Post-screening analysis - Texts with ideas and suggestions written by researchers. - Cyclical talk around texts - Research diary - Onsite and online meetings of researchers - E-mail correspondence between researchers

- Interim analyses
- Manuscript drafts
- Draft edits

National context	US and Japan
Disciplinary focus	Sociolinguistics
Length of research	18 months

It is important to note that our research not only serves as a source of data for this study but also reflects my personal journey as a researcher examining the complexities of contextualizing academic digital discourse. Moreover, our study showcases the accomplishments and challenges within the field of scalar pragmatics. Although it was not a collaborative study between two researchers of similar categories, it exemplifies the collaboration between my mentor, Dr. Theron Muller, and myself, as a supervisee exploring discourse analysis. Our collaboration was characterized by a positive mentor-supervisee relationship, where I recognized Theron's expertise while critically evaluating his arguments. We maintained regular meetings, and Theron provided clear tasks and guidance, enabling me to progress through various research steps. Both academically and professionally, we represented different levels of Japan-based academia. At the time of our study, I was a part-time non-faculty lecturer in two Japanese prefectures, teaching at three universities, which allowed me to gather extensive ethnographic material and observations. Yet, my non-membership in academia, as is the case with part-time teachers in Japan-based tertiary institutions (discussed in Khaitova & Muller, 2022a), limited my research efforts. Unlike me, Dr. Theron Muller has been a tenured faculty member with impressive research accomplishments and projects.

The positive mentor-supervisee relationship we shared greatly contributed to enhancing our overall research experience. Throughout our collaboration, I never experienced any form of disrespect, regardless of how unrealistic my proposals may have been, as I illustrate in the following section. However, it would be inaccurate to describe our collaboration solely in terms of respectful criticism. It was predominantly a warm and cordial relationship (David 2020), characterized by mutual support and openness. We met on a weekly, biweekly, or monthly basis, depending on our schedules. Usually, Theron would give me a clear task – to review the literature, for example, and draft a literature review, which I would submit before the next meeting (Appendix B, Figure 1). Then we would review and make the necessary changes. Depending on the number of changes. I would write the next draft that would meet the

requirements set by Theron. This cycle involved various steps, which I am going to discuss at length later in the section on scalar pragmatics as a methodology.

Whereas I was a beginning disciple, Theron has been my research mentor and example, who, while allowing me to explore every step in our joint research, patiently explained and pointed at my flows. Below are the personal anecdotes of two such episodes that demonstrated the obvious difference.

Scalar Pragmatics as Scalar Expressions

As stated in the introduction, scalar expressions are words that can be arranged according to their intensity and strength. In the initial stage of the study, I aimed to clarify my understanding of ordering discursive chaos from multiple and diverse job advertisements. This process is crucial to providing context for our research. Figure 1 depicts a specific episode within our research process, illustrating my initial understanding of keyword analysis and its role in generating scalar expressions and conclusions.

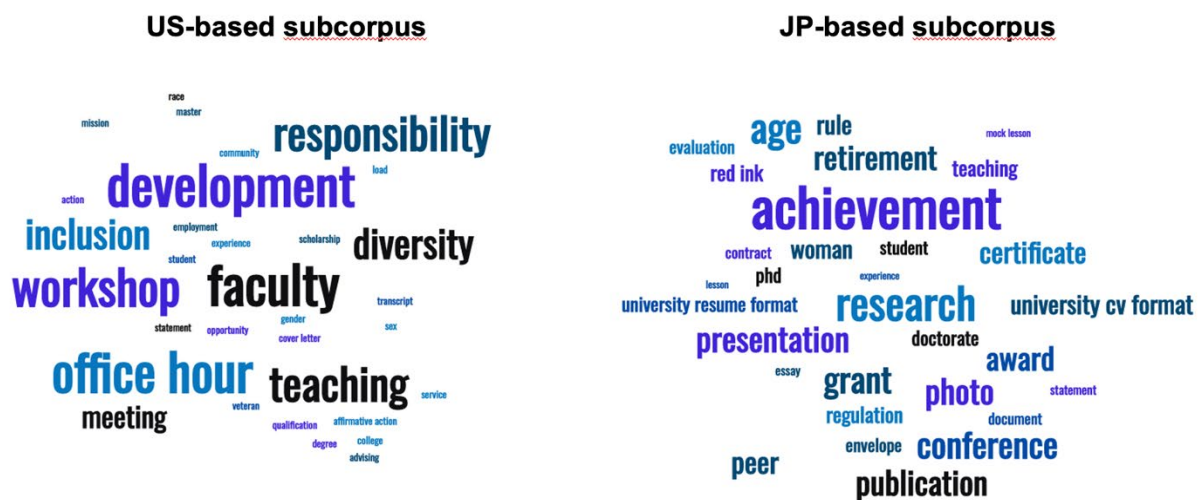


Figure 1. Preliminary scaling and 'keyword' analysis

During the analysis, I utilized the antconc (Anthony, 2019) software to identify keywords, which formed the basis for my mental picture, as shown in Figure 1. Based on the keywords and the scaling of prominent words, I suggested that the US-based discourse appeared more approachable and 'friendly' compared to the Japan-based discourse, which seemed overly formal and infantilizing. However, during the subsequent meeting, Theron, a full-time faculty member,

raised a valid concern regarding the potential restriction of data interpretation from such a perspective. He emphasized the importance of engaging directly with the data through an action-based approach. This instance highlights the subjectivity of interpretations based on individual perspectives and roles within the academic hierarchy.

Seeking to further explore the US-based sub-corpus, I initially proposed analyzing it from the perspective of woke ideology. I believed that this approach would enhance the appeal of our manuscript for journals and engage readers. The following paragraph is an excerpt from the literature review I drafted on January 12, 2022:

Trends toward improving participation rates of women and other minoritized populations in the workforce more generally and within higher education faculty specifically are commendable. However, while they may have commendable progressive intentions, they tend to be interpreted by institutions as presenting risks, and such interpretations end up obscuring and derailing their intended outcomes (Tuck 2021). For example, Ramaswamy's critique of diversity in the workforce is that while "woke culture posits a new theory of who you are as a person" it simultaneously "reduces you to the characteristics you inherit at birth" (2021: 17). In contrast, what he refers to as "true diversity" (2021:26) would entail "diversity of thought" and/or "experience" (2021:285) because it would serve as a "means toward achieving excellence" (2021:354). In this sense, higher education's "interface with society" (indexlis 2021:5) should reinforce, project, and further social mobility and inclusion... Returning to the issue of how diversity is interpreted, inborn features end up trumping creative and constructive features (Ramaswamy 2021). Ramaswamy (2021) argues this is nothing but a lose-lose game that only creates exclusions on different levels, with no ethnic or racial groups feeling secure. These issues are of interest to this investigation of US- and Japan-based higher education job advertisements because how larger concepts such as diversity and equality are entextualized in their discourse can be examined. This can help to empirically interrogate the issues concerning institutional variability in implementation and interpretation raised above.

However, Theron's concern about the potential restriction of data interpretation through an ideological lens prompted a critical reassessment. It led to a realization of the tendency to rely on ideological frameworks to support my inquiry, which Geertz (2000) famously characterized as "the results of thought inevitably reflect the quality of the kind of human situation in which they were obtained" (p. 22). This realization challenged the suitability of an ideological approach and highlighted the need for alternative theoretical frameworks that enrich the analysis and interpretation of data. Previous studies analyzing the language of ideologies, such as marketization (Xiong, 2012; Kheovichai, 2014; Khaitova & Muller, 2022a) and neoliberalism (Pack, 2018; Tuck, 2021; Khaitova & Muller, 2022a), have demonstrated the potential

limitations of an intellectualized ideology-based approach. Such an approach tends to oversimplify the nuanced discourse of universities, which varies not only across different countries but also within a given country across different types of universities (national, public, private, etc.). In light of these insights, it is more appropriate to focus on the researcher's agency in handling research tools and frames. An action-based or human-centered approach, as suggested by Misak (2016) and Moyal-Sharrock (2021), holds promise for yielding more insightful results by encouraging researchers to reject preconceived filters during analysis. This understanding of the action-based approach emphasizes the importance of engaging in human-centered and critical discourse analysis, disregarding preconceived filters and ideological influence on data interpretation. The 'keyword analysis' in Figure 1 serves as an example of how such filters can impact the interpretation of data.

Moreover, the above examples contribute to the main argument of this study in three ways. Firstly, they serve to define scalar expressions, highlighting their nature and characteristics—meaning-based in the first instance and ideology-based in the second. Secondly, they demonstrate the importance of scalar expressions from the researchers' perspective by focusing on understanding participants' viewpoints through an emic lens. Emic perspectives shed light on participants' perspectives and significant aspects within the broader notion of "context" (Lillis, 2008, p. 360). Finally, the examples underscore both the values and limitations of scalar expressions.

The Value and Limitations to Scalar Pragmatics as Scalar Expressions

The value of scalar pragmatics as scalar expressions from a sociolinguistic perspective is explored in existing studies such as those by Carr and Lempert (2016), which primarily focus on spoken texts. In his work, Nakassis (2016), for example, explores the pragmatic and metapragmatic aspects of scale, particularly in the context of trademark law. He examines how trademark law becomes a domain where scales are created and pragmatically employed. Indeed, scalar expressions facilitate certain actions, such as preliminary discussions, interactions, and interpretations that constitute "talk around texts" (Lillis, 2008, p. 358). This framework captures a diverse array of conversations, feedback, revisions, interpretations, and evaluations that revolve around written texts (Appendix B, Figures 4 - 12). The complexity of these dynamics points to deeper social and discursive aspects. In other words, by focusing on the stream of experience in meaning-making and discourse studies, scalar expressions facilitated our study of the practical consequences of language use and helped us understand how language is used to create and maintain meaning in specific contexts.

Despite the interest in scalar pragmatics, there is a lack of clarity due to varying interpretations. Some scholars view it as "a social project" (Nakassis, 2016, p. 162) with identified problems and

solutions, while others prioritize practical matters over general principles (Carr & Lempert, 2016, p. 9). In my view, this disparity in interpretation neglects the role of the researcher's agency in the meaning-making process, which is essential for understanding the complexities of scalar pragmatics. Moreover, it complicates the significance of meaning-making, which is becoming increasingly crucial (Geertz, 2000). As I illustrated in the introduction, our study conversely illustrates a more nuanced and complex approach to scalar pragmatics, which allows for a better understanding of this field. Based on our study, I propose that scalar pragmatics involves agents acquiring scalar projects to understand the language games present in academic job advertisements in higher education institutions. This highlights the intricate and creative nature of scalar pragmatics and emphasizes the importance of considering the agency of the researchers involved.

Overall, I argue that scaling is more than just an intellectual construct that begins with an attempt or effort. It represents a complex, structured cycle of meaning-making that is rooted in the actions of the agent rather than simply being an intellectual construct. In contrast to Carr and Lempert (2016), the scalar pragmatics of language games, therefore, should not be reduced to a heuristic unit or seen as a mere effort. As our study demonstrated, it is a dynamic, multi-step process that represents the language games of the agent (Figure 3 in the following section). Scales, I claim, are not just an intellectual exercise but the practical frame of meaning making and language use that requires de-intellectualization and de-problematization. In contrast to Blommaert (2021) and Carr and Lempert (2016), who view scales in more abstract or metaphorical terms, I underscore their pragmatism and practicality. Ultimately, the scalar pragmatics of language use is an important aspect of understanding the role of authority in communication, as it reveals how the agent's actions and language use contribute to the creation and reproduction of meaning.

Scalar Pragmatics as a Methodology

As I stated above, scalar pragmatics is mostly considered a theoretical concept. In contrast, I argue that scalar pragmatics is *a methodology*. In our exploration of online academic job advertisements, scalar pragmatics takes center stage as it unveils how speakers skillfully utilize scalar expressions to convey intricate meanings that surpass the mere literal interpretation of words. Employing rigorous experimental methods, we diligently examine the intricate interplay between contextual factors and the computation of scalar inferences. By leveraging the methodological framework of scalar pragmatics, we embark on a captivating journey within sociolinguistics, uncovering how individuals deploy scalar expressions within diverse social milieus and investigating the nuanced interpretations of these expressions across distinct universities, shaped by institutional discourses. In essence, our study underscores the immense

potential of scalar pragmatics as an invaluable methodology, illuminating the intricate tapestry of sociolinguistic phenomena.

Scalar pragmatics as a methodology empowers us to employ a wide range of actions and approaches that effectively guide the cycles of research and analysis. It involves rooting our assumptions, strategies, and practices in solid empirical data. Instead of choosing a singular perspective or ideology, we consider cues and nuanced directions provided by our sub-corpora, as illustrated by the funneling I discuss below.

Funneling

Throughout our collaborative exploration of contrast studies in online academic job advertisements, we encountered various challenges. Methodological considerations, particularly those related to experimental designs within scalar studies, demanded careful attention. Understanding the intricate interplay between context and scaling proved crucial in our investigations. Additionally, ensuring the validity of result interpretations presented a significant hurdle, requiring meticulous scrutiny and thoughtful analysis. According to Misak (2016), validity refers to the rightness of actions based on the intrinsic value of their consequences, in contrast to Carr and Lempert's (2016) view of validity as dependent on a specific context, such as an institutional context. This concept of validity is crucial for understanding how pragmatics can shed new light on the interpretation of job advertisements as situational texts and mediated interactions.

To navigate the encountered challenges effectively, I propose that in our study, we employed a valuable approach known as the *funneling* process (Figure 2). In this context, funneling involved systematically narrowing down our research variables to address specific considerations. By closely following our data, we streamlined our investigation and ensured study rigor. This focus allowed us to explore the intricate relationship between context and rates of pragmatic inference while enhancing the validity of result interpretations. The funneling process guided us through the complexities and obstacles we faced, leading to a more nuanced and robust understanding of the subject matter. Let me illustrate the concept of funneling as it pertains to the research cycle and its application to scalar pragmatics.

Our research project, summarized in Table 1, included various activities:

- 26 meetings on site at Toyama University where Theron works.
- 8 online meetings between researchers.
- 146 email exchanges between us, researchers (Appendix A, Figure 1).
- 50 drafts of introduction and literature review.
- 40 drafts of analyses (Appendix B, Figure 6 – Figure 12).

- over 100 edits of the manuscript (Appendix A, Figure 3)
- 221 pages of research diary (Appendix A, Figure 2)
- over 900 screening entries of data (Appendix B, Figure 4; Figure 5)

Collaboration unfolded dynamically and iteratively, as depicted in Appendix B, Figures 4 – 12. Continuous communication via email exchanges (Appendix B, Figure 1) supplemented our research meetings, during which specific tasks and goals were assigned and reported upon. Appendix B visually represents the progression of our project, highlighting the stages we traversed.

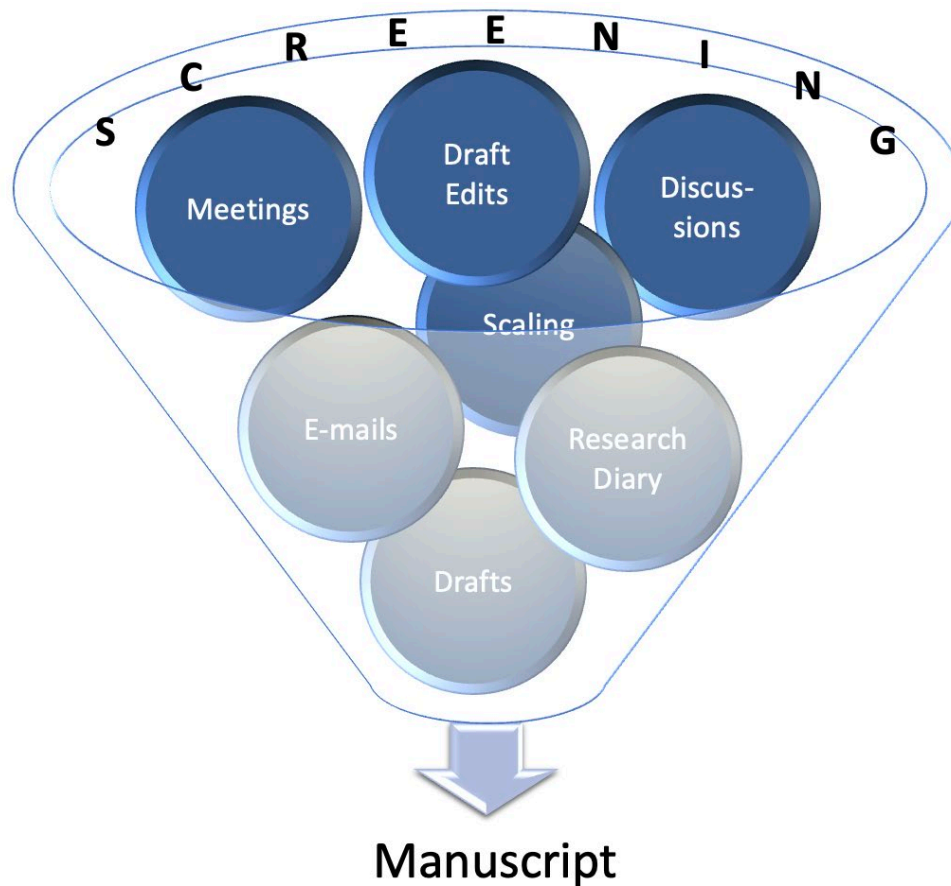


Figure 2. Funneling of research variables

Initially, I entered data into a spreadsheet (Appendix B, Figure 4), and discussions were held to make sense of the information. Manual word selection (Appendix B, Figure 5) yielded no noteworthy results, leading us to employ machine-based keyword analysis for preprocessing our sub-corpora (Appendix B, Figure 6; Figure 7). The project was expedited after August 2021, as marked by initial analyses (Appendix B, Figs. 8, 9). Challenges in framing our analysis persisted until mid-August 2021, when we described our data based on word frequency (Appendix B,

Figure 8) and explored discursive motives within the categories created. As we scaled our data, we transitioned from discursive motives to thematic organization (Appendix B, Figure 10). The more we reflected on scaling, however, the less sure we were about organizing our analysis around themes. It was only in February 2022, through rescaling (Appendix B, Figure 11), that we realized indexing would align with our scaling project (Appendix B, Figure 12). By employing a funneling approach, we steadily advanced towards our desired outcome. The iterative cycles of verbal and written exchanges refined our findings and positioned us as active agents immersed in the socio-discursive fabric of our research. This recursive experience encompassed active participation in social and discursive practices, continuous reflection on our actions and thoughts, and an openness to following our data. Embracing this iterative and reflexive approach allowed us to continually refine our ideas, challenge prevailing assumptions, and cultivate a deeper comprehension, enabling us to provide rich descriptions and engage in meaningful participation.

Building upon my understanding of the funneling approach to our research project, I assert that scalar pragmatics emerges as a pivotal methodology, particularly when conducting sociolinguistic analyses within the context of online academic job advertisements. The semiotic cycle of scaling assigns meaning and weight to specific words based on their usage (Figure 3). As suggested by Searle, “words [especially 'troubling'] get their meaning from their role in the language game” (Philosophy Overdose, 2022, 24:00), where words derive their meaning from their role in the language game. Similarly, the application scale in online academic job advertisements can be deciphered by analyzing the contextual implications and the underlying pragmatic inferences they convey. The US-based sub-corpus, to illustrate, includes words such as 'inclusion', 'ideal candidate', and 'application', which are considered troubling, and their significance is determined by their frequency of use. These words are categorized based on their strength, ranging from A to the weakest, with A being the strongest. For example, the ideal candidate scale is represented in our study by the applicant identifier index and is dominated by legalese. The categories formed from this process represent scaling, the first part of the triadic cycle.

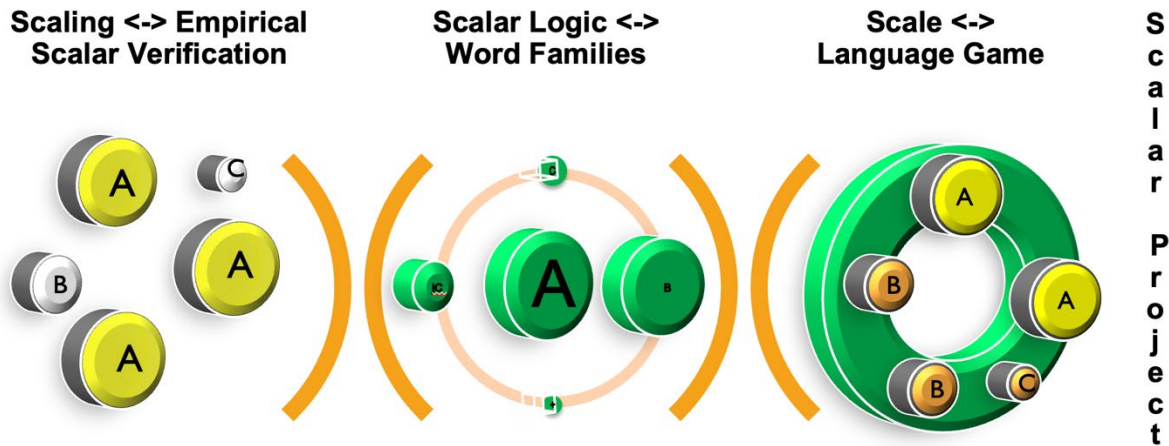


Figure 3. Scalar Project

In the next cycle, scalar logic, I group the words into word families. As Searle suggests, words acquire meaning by being associated with ideas in our minds (Philosophy Overdose, 2022, 11:36). Despite differences in meaning, words within the same word family share similarities in features. For instance, regardless of whether the word “color” in category A is different from “adjunct” in category C, they both belong to the same word family that describes the academic identity in a job advertisement. These word families develop over time into larger categories, or scales, which incorporate additional keywords. Through this process, I can identify and categorize words based on their frequency of use and discursive course within the language game. This provides a deeper understanding of their fluid and multi-layered meanings, which aligns with Wittgenstein's suggestion that words within word families should have “crisscrossing similarities of some features” (Magee in Philosophy Overdose, 2022, 17:00). The resulting category, scales, is formed from matured word families and, therefore, can be verified at any time during and after the analysis with concrete examples, making this a rigorous and systematic approach.

With an understanding of scalar pragmatics in place, I then focus on the following two key scales coined in our study: the ideal candidate in the US-based sub-corpus and the application in the Japan-based sub-corpus. These scales offer valuable insights into different pragmatic scalar projects and contrasting discursive colonization dynamics. By analyzing these scales in the US-based sub-corpus, we can better understand how universities approach the concept of inclusion and express their ideal candidate with legalese:

All **qualified applicants** are encouraged to apply and will receive consideration for employment without regard to **race, color, religion, national origin, age, sex** (including **pregnancy, gender identity** and **expression**, and

sexual orientation), disability status, protected veteran status, or any other characteristics protected by law.

(US-2021-03-10-10, author boldface)

University is an **Equal Employment Opportunity/Affirmative Action** Employer encouraging applications from individuals with **disabilities, minorities, females, and veterans.** (US 2021-06-27-1, author boldface)

According to the data, the concepts of inclusion and diversity are interpreted differently by universities, as revealed in the US-based sub-corpus. In the context of job advertisements, these words are part of the ideal candidate scale, which is represented by legalese language in job advertisements. The frequency of this language demonstrates its strength in colonizing other scales, reflecting how each university sets the definitions offered by time within its space. On the other hand, the Japan-based sub-corpus focuses on the application scale, which highlights the contents and submission process of job applications. The scalar pragmatics of these scales validate the meaning within everyday cycles and discourse patterns:

CV **must** include a **photo.** (JP - 2020-10-21-1)

Application documents: list of **academic publications, published articles, books, book chapters, and conference presentations.** (JP - 2020-08-11-4; author boldface)

The application scale specifies not only the types and prerequisites of the documents but also the logistics: as in [documents to be submitted] “as **PDF files**” (JP - 2020-08-06-6); format: as in [following] “**University format**” (JP - 2020-08-06-2) [in] **envelopes** marked with “**red ink**” (JP - 2020-08-11-23 author boldface).

The examples mentioned above display the significance of authority in both grammar and the selection of requirements in job advertisements in Japan. In contrast to the US-based sub-corpus, which focuses on signifying the public domain, the Japan-based sub-corpus prioritizes signifying the material sphere (Blommaert et al., 2015). The distinct pragmatic scalar projects and contrasting discursive colonization dynamics are demonstrated by the contrasting scalar pragmatics in the two subcorpora. In the US-based sub-corpus, the emphasis is on signifying the public domain, with a focus on the meaning of inclusion and diversity in job advertisements. The frequency of legalese in the US-based dataset reflects the authority of universities in colonizing other scales (Khaitova & Muller, 2022b) and, I claim, the *outward trajectory* of *time-space* discourse with an emphasis on time. On the other hand, the Japan-based sub-corpus focuses on the semiotization of the material sphere. Material signifiers such as photographs, publications,

envelopes, and red ink, seen above, are apparently as important as academic requirements in the application process. These material signifiers, after being established in the scaling cycle, eventually become a full-fledged scale, representing both the regulations and authority of a university. The Japan-based sub-corpus then demonstrates an *inward trajectory* of *space-time* discourse, with space outweighing time, where universities author their own policies that colonize other scales. The examples mentioned above show how authority plays a crucial role in both the grammar and selection of requirements in job advertisements in Japan. In contrast to the US-based sub-corpus, where the focus is on *the temporal semiotization* of the public domain, the Japan-based sub-corpus focuses on *the spacial semiotization* of the material sphere. The scalar projects in the US-based and Japan-based sub-corpora thus differ in their discursive trajectories and spatiotemporal dynamics.

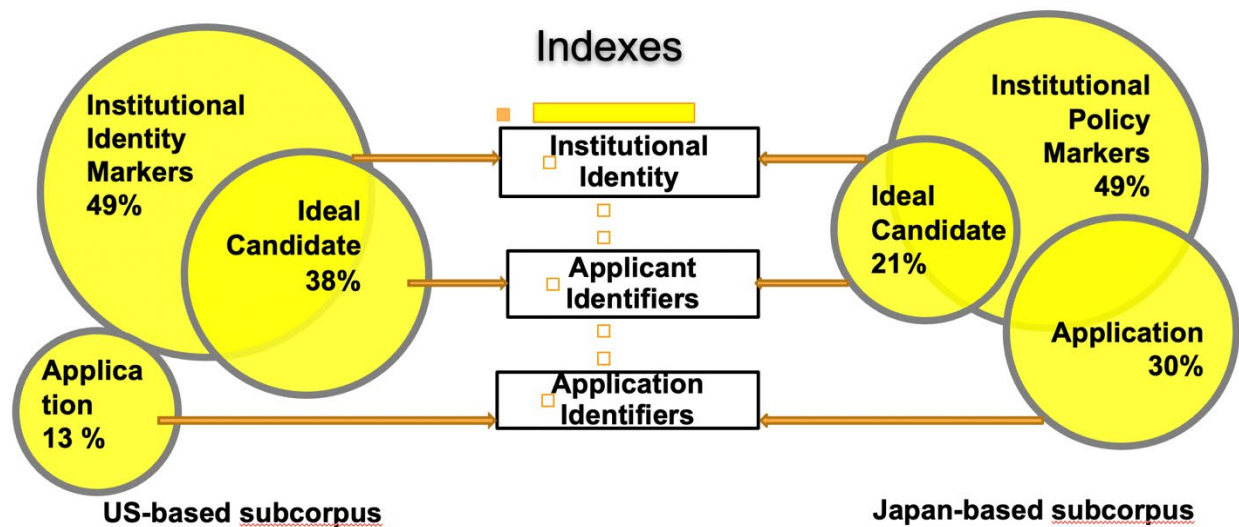


Figure 4. Indexes informed by scales

Our study shows further that the differences in colonization dynamics between the two sub-corpora extend to the indexes (Blommaert et al., 2015) as well (Figure 4). In the US-based sub-corpus, the discourse of legalese in the institutional identity index has a minor influence on the second major index of applicant identifiers, resulting in a greater emphasis on the detailed description of applicants and less representation of the application process (see more in van Leeuwen, 2008, on the impact of discourse on the representation). In contrast, the Japan-based sub-corpus displays a more significant colonization of indexes by the institutional identity index, which is characterized by “organizational discourse of regulations, command, and discipline” (Khaitova & Muller, 2022b, p. 102). This results in the institutional identity index colonizing both the application identifiers and applicant identifiers indexes (Figure 4). The Japan-based advertisements focus on the mechanics of the application process and the generic representation

of applicants. Scalar pragmatics reflects indexical pragmatics, as the polycentricity of scales affects the polysemantic property of indexes. Each index aligns with different shades of scales, giving it discursive legitimation for certain social practices. The authority held by universities is a key factor in this process, with personal authority predominating in the Japan-based sub-corpus and impersonal authority of legalese predominant in the US-based sub-corpus (see more in van Leeuwen, 2008, on types of authority).

To recap, the utilization of the funneling approach within scalar pragmatics offers a comprehensive framework for analyzing and interpreting online academic job advertisements. This methodology enables researchers to navigate the complexities of context, scaling, and interpretation, ultimately yielding a deeper understanding of the intricate dynamics at play. By unraveling the layers of meaning and uncovering the deliberate language choices, researchers can shed light on the recruitment practices within the academic sphere, thereby enhancing representation in research and expanding the role of researchers. This invaluable contribution to the broader discourse on effective communication in professional contexts not only enriches our understanding but also elevates the significance of research in shaping academic practices.

The Value and Limitations to Scalar Pragmatics as Methodology

Here I aim to underscore the profound worth of scalar pragmatics as a methodology in sociolinguistic study, particularly in the analysis of online academic job advertisements. By recognizing the potential connections between sociolinguistic scales and the concept of funneling, intriguing insights emerge. Sociolinguistic scales offer valuable analytical tools for examining the customized language used in job advertisements to target specific audiences, such as part-time, non-tenured, or tenured candidates (as discussed in Khaitova & Muller, 2022a). This application of sociolinguistic scales aligns with the objectives of funneling, facilitating more effective guidance of candidates throughout the application process. Moreover, the capacity of scaling in sociolinguistics to categorize language usage underscores its resemblance to the organizational nature of funneling, as both involve a temporal progression through multiple stages or levels, leading to a refined understanding and systematic management of the phenomena under study.

By acknowledging and exploring these connections, I capitalize on the collaborative potential of sociolinguistic scales and funneling, enriching their overall interpretation of scalar pragmatics as a methodology. This holistic approach allows for a comprehensive analysis of language use in online academic job advertisements, enhancing the argument for scalar pragmatics as a methodology that contributes to a deeper understanding of communication strategies within this specific domain. This perspective fosters a more nuanced understanding of the intricate dynamics of sociolinguistic phenomena in online academic job advertisements. Scalar pragmatics as a methodology, I maintain, can host various tools to interpret online job

advertisements as representations of university politics in our increasingly mediated time, with the online discourse growing exponentially. Online academic job advertisements frequently convey implicit messages that necessitate contextual understanding and shared assumptions for proper interpretation. This is precisely where the agency of the researcher becomes pivotal as she navigates the intricate web of meaning embedded within these advertisements.

It is crucial to acknowledge the limitations of relying solely on scalar pragmatics as a methodology without considering the active agency of the researcher. Three critiques emerge in this regard. First, a potential critique of scalar pragmatics as a methodology is its narrow focus on language use, potentially disregarding other crucial factors that significantly shape communication, such as power dynamics and social context. To illustrate, the conventional approach in sociolinguistics (Figure 5) has often focused on dichotomization within the dyadic semiotic process of structuralism (Irvine, 2016). This approach has been used to examine language performance on a global and local scale, as seen in Blommaert's (2008) analysis of narratives by African asylum seekers. While scalar pragmatics offers valuable insights into the nuanced aspects of meaning conveyed through language, it is essential to recognize and incorporate a broader range of factors that contribute to the richness and complexity of communicative interactions. For instance, studies like Meek's (2016) examination of endangered languages in Canada question the conventional aboriginal-official binary, highlighting the need to consider the logistics and role of the meaning-maker. Second, the absence of the meaning-maker, or agent, in the process represents one of the significant drawbacks of the dyadic semiotic approach. By fixing the logistics and treating meaning as unchanging and only in relation to its reference, the semiotic approach oversimplifies the meaning-making process, omitting the role of the agent in shaping interpretations and constructing meaning (Gal, 2016). Third, the linear approach employed by the conventional dyadic semiotic perspective has been criticized for delegating the logistics and meaning to nominal scalar tasks, such as measuring and comparing, while leaving the role of the agent unclear (Gal, 2016). Recent studies on the epistemology and ontology of meaning-making, such as those by Misak (2016) and Moyal-Sharrock (2021), emphasize the importance of a more inclusive triadic semiotic cycle. Within this cycle, the agent's interpretation plays a pivotal role in considering the discourse and its meaning, highlighting the need to involve the meaning-maker in the analysis of online academic job advertisements.

For example, let's consider the phrase "sample syllabus" (JPT 2020-08-14-10) in the Japan-based sub-corpus through Saussurian and Peircean semiotics. From a Saussurian perspective, the phrase functions as a binary sign, where the words "sample syllabus" conventionally and arbitrarily pair with the object, which is a document detailing course topics, readings, and assignments. According to Saussure, there is no inherent or direct connection between the signifier and the signified; their relationship is based on convention and agreement. However, adopting a Peircean perspective provides a more intricate understanding of the sign "sample

syllabus" as a triadic sign. In this framework, the sign, represented by the words "sample syllabus," becomes linked to the object, which is the actual document outlining the course. In this context, the interpretant relies on the reader's interpretation of the document and its contents, influenced by factors such as the reader's background knowledge, cultural context, and personal experiences. This Peircean view acknowledges the nuanced and complex relationship between sign, object, and interpretant, going beyond the binary nature of a Saussurian sign.

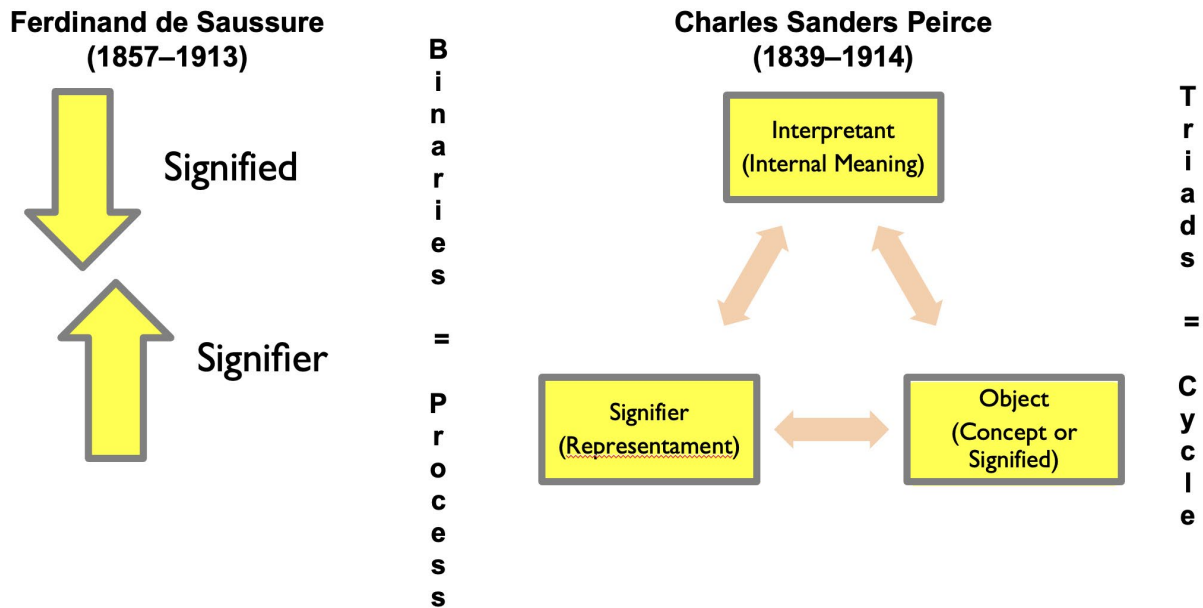


Figure 5. Binary and Triadic Semiotics

The example presented above emphasizes the need for exploring more sophisticated approaches to establishing connections between text and context. It prompts a discussion on the ontological and epistemological frameworks that underpin such endeavors, encouraging researchers to consider the active role of the meaning-maker, the influence of power dynamics and social context, and the complexity of the meaning-making process. By incorporating these perspectives into the analysis of online academic job advertisements, researchers can achieve a more comprehensive and nuanced understanding of the communicative strategies employed within this specific domain. Moreover, by combining Peirce's triadic cycle, action-based or human-centered logic, scalar pragmatics, and the concept of validity, I gain meaningful insights into the discursive elements of job advertisements and how they vary over time. Our study, which I propose further, and my illustration (Figure 3) with the following discussion demonstrate scalar pragmatics as a discursive course that is independent of any context. In job advertisements, validity can help solve the puzzle and explain each piece of the puzzle by reciprocally justifying

both the final image and its tabs, constructing the image, which discursively varies in size. The concept of validity points to a gap in the literature that requires immediate attention.

Overall, while scalar pragmatics as a methodology offers significant value in sociolinguistic study and the analysis of online academic job advertisements, it is essential to acknowledge its limitations. By addressing the critiques concerning the narrow focus on language use, the absence of the meaning-maker, and the linear nature of the conventional semiotic approach, researchers can develop a more comprehensive and inclusive framework for examining the complexities of communication within this domain. By embracing a holistic perspective that integrates sociolinguistic scales, funneling, and the active agency of the researcher, we can advance our understanding of the intricate dynamics at play and make valuable contributions to representation and agency in research.

Scalar Pragmatics as Theoretical Exploration

In this section, I aim to delve deeper into the concept of "deep theorizing," as elucidated by Lillis (2008), in relation to Blommaert's examination of ethnography. However, I intend to go even further by asserting that scalar pragmatics, as a methodology, is a subject of theoretical exploration. The study of online academic job advertisements through the lens of scalar pragmatics reveals ontological and epistemological gaps that necessitate thorough investigation. To overcome the limitations and challenges associated with conventional approaches to scalar pragmatics, it is crucial to develop more inclusive and comprehensive ontological and epistemological designs that facilitate further scrutiny of concepts.

Within this theoretical exploration, I emphasize the role of semiotics or meaning making, with a particular emphasis on Peirce's pragmatism, to provide a comprehensive overview of the relevant literature and its impact on the current study. By comparing it to Saussurian semiotics, I highlight the importance of complexity and nuances in meaning-making within scalar pragmatics. The examples presented in the previous section demonstrate the relevance of the triadic semiotic cycle of Peirce, which mitigates adopting a pragmatic approach to meaning making as *produced*. Unlike the commonly used dyadic semiotic process, where meaning is accepted as given, Peirce's pragmatism emphasizes the role of the user in the interpretation of signs and focuses on their thoughts and actions. I argue that Peirce's pragmatism directly relates to the meaning-making of digital discourse.

As I already mentioned in the introduction, the sub-corpora in this study exemplify the specific discourse that represents the gap between a sign and its meaning, showing the multitude of possibilities for interpreting depending on context and background. To address the signifiers of scalar pragmatics, I frame the analysis within the holistic and transparent mode of Peirce's triadic cycle in Wittgenstein's language game. This triadic cycle, where "all perception is interpreted"

(Peirce discussed in Misak, 2016, p. 57), generates contextually adjustable meanings rather than relying on preconceived ideas or ideologies. By considering the language game as a process of using words in specific situations and combining it with scalar pragmatics, I illustrate how a researcher constructs and maintains her understanding of the world through practical engagement with reality. In the context of academic job advertisements, the researcher is the inquirer seeking to categorize, theorize, and solve problems to act effectively. Therefore, I view scalar pragmatics as an agent-centered framework (discussed in Misak, 2016; Ogien 2018; Moyal-Sharrock, 2021) of triadic semiotics that validates different phases of the language game. Furthermore, I argue that the meaning-making process consists of the researcher-agent's actions, experiences, and observations. In this process, the researcher-agent actively participates in a scalar project, serving as a focal point and accounting for every action and step.

By integrating pragmatics and Wittgenstein's language games, as I suggested in the introduction and as extensively discussed in Misak (2016) and Moyal-Sharrock (2021), I can gain further insights into the validity of online job advertisements as situational texts and mediated interactions. In today's age of mediated discourse, characterized by a technical medium that increases time-space distancing and splits contexts (Chouliaraki & Fairclough, 1999), Wittgenstein's (1953) concept of meaning-in-use is particularly relevant. The non-unified, stratified nature of job advertisements calls for a comprehensive understanding of their meaning-in-use, going beyond the surface-level interpretation of words. Wittgenstein's meaning-in-use allows us to comprehend the meaning-making processes that occur within these contexts. According to this view, the actions of the agent-researcher are seen as “the origin of any human thought or utterance” (Moyal-Sharrock, 2021, p. 5). This philosophical concept of epistemology suggests that knowledge is produced through researchers' active inquiry and actions, highlighting the importance of considering the role of researchers in the meaning-making process. Specifically, the concept provides a useful framework for understanding how users interpret meanings in online contexts by emphasizing the importance of the context and the specific communicative goal they wish to achieve. By examining the interplay between scalar pragmatics, Peirce's pragmatism, and Wittgenstein's language games, we can unlock the potential of scalar pragmatics as a methodology to explore and interpret online academic job advertisements.

Through this theoretical exploration, I aim to develop a more nuanced understanding of scalar pragmatics as a comprehensive and inclusive approach to meaning-making. By recognizing the dynamic nature of scales and their significance in empirical, methodological, and epistemological domains, we can uncover the complex narratives and actions embedded within online academic job advertisements. However, it is important to acknowledge the limitations of this study, which is primarily focused on a specific type of online academic discourse, namely job advertisements. Further research is necessary to explore the application and implications of scalar pragmatics in different contexts and forms of digital academic discourse.

To summarize, in this section I emphasize the importance of adopting an appropriate framework for analyzing online academic job advertisements, with Peirce's semiotics providing a flexible and practical approach to understanding how users interpret signs. I argue that an action-based or human-centered logic, when combined with scalar pragmatics can provide meaningful insights into these situational texts. It is vital to comprehend the discursive elements of job advertisements and how they vary in size over time. Furthermore, it is important to examine the broader philosophical and theoretical frameworks that underpin the analysis of academic job advertisements in the digital age. This includes investigating the epistemological framework of meaning-in-use together with the ontological perspective of pragmatic triadic semiotics, as they inform our understanding of how users interpret signs and meanings in online contexts. Scalar pragmatics builds on this framework by examining how speakers choose from a set of alternatives based on the context and their communicative goals. By understanding how scalar pragmatics relates to these broader philosophical and theoretical frameworks, I gain a more comprehensive understanding of how users interpret signs and meanings in online academic discourse, such as job advertisements. I also develop more nuanced and effective approaches to analyzing these texts. Investigating the broader philosophical and theoretical frameworks of pragmatic triadic semiotics and meaning-in-use deepens my understanding of how users interpret signs and meanings in online contexts. Ultimately, by adopting this framework, I develop more effective and informed approaches to analyzing online academic job advertisements, leading to a better-informed representation of research and of the researcher's agency.

Conclusion

In this follow-up study, I have delved into the concept of scalar pragmatics as a methodology for understanding meaning-making processes in online academic job advertisements. By adopting an action-based and human-centered approach rooted in Peirce's pragmatism and Wittgenstein's language games, I have demonstrated the potential of scalar pragmatics to provide nuanced insights into the discursive practices and narratives embedded within these texts.

Through iterative cycles of analysis, writing, reflection, and idea testing, I have refined my understanding and skills as an active agent engaged in the socio-discursive fabric of research. This recursive experience has allowed me to actively participate in the social and discursive practices inherent to my investigation, reflect upon my own actions and thoughts, and be receptive to the influences emanating from the broader socio-cultural context. By embracing this iterative and reflexive approach, I have continually refined my ideas, challenged prevailing assumptions, and cultivated a deeper comprehension of scalar pragmatics.

Methodologically, I have questioned the traditional cognitive approach to scalar frames and proposed scalar pragmatics as a more suitable alternative for understanding the complex

meaning-making processes in online academic job advertisements. By focusing on meaning-in-use and the actions of agent-researchers, I have shed light on the dynamic nature of scalar categories, scales, and scalar projects. The holistic and inclusive nature of scalar pragmatics, informed by pragmatic semiotics and action-centered inquiry, has allowed me to unravel the multifaceted dimensions of these texts.

While this study has contributed valuable insights into the meaning-making and discourse practices of online academic job advertisements, it is important to acknowledge its limitations. The analysis has been limited to a specific type of online academic discourse, and further research is needed to explore the applicability and implications of scalar pragmatics in different contexts of digital academic discourse. Additionally, it would have been more comprehensive to include the narrative of my collaborator, Theron, in this study.

Looking ahead, future research should focus on advancing discursive studies by making concepts and logistics involved in texts more tangible through the pragmatic approach of de-problematizing and de-intellectualizing. Investigating how researchers use scalar pragmatics to make meaning in online academic discourse and employing interpretive content analysis as a method for examining meaning-making processes are promising avenues for further exploration. Moreover, the implications of scalar pragmatics in online communication and its impact on the meaning-making process in diverse contexts warrant further investigation. A comparative analysis of scalar pragmatics in online job advertisements and traditional job advertisements could also yield valuable insights.

By enhancing our agency through the application of semiotics, we, as researchers, can produce more rigorous and insightful qualitative studies. The methodological approach of scalar pragmatics offers a flexible and practical framework for exploring the complex meanings and actions embedded within texts, paving the way for more nuanced understandings of discursive practices in the digital age.

References:

Anthony, L. (2019). AntConc (Version 3.5.8) [Linux & MacOS X]. Waseda University. <https://www.laurenceanthony.net/software>

Badwan, Khawla & Simpson, James. (2019). Ecological orientations to sociolinguistic scale: Insights from study abroad experiences. *Applied Linguistics Review*. 13. 10.1515/applirev-2018-0113.

Blommaert, J. (2007). On scope and depth in linguistic ethnography. *Journal of Sociolinguistics*, 11(5), 682-688.

Blommaert, J. (2007). Sociolinguistic Scales. *Intercultural Pragmatics*, 4(1), 1–19. Blommaert, J. (2010). *The Sociolinguistics of Globalization*. Cambridge University Press.

Blommaert, J., Westinen, E., & Leppänen, S. (2015). Further notes on sociolinguistic scales. *Intercultural Pragmatics*, 12(1), 119–127. <https://doi.org/10.1515/ip-2015-0005>

Canagarajah, S., & De Costa, P. I. (2015). Introduction: Scales analysis, and its uses and prospects in educational linguistics. *Linguistics and Education*. Advance online publication. Retrieved May 20, 2023, from <https://doi.org/10.1016/j.linged.2015.09.001>

Carr, E. & Lempert, M. (2016). Introduction: Pragmatics of Scale. In E. Carr & M. Lempert (Eds.), *Scale: Discourse and Dimensions of Social Life* (pp. 1 - 22). Berkeley: University of California Press

David, O. (2020). “To Be or Not to Be?” The Effect of Supervisor-Supervisee Relations on Students’ Completion of Doctoral Studies. *World Journal of Education*, 10(1), 1-11. Retrieved May 23, 2023, from <https://www.sciedupress.com/journal/index.php/wje/article/view/17100/10778>

De Fina, A., & Georgakopoulou, A. (2015). *Analyzing narrative: Discourse and sociolinguistic perspectives*. Cambridge University Press.

Gal, S. (2016). Scale-Making: Comparison and Perspective as Ideological Projects. In E. Carr & M. Lempert (Eds.), *Scale: Discourse and Dimensions of Social Life* (pp. 91 - 111). Berkeley: University of California Press

Gee, J. P. (2011). *An introduction to discourse analysis: Theory and method* (4th ed.). Routledge.

Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.

Geertz, C. (2000). *Available Light: Anthropological Reflections on Philosophical Topics*. Princeton University Press.

Gill, R. (2010). Discourse analysis. In C. Seale, G. Gobo, J. F. Gubrium, & D. Silverman (Eds.), *Qualitative research practice* (pp. 331-348). Sage Publications.

Khaitova, M. (2022). *Scalar Pragmatics in Academic Job Advertisements [PowerPoint slides]*. Miro. bit.ly/esbb22

- Khaitova, M., & Muller, T. (2022a). Marketization of Japan-based higher education advertisements: A discourse of McJobs? *Ilha do Desterro*, 75(1), 131–153.
<https://doi.org/10.5007/2175-8026.2022.e83058>
- Khaitova, M., & Muller, T. (2022b). Higher education discourses: A contrastive keyword analysis of the US and Japan, *English Scholars Beyond Borders*, 8 (1), 91 – 125
- Kheovichai, B., (2014). Marketized university discourse: A synchronic and diachronic comparison of the discursive constructions of employer organizations in academic and business job advertisements. *Discourse & Communication*, 8(4), 371–390.
- Lillis, T. (2008). Ethnography as Method, Methodology, and “Deep Theorizing”: Closing the Gap Between Text and Context in Academic Writing Research?
- Meek, B. (2016). Shrinking Indigenous Language in the Yukon. In E. Carr & M. Lempert (Eds.), *Scale: Discourse and Dimensions of Social Life* (pp. 70 - 89). Berkeley: University of California Press
- Misak, C. (2016). *Cambridge Pragmatism: From Peirce and James to Ramsey and Wittgenstein*. Oxford
- Moyal-Sharrock, D. (2021). *Certainty in Action: Wittgenstein on Language, Mind and Epistemology*. Bloomsbury
- Nakassis, C. (2016). Scaling Red and the Horror of Trademark. In E. Carr & M. Lempert (Eds.), *Scale: Discourse and Dimensions of Social Life* (pp. 159 - 184). Berkeley: University of California Press
- Pack, J. (2018). *How the neoliberalization of academia leads to thoughtlessness: Arendt and the modern university*. Lanham: Lexington Books.
- Peirce, C. (1868). On a New List of Categories. In *The Essential Peirce: Selected Philosophical Writings*, N. Houser and C. Kloesel (Eds.), V 1 (1867–1893), 1–10. Bloomington, IN: Indiana University Press. Presented to the American Academy of Arts and Sciences on May 14, 1867, Retrieved January 16, 2023 from <file:///Users/K/Desktop/Peirce%20Charles%20Sanders%20-%20On%20A%20New%20List%20Of%20Categories.htmlm>
- Philips, S. (2016). Balancing the Scales of Justice in Tonga. In E. Carr & M. Lempert (Eds.), *Scale: Discourse and Dimensions of Social Life* (pp. 112 - 132). Berkeley: University of California Press

Philosophy Overdose 2.0. (2022, March 9). *Ludwig Wittgenstein - John Searle & Bryan Magee (1987)* [Video]. Youtube. Retrieved November 1, 2022, from <https://youtu.be/g2JVMOKoDo8>

Ramaswamy, V. (2021). *Woke, Inc: Inside Corporate America's Social Justice Scam*. Center Street.

Tuck, A. (2021). Social inclusion. In S. Themelis (Ed.) *Critical Reflections on the Language of Neoliberalism in Education Dangerous Words and Discourses of Possibility* (pp. 69–77). Routledge.

van Leeuwen, T. (2008). *Discourse and Practice: New Tools for Critical Discourse Analysis*. New York, NY: Oxford University Press.

Wittgenstein, L. (1953). *Philosophical Investigations*. New York, NY, USA: Wiley-Blackwell

Wodak, R. (2009). The discourse-historical approach. In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse analysis* (2nd ed., pp. 63-94). Sage Publications.

Appendix A: Correspondence**Figure 1: Sample of email exchange between Khaitova and Muller, March 13, 2022**

Dear Miah,

I wanted to let you know that I finished reading through our paper up to and including our analysis. I'll wait to look at the discussion and conclusion until our meeting tomorrow.

All the best,

Theron



Miah <[redacted]>
to Theron ▾

Mar 13, 2022, 2:04 PM



Dearest Theron,

Thank you so much for taking your time. I've responded to your comments and agree that we need to discuss several important points tomorrow.

I just finished drafting the discussion and conclusion parts, which need editing. Hopefully will do that by 9 am tomorrow.

Thank you so much for your amazingly patient supervision.

Best,

Miah

**Figure 2: Sample entry of a research diary, August 2, 2021**

“Qualification: in J advertisements one can observe a strong tendency for qualification requirements such as essays on teaching experience (even though there's CV and other papers pointing at professional experience/on research history (even though there is a CV and another document listing the publications)/on future teaching and research plans in addition to demo lessons. To a non-Japanese eye it is as if though applicants are not professionals with degrees but students applying for scholarships, where various statements of purpose are required to stay

out of the crowd. On a closer inspection though one could connect it with nemawashii, in other words, institutions seek for ways to make their minds on the candidates before they actually meet them (?)” (Khaitova M.)

Figure 3: Sample of manuscript draft, March 22 – 30, 2022

Higher education discourses: A contrastive keyword analysis of the US and Japan

Abstract

In this investigation we use keyword analysis to critically analyze higher education discourse, specifically job advertisements. Using two sets of advertisements, one from Japan-based and another from US-based institutions, we examine what is indexed (Blommaert, et al., 2015) in the advertisements, considering how those indexes are differentially represented by scales by unique to by each. We discuss these scales (Blommaert, et al., 2015) from the view of the process of their creation as encompassing multiple stakeholders and discourses that intersect with differing degrees of tension and agreement. We describe how with with these tensions manifesting in the advertisements through how the way how they differentially scale the concepts that they index. Finally, we consider the implications of our analysis for understanding higher education discourse. Specifically, this analysis helps reveal how antiracist, or “woke,” inclusionary ideologies expressed in the advertisements tend to use formulaic language that signals their relatively low priority scaling relative to the other-other features (Khaitova & Muller 2022) that they index.

Key words: scale, indexicality, critical discourse analysis, contrastive keyword analysis, Japanese higher education discourse

Introduction

This critical discourse analysis investigation explores metrification in higher education, focusing

- ▶ March 30, 2022, 11:57 AM
● Theron Muller
● Miah A

- ▶ March 30, 2022, 10:48 AM
● Theron Muller
● Miah A

- ▶ March 26, 2022, 7:21 AM
● Miah A

- ▶ March 23, 2022, 11:37 AM
● Theron Muller
● Miah A

- ▶ March 23, 2022, 11:11 AM
● Miah A
● Theron Muller

- ▶ March 23, 2022, 9:50 AM
● Theron Muller

- ▶ March 22, 2022, 6:43 PM
● Miah A

- ▶ March 22, 2022, 4:49 PM
● Theron Muller

Appendix B: The Chronology of Analyses

1. Screening:

Figure 4: Sample of screening entries of Japan-based job advertisements, March 15, 2021

	A	B	C	D	E	F	G	H	I	J	K	L	M	
1			Categories											
2			Titling/Lab	Pay				Requirements					Notes	*
3	Codes	Website	Work	Research	Other	Subject	Education	W/experience	Language(s)	Publications	Other			
16	APT 2021-03-19-3	higher jobs	adjunct	N	N	N	S: Computer Science	Bachelor	teaching&industrial		N			
17	APT 2021-03-19-5	higher jobs	Chair	N	N	N	S: Math	n/a *see the note	n/a *see the note		N		Candidates must hold a tenured appointment in the Department of Mathematics at the University of Illinois at Urbana-Champaign at the rank of full professor by August 16, 2021. A strong record of scholarship and dedication to excellence is essential, along with a commitment to diversity, equity and inclusion across the full spectrum of departmental operations. Demonstrated effectiveness in leadership is desirable.	
18	APT 2021-03-19-6	higher jobs	PT/online	N	N	N	S: Computer Technol	PhD/Master's	5 years in industry + college & online teaching experience		N			
19	APT 2021-03-19-7	higher jobs	adjunct	N	N	N	S: Physical Geolog	Master's	professional, online teaching & teaching adult learners		N			
20	APT 2021-03-19-8	higher jobs	adjunct	N	N	N	SS: Marketing & Sales	MBA or Master's	Five or more years of experience in a managerial capacity. Full time or		N		Professional certification and/or continuing professional education relevant to business domain. Professional activity within discipline such as relevant-to-teaching area leadership or managerial role in a business enterprise, non-profit organization or government agency	
21	APT 2021-03-19-9	higher jobs	adjunct	N	N	N	SS: Law	A J.D. from an ABA-accredited			N		These positions are part-time, non-tenure-track, and without benefits ("faculty wage"), and they typically involve teaching one elective course during the academic year.	

Figure 5: Sample of manual screening for frequent words that stood out for us, July 7, 2021

1	2	facul	Total	Institutional barriers			Linguistic barriers					
				office hours	digital technologies? (online)	meetings/seminars/conferences	native?	application documents in Japanese/English	languages	essay(s)	trial lessons	sample syllabi
3	PT	25	0	10	meeting/workshop: 1 faculty meeting: 1 faculty: 9(17) seminar: 0 campus: 0 (of 12 as a location) training: training 0 (out of 3 as past experience, and inst type) department: 0 (out of 72 as admin unit) colleague: 0 participate: 0 team: 1 (out of 2)	16	J: CV (13) resume (4)	Japanese: 14 English: 13	essay: 6 summary: 1 statement: 4	demo: 1 sample lesson: 1 demonstration lesson: 1 mock lecture: 6	5	publication: 4 research: 16
4	NT	25	1	1 (58 total)	campus: 6 meeting: 0 seminar: 3 workshop: 2 (as a part of subjects) training: 2 (part of curriculum) department: 2 (out of 72 that in the meaning of 'admin unit') colleague: 0 participate: 5 team: 5	18	J: CV (8) resume (6) other docs: (13) CV in E: (2) other docs: (10)	Japanese: E&J communication: E&J teaching:	essay: 4 summary: 8 statement: 12	demo: 1 sample: 1 demonstration lesson: 2 mock: 3	5	publication: 12 research: 124 (total)
5	TT	25	0	2(56 total)	campus: 2(21) meeting: 2 seminar: 18 workshop: 1 training: 7 department: 5(93) faculty: 4(82) faculty member(s): 17 participate: 4 team: 0	39	J: CV (8) curriculum vitae: 22 other docs: E or J: 13 J: 11 resume (9) E: CV (2)	Japanese: 15 E&J communication: 15 E&J teaching: 9	essay 5 essays 3 summary: 15 statement: 10	demonstration: 2 sample: 1 demo: 0	2	publication: 12 research: 262(total)

2. Keyword Analysis

Figure 6: Sample of keyword analysis of Japan-based subcorpus against US-based subcorpus, July 24, 2021

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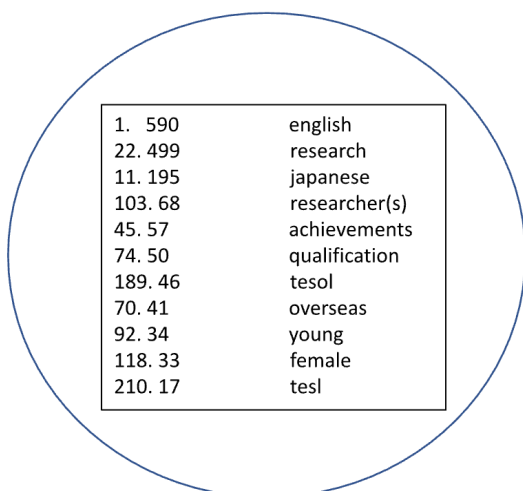
#Keyword Types: 400
#Keyword Tokens: 31354
#Search Hits: 0
1      590      +      474.62  0.0165  english
2      327      +      423.99  0.0092  jp
3      266      +      344.79  0.0075  ac
4      219      +      283.8   0.0061  japan
5      208      +      229.52  0.0058  mail
6      206      +      227.03  0.0058  period
7      223      +      221.25  0.0063  details
8      283      +      220.03  0.0079  documents
9      199      +      212.53  0.0056  etc
10     342      +      202.88  0.0096  available
11     195      +      197.08  0.0055  japanese
12     207      +      188.7   0.0058  web
13     227      +      188.48  0.0064  selection
14     193      +      180.71  0.0054  submission
15     136      +      176.16  0.0038  url
16     132      +      170.98  0.0037  westgate
17     799      +      163.48  0.0222  application
18     123      +      159.31  0.0035  tokyo
19     122      +      158.02  0.0034  notification
20     476      +      151.17  0.0133  not
21     112      +      145.06  0.0031  yen
22     499      +      132.81  0.0139  research
23     211      +      126.39  0.0059  e
24     93       +      120.44  0.0026  jrec
25     917      +      118.66  0.0253  be
26     190      +      115.33  0.0053  address
27     91       +      108.3   0.0026  late
28     117      +      108.07  0.0033  result
29     78       +      101     0.0022  kanazawa
30     84       +      99.39   0.0024  receipt
31     99       +      95.51   0.0028  html
32     118      +      93.93   0.0033  contract
33     89       +      93.26   0.0025  publication
34     72       +      93.23   0.002   method
35     209      +      92.51   0.0059  www
36     91       +      90.6    0.0026  recruiting
37     82       +      90.25   0.0023  publications
38     100      +      86.2    0.002   information
    
```

Figure 7: Sample of early contrast of subcorpora, July 26, 2021

Intercorpora_K WD		Intercorpora_WL				JPN_BROWN_KWD				JPN_BROWN_WL				Preliminary search (words st			
Rank	Keynes	Word	Notes	Rank	Freq	Word	Notes	Rank	Freq	Keynes	Word	Rank	Freq	Word	Notes	Frequency	Word
1	590	2 english		1	2558	of		1	2558	2373.99	of	1	2558	of		3	meeting
4	219	283.8 japan		10	799	application		10	799	725.56	application	10	799	application		21	seminar
8	283	220.03 documents		11	741	university		11	741	671.84	university	11	741	university		3	workshop as a d
11	195	197.08 japanese		12	590	english		12	590	532.23	english	12	590	english		4	faculty prof
14	193	180.71 submission		15	509	teaching		15	509	457.49	teaching	15	509	teaching		2	training part
17	799	163.48 application		16	499	research		16	499	448.27	research	16	499	research		9	participate
22	499	132.81 research		20	420	information		22	352	312.98	institution	22	352	institution		6	team
32	118	93.93 contract		22	352	institution		31	283	249.66	documents	31	283	documents		17	member part
33	89	93.26 publication		24	328	job		35	254	234.18	online	35	258	education		1	office hours
37	82	90.25 publications		31	283	documents		36	258	226.76	education	36	254	online		39	native
45	57	73.8 achievements		35	258	education		37	250	219.43	department	37	250	department		64 (j)	CV
46	56	72.51 nontenured		37	250	department		39	245	214.86	experience	39	245	experience		19(j)	resume
70	41	53.08 overseas		39	245	experience		59	195	169.17	japanese	58	195	japanese		18	essay add
72	62	52.12 certificate		58	195	japanese		64	184	159.13	qualifications	63	184	qualifications		24	summary
73	76	51.4 regulations		63	184	qualifications		66	179	154.58	language	65	179	language		26	statement
74	50	50.75 qualification		65	179	language		78	156	133.64	hours	78	156	hours		4	demo trial

Figure 8: Sample of early pre-scale analysis, August 5, 2021

Figure 5. Requirements section of Japan-based job advertisements.



The highest frequency of keywords is observed in the requirements section of Japan based job advertisements (Fig. 5). One of the requirements necessitates knowledge of two languages, English and Japanese for all categories of advertisements. Such as the requirement for publication “Must include **at least one paper** written in **English**” (NT 2020-08-03-18), considered as “**Research achievement**” (TT 2020-09-10-1). Tenure-track positions are advertised for ‘young’ job seekers seeking applications “from promising **young researchers** within and outside Japan” (TT 2020-08-14-13) and “**female applicants**” (TT 2020-09-10-14)

Figure 9: Sample of discursive motives Anglophone and Japan-based advertisements, August 5, 2021

Figure 1. Discursive motives of Anglophone and Japan-based advertisements

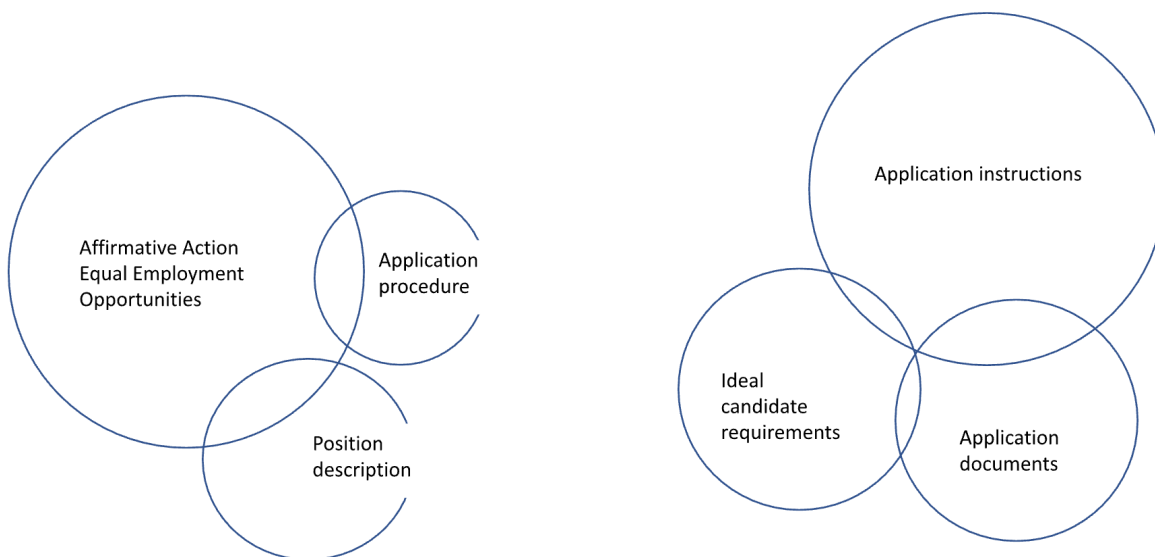
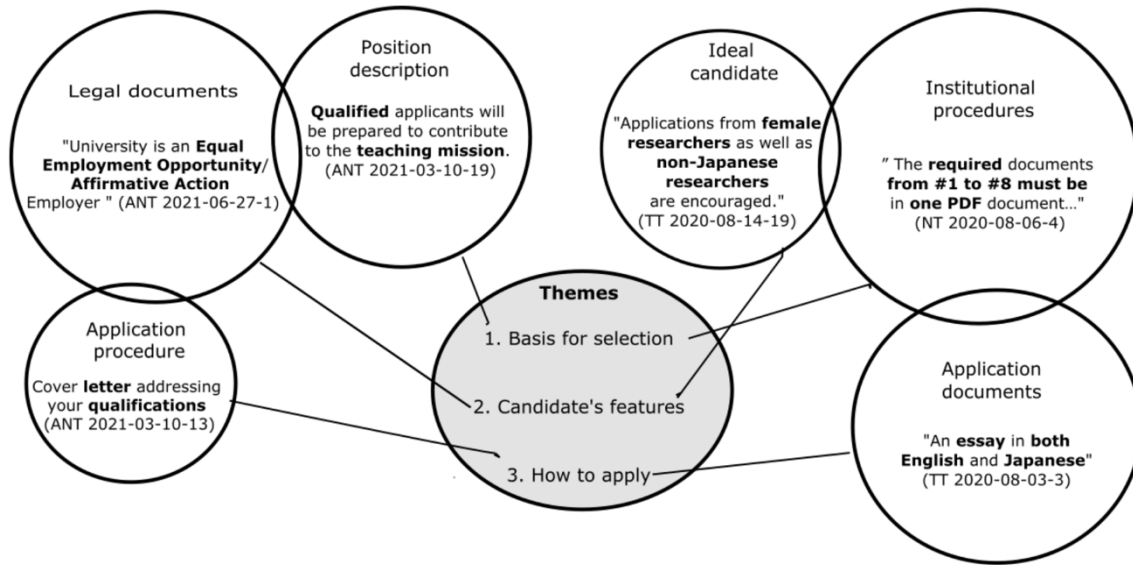


Figure 10: Sample of a preliminary scaling project , August 20, 2021

Figure 1. Discursive themes of Anglophone and Japan-based advertisements



Discursive themes of Anglophone advertisements

The analysis between the two corpora indicate that the Anglophone advertisements primarily focus on the description of non-discriminatory positions in need of candidates with experience and ability to teach. Discursively, institutions prioritize legal conditions for their future employees, which is followed by professional responsibilities, and finally by conditions necessary for institutional membership. These three threads prevail in any advertisement regardless of the length of the contract, such as tenured, non-tenured, part-time and pool positions and the status of the position, such as Professor, lecturer, assistant. These advertisements

Figure 11: Sample of rescaling, February 16, 2022

	US-based Keyword	Frequency	Keyness
institutional identity	faculty	481	248.17
	college	315	227.72
	adjunct	162	207.86
	Subtotal/AVG	958	227.92
applicant identifiers	disability/disabilities	92 + 45	119.7 + 66.73
	sexual/sex	85 + 52	109.62 + 62.6
	diversity/diverse	115 + 91	106.67 + 93.6
	color	55	81.57
	identity	47	69.7
	race	56	68.24
	origin	54	65.42
	veteran/veterans	44 + 41	65.25 + 60.8
	orientation	55	61.84
	religion	4	45.52
	gender	26	36.04
	marital	23	34.1
	minorities	20	29.66
	pregnancy	20	29.66
	ethnic	19	28.17
	underrepresented	17	25.21
	Total/AVG	961	1260.1/16 = 78.76

Figure 12: Sample of scaling and indexing, February 22, 2022

<p style="text-align: center;"><u>Ideal Candidate</u></p> <p>2a. ...qualified candidates without regard to race, color, religion, sex, sexual orientation, gender identity, age, national origin, disability or veteran status (US-2021-03-10-12)</p> <p>2b. Qualified applicants will be prepared to contribute to the teaching mission. (US-2021-03-10-15)</p>	<p>Applica nt identi fiers</p>	<p style="text-align: center;"><u>Ideal Candidate</u></p> <p>2c. Research achievement ... is outstanding (JP-2020-08-05-1)</p> <p>2d. Applications from female researchers as well as non-Japanese researchers are encouraged. (JP-2020-08-14-19)</p>
<p style="text-align: center;"><u>Application</u></p> <p>3a. Cover letter addressing your qualifications (US-2021-03-10-9)</p> <p>3b. a teaching and scholarship statement (US-2021-03-10-15)</p>	<p>Applica tion identi fiers</p>	<p style="text-align: center;"><u>Application</u></p> <p>3c. An essay in both English and Japanese (JP-2020-08-03-3)</p> <p>3d. Please write on the envelope "Application for Thai Teaching Position" in red and submit it by a trackable delivery method (JP-2020-08-14-15)</p> <p>3e. All the documents except Two letters of reference should be submitted via the Institution's Web Application URL below (JP-2020-08-14-7)</p>

Within the US-based advertisements, therefore, *legalese* benchmark scales, that colonize other scales and create scales-within-scales. To illustrate, multiple data similar to the following: "... is an equal opportunity employer that actively values and supports diversity among faculty, staff and students" (US-2021-03-19-5) point that *legalese* characterize the first and the second indexes in US-based advertisements (1a&2a, Table 2). Consequently, the scales that include *legalese* are the most represented as we analyzed above. This