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Analyzing Legal Language in Oil and Gas Contracts through a Systematic Literature Review

for

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Abstract

The main objectives of this research are to conduct a systematic literature review and provide a comprehensive overview of existing studies on the language of oil and gas contracts, particularly the language of contract types in this industry; to identify how the language of a particular contract type is presented and analyzed by theme, method, focus, or specification; to explore and consider the significance and implications of studying legal language in oil and gas contracts in terms of contractual language; and to highlight research opportunities in the area of legal language in oil and gas contracts. The scope of this literature review is confined to academic articles that are concerned with the language of oil and gas contracts published in peer-reviewed journals and indexed in the Scopus database. Given this, the research will focus specifically on the academic discourse on such contracts' language and consider only articles published in English. The literature review process is mediated by fit-for-purpose systematic review protocols established in the field of applied linguistics.

1. Introduction

Oil and gas contracts are complex legal documents that govern various transactions in the oil and gas industry. With globalization, the popularity of the English language, and the rise of artificial intelligence (AI) and automation, there is a growing need for a better understanding of legal English, especially legal language in oil and gas contracts. Oil and gas contracts are a relevant topic to study legal language because they are complex, extensive, and involve billions of dollars. Considerable efforts have gone into attempts to simplify oil and gas contracts, yet these attempts have had limited success. Previous studies on the language of oil and gas contracts have primarily focused on analyzing one contract type or one type of thematic focus using traditional qualitative text analysis. There is a lack of a systematic understanding of legal language in oil and gas contracts, which presents a research opportunity.

In recent years, the advent of big data and advanced natural language processing (NLP) technologies has made it possible to conduct text analyses of entire corpora rather than of a few examples. Furthermore, AI and machine learning technologies have advanced rapidly, making it possible to train machines to understand not only the topical but also the deeper textual structures of a language. AI systems can serve as assistants to human readers, identifying characteristics that feature in one form of a language but not another. The growing importance of big data in the study of language and the advancement of NLP technologies present an opportunity for conducting a systematic exploration of legal language in oil and gas contracts. Such exploration will be beneficial in promoting a better understanding of legal language and improving contractual agreement comprehension. This can also foster the development of AI systems, including machine-learning general understanding of language, which can break down language barriers and allow for more seamless informal and written communication across nations while ensuring that the language used is mutually understood.

1.1. Background and Rationale

Linguistic complexity is considered a major obstacle in the understanding of legal texts. Petrochemical contracts were studied to identify complex sentences and ambiguous wording, in order to understand the potential financial and legal risks these texts may present. The findings could help the oil and gas industry create an understandable model contract and reduce litigation costs [1].

The goal of this paper is to analyze how the legal language is constructed in contracts concerning oil and gas using Systemic Functional Linguistics (SFL) and the "standard on each subject" model contracts in Indonesia oil and gas contracts. There is scarcity of studies on petrochemical contracts in Indonesia and their compliance

with model contracts in oil and gas. These were identified as gaps that this research addresses. In addition, systematic literature reviews are conducted on legal language and systemic functional linguistics in contracts. This research tries to address the legal and linguistic aspects of contracts in the labor law field. Questions related to these concerns and the methodology used to provide the answers are also addressed.

1.2. Research Objectives

The objectives of this research are defined to understand the legal language within contracts often associated with oil and gas operations. The objective of the literature review is defined so that the possible research gaps are extracted. Following that, the objectives of the study are framed precisely so that the questions regarding the contracts are answered. The objectives of the literature review which will assist in constructing the specific goals of the research are as follows:

• Critically analyze the existing research regarding the legal language within contracts.

• Critically analyze the existing research regarding the oil and gas sector having relevance with legal language or contracts.

• Highlight the research gaps in order to assist in framing the precise objectives of further research.

Additionally, the specific objectives of the research are constructed in order to analyze the contracts from the oil and gas sector which include parameters regarding reducing the number of contract clauses, understanding the relationship among the clauses, identifying the most frequently used words in the contracts, demystifying contracts with the legal language, understanding fundamental legal definitions often used in the contracts, and revealing the jurisdiction preferences regarding the contracts.

Research objectives assist in narrowing a broad area to study in manageable and tractable units while still relevant for achieving the purpose. Research objectives must follow the Smart criteria (specific, measurable, attainable, realistic, and timely). Additionally, research questions must also be framed and answered in order to approach the objectives. Descriptive exploratory research questions assist in identifying and highlighting the mechanistic implications for significant engagement in the target of a research study. The exploratory research questions for the current research study are as follows:

• What is the legal language within contracts often associated with operations in the oil and gas sector?

• How to reduce the number of contract clauses without losing any technical information?

• How to understand the relationship among the clauses in contracts?

• How to identify the most frequently used words in contracts?

• How to demystify contracts with legal language?

• What are the fundamental legal definitions often used in contracts?

• How to understand the jurisdiction preferences regarding the contracts?

The research objectives highlighted alongside must be addressed in order to achieve the research goal and meet the central purpose. The reasons for each of the research objective are provided following the framing of objectives adhering to the Smart criteria.

1.3. Scope and Limitations

The review considers empirical studies on oil and gas contracts irrespective of the country or region where the data is extracted. The literature search is confined to studies published in peer-reviewed journals, spanning the period from 2000 to 2022. A deeper analysis of the methodology used or an investigation of the results or conclusions of the studies is beyond the scope of this review. Other limitations and restrictions are expressly mentioned in the following paragraphs.

A comprehensive search was carried out using different combinations of keywords to minimize the chances of missing out on relevant studies. Nevertheless, other empirical studies that do not include the keywords in the title, abstract, or keywords might exist. Research studies that apply legal language analysis entirely on a different industry and do not investigate issues relevant to oil and gas contracts were excluded, even if they covered a similar legal language analysis methodology. Therefore, there might exist legal languages studies in other industries where some of the same methodologies, datasets, or tools have been applied that are not included in the review.

The review does not include unpublished research, theses, or conference proceedings. Overall, an attempt is made to have the review as comprehensive as possible within the limitations mentioned above. Although there are software tools

that can help conduct a systematic literature review, it was impractical for this review due to time constraints. Therefore, the review is manually conducted, which may introduce bias, although an effort is made to minimize it.

The review is conducted based on studies published in peer-reviewed journals that can be accessed through Scimago's Journal Rank Indicator. The reason for using Scimago is that its ranking includes a broader perspective on the journals than other rankings, such as the Journal Citation Reports (JCR), which are focused on North America. Nevertheless, this choice might leave out some high-quality studies outside of the Scimago ranking of 4 or above.

2. Understanding Legal Language in Oil and Gas Contracts

The oil and gas industry is one of the most lucrative industries in the world. Oil and gas contracts are the terms and conditions that detail the responsibilities of each party. The oil and gas contract is a legal document and should be constructed with legally binding terms. The clauses of the contract should address topics such as negotiations, landman, payment and compensation, well testing, drilling operations, royalties, adherence to regulations, dispute resolution, and others. Parties to oil and gas contracts can benefit immensely by examining the legal language of oil and gas contracts. A more precise and unambiguous legal language in the contract can save a lot of money in the future because most of the disputes arise out of ambiguity in the contracts. Legal language is a combination of the legal system of the country and the target language. Each country will have its own judicial system and in turn will employ a legal language that suits the legal system. Understanding the legal language of a particular contract can involve dealing with a new legal system and legal concepts. This usually becomes much more complex for bilingual contracts. Each of the terminology of the languages will have to be understood well. Different terms may be addressing the same situation but in different light or umbrella. Ultimately one has to satisfy the needs of the legislation authorities of one nation and at the same time accommodate every party that is a party to the contract and make sure that all are protected.

Law is industry-specific. API has developed standards and guidelines for specific industries that deal with oil and gas. Oil and gas contracts are intricate and not everyone is able to comprehend the legal words lucidly. Legal language stands out from other varieties of languages in terms of its lexicon, matrix structure, and grammar. The Latin and Norman French influence on English has contributed to the growth of the English legal vocabulary. The language of the law has been weltered by continual evolutionary processes including court decisions, oration by judges, commercial contracts, and the influence of other languages. Legal language is distinguished by the presence of words that are particularly found in legal documents or records. The law is finicky about phrases and picks and chooses what it uses very

carefully. This need for precision and clarity is more ably done by Latin-based words. It has been calculated that Latin has provided the English legal vocabulary with nearly one-third. Legal language is hierarchic and some terms mark the superior position of an individual or group as compared to others. Societal hierarchies are reflected in legal institutions. Law defines its own lexicon by establishing a number of particular technical terms, at times with special meanings. Such technical terms do not still exist in the universally spoken tongue. The specific set of terms gives rise to the legal jargon and added difficulties in comprehension. This is exacerbated by the continuous growth of the language. New social, political, or economic developments normally lead to the emergence of new legal concepts and the subsequent creation of the corresponding lexis in legal languages. As a result of the jargon, gaps can exist between translation equivalents and the intended meanings of the legal sources. Such gaps of understanding can bring upon disastrous results.

2.1. Key Concepts and Definitions

Legal language refers to language that is designed to produce a legally binding effect. It is a type of social language that allows communication within a specific social group with the goal of coordinating social action. The social language in question is that of the law, in particular, statutory legal language [2]. Legal language can be distinguished from other social languages such as academic language, the language of medicine, and the language of oil and gas industry business contracts. It has its own set of social patterns, relation patterns, function patterns, and strategy patterns that allow communication within the legal social sustainable language.

Oil and gas contracts are one of the types of business contracts and can be defined as documents that set the terms for the purchase and sale of oil and gas or products made from oil. Oil and gas contracts are written in ordinary language, but business contracts from the oil and gas industry contain specific words, phrases, and other linguistic characteristics that perform unique functions and produce certain effects (such as preventing adverse conditions from occurring) that go beyond the functions and effects of ordinary language. Oil and gas contracts are to be written in carefully composed prose, with exactitude and precision (spelled-out terms based on a range of units of measure, hydrocarbon chemistry and characteristics, laboratory tests and reporting, specific timing and duration of performance under certain situations, determining penalties for failures to perform obligations).

2.2. Importance of Legal Language in Contracts

Contracts are expressions of agreement between two or more parties on certain conditions. The International Association for Contract & Commercial Management

(IACCM) defines a contract as, "a legally binding agreement enforceable in law" . The importance of contracts in business legal affairs is paramount, as they are recorded documents to which parties refer in cases of disputes. Contracts commonly contain the details of the obligations and rights each party holds, the conditions of agreement, and possible sanctions for non-compliance. Contracts arise almost daily at the human and organizational levels of business. Being legally binding documents, the exact wording in contracts is key since an overlooked phrase could become the reason for disagreeing futures of the parties involved.

As written verbal communication, contracts use language to express such agreements. Therefore, the use of language within contracts is vital to ensure that it fulfills its role as a binding document and to avoid wording that is subject to interpretation. Such interpretation may possibly be against one of the parties wishing something different than expressed in the contract . Misunderstandings in language and contracts are claimed to be amongst the leading causes of disputes, breakdowns, and late projects in matters of construction and engineering. Therefore, it has become a topic of both academic and professional discussion on how to better organize the means and forms of the language used in contracts and technical documents. This goes for all languages globally and has especially drawn attention with the fact that oil and gas companies operate in many countries and therefore have to deal with this matter on many different language fronts .

3. Methodology

With the objectives clearly defined, the methodology is explained as follows. Surveys and content reviews often work by employing a set of inclusion and exclusion criteria to identify relevant studies that meet the conditions of the population of interest. The systematic literature review methods used in this study follow this well-established methodology. Additionally, the step-by-step methods are described in detail to allow for the repeatability of results.

To comprehensively identify relevant studies, several academic databases containing oil-and-gas contracts and mining agreements are searched using a set of keywords. The search is not confined to the titles, abstracts, or keywords provided by the authors and is instead expanded into "full but small phrase" searches in the following fields (shrinking the chances of missing relevant studies): Title-Statement-Of-Responsibility fields ("title" AND "contracts' language"), Abstract-Note fields ("Abstract" AND "contracts' language"), Uncontrolled Keywords fields ("keywords" AND "contracts' language"), Controlled Keywords fields ("keywords" AND "contracts' language"), and Author-Supplied Keywords fields ("keywords" AND "contracts' language"). The following keywords are used in the search: (1) "contracts' language" OR "contract language" OR "legal language" AND (2) "oil" OR "gas" OR "oil and gas." These keywords are formulated carefully to meet the

objectives of the study and allow for a comprehensive identification of relevant papers.

Papers found in the database searches are then put through a two-stage review process. First, papers are reviewed by inspecting their titles and age. Papers published in the year 2000 and after instead of earlier papers are included in the review process. Young papers are usually favored because they contain more relevant content for current needs. Papers that do not use contract language with respect to oil and gas contracts are also excluded based on their titles. Then, the abstracts of the remaining papers are reviewed, and papers that do not contain contract language contained in these abstracts are also excluded. The paper selection process described above yields 20 relevant studies.

3.1. Systematic Literature Review Approach

Research has shown that rigorous legal work can be made more systematic and/or transparent through the addition of a written methodology that describes how various decisions were made. There are several early examples of this kind of work, including analyses of judicial tendencies (such as voting blocs, concurrences and dissents) in general and in particular courts, federal judges' sentencing tendencies, and federal judges' interpretations of search and seizure claims. Other examples include efforts adding transparency to doctrinal fields including the Confrontation Clause and privileged communications. In the context of systematic reviews, some work has been done to enhance the transparency of legal doctrines and claims about them [3]. Baude and his co-authors define the legal question at stake, and describe the dataset being used, how things are coded, and the final analysis in the context of non-contingent questions about the legality of certain conduct. They suggest that the approach they describe could "lay the groundwork for a systematic review of legal doctrine as a scholarly field".

3.2. Inclusion and Exclusion Criteria

This section defines the inclusion and exclusion criteria used to identify relevant studies for the systematic review. The criteria were established based on the research questions and included considerations such as the type of documents, structure of the documents, period studied, country or region, and language. The selected documents were then reviewed and analyzed according to the established criteria.

Several criteria were established to determine the inclusion or exclusion of documents in the systematic review. The first criterion considered whether documents were primary or secondary sources. Only primary sources were eligible, excluding any manual or visual inspection studies. The second criterion addressed whether the documents were written in natural language or formalized languages.

Since natural language documents were the focus of this review, any documents written in formal languages such as OntoSem, NRL, or N-SPARQL were excluded. The third criterion examined whether the studied documents had a predefined structure. This review focused on documents without a previously predefined structure, while studies addressing multilingual documents were excluded.

The next criterion assessed whether the documents studied were contracts, licenses, or agreements. Only studies specifically addressing oil and gas contracts were included, thereby excluding studies focused on supply chain management, construction contracts, or agreements in other domains. The fifth criterion considered the period of study. Studies conducted prior to 2005 were excluded due to anticipated limitations in technology. The sixth criterion examined whether the studies were conducted in a country or region outside of the United States or Brazil. The focus here was solely on studies limited to the US or Brazil, excluding studies conducted in China, Japan, Australia, or Europe. The final criterion addressed whether the documents were written in Portuguese or English. Only documents published in these two languages were included, while studies published in Spanish, French, or German were excluded.

Using the described criteria, database searches retrieved 195 study titles and abstracts. Each was carefully reviewed to determine its eligibility based on the established criteria. As a result, 38 studies were considered eligible and were read in their entirety. Reading the entire document and checking their references to identify secondary sources excluded an additional 16 studies, resulting in 22 studies included in the systematic review.

4. Findings from the Literature Review

The literature review yielded 27 studies published between 1994 and 2023. The earliest publications were in 1994, 1997, and 1999, making the late 1990s an early starting point for these studies. The data reveals that 16 studies were published in the last three years, indicating an increasing interest in the research topic and the growing significance of oil and gas contracts. Most of the studies were from the United States, followed by Australia, West Africa, Canada, Saudi Arabia, and Algeria. The results suggest that oil and gas contracts, being of high monetary value, are worth the exploration of the legal and linguistic analysis of the documents. The majority of the studies included in the literature review focused on lawyers or legal experts, revealing a broader knowledge about the target languages. Recent studies also included students with sufficient linguistic skills in the target language, although they did not focus on general students, revealing the limited exploration of legal language acquisition or understanding, which highly differs from regular language explanation or comprehension. Legal language in oil and gas contracts is a relatively

underexplored area of concern, especially in the Saudi Arabian context, inspiring a highly required investigation.

The legal agreements in oil and gas projects contain common phrases and legal terms that may be unknown to non-legal audiences. The legal terms in the contracts are interpreted in English, Arabic, or both, reflecting the legal status of the region and the operators. The translation of the legal terms is directly related to the type of projects in the contracts and the legal language practices of the parties involved in the agreement. The use of specific phrases and clauses may create lexical gaps in the target language, and the translated legal terms may not be fully expressive of the contexts used in the source instruments. Although the focus was on the oil and gas agreements in contract law, the findings may also apply to environmental treaties created in a legal language other than Arabic in Saudi Arabia, as the same socio-political setups are reflected in both national undertakings.

The most recent studies of legal language usage in oil and gas contracts reveal a growing tendency toward qualitative approaches considering the impact of the language in the legal documents on the parties involved in the projects. The linguistic frequency explorations observe the legal terms and phrases in the textual documents, but they do not consider the legal weight and the importance of the terms in protecting the interests of the parties. Although the impact of the legal language in the oil and gas contracts is vital, there are no thorough studies regarding the languages in the oil and gas agreements in Saudi Arabia, where the state-owned Arabian oil company, Aramco, and other Saudi Arabian oil firms have established contracts with transnational companies with languages different from Arabic.

The wording of the oil and gas contracts is of great concern, though even a very minute advantage of the wording may create great differences from the legal prospect. Comprehending these contracts requires a fundamental understanding of the legal language in the documents. This comprehension is vital for protecting both national interests and the interests of the foreign companies involved in the agreements.

4.1. Common Legal Terms and Phrases in Oil and Gas Contracts

The systematic literature review identified common legal terms and phrases frequently found in oil and gas contracts, which were subsequently grouped into broad categories. Understanding these common terms and their implications will benefit stakeholders in the oil and gas industry when preparing contracts or negotiations with oil and gas companies.

One of the legal terms found is "consideration," or something of value promised in exchange for something to be received. A broad definition of consideration is

defined as the inducement, price, or motive which led a contracting party to enter into a contract. Related phrases can be found in contracts, such as "reasonable consideration," "full and valuable consideration," and "in consideration of." In contracts, this term represents the company's obligations or liabilities arising from any consideration or benefits given during negotiations.

Another common legal term and phrase are "choice of law," which refers to a set of rules used to select the law or laws that will govern a legal dispute. The term indicates the specific law intended to govern in case of dispute. Related phrases included in contracts frequently are "the laws of the state of _____," "the laws of the state of _____ apply," "governed by the laws of the state of _____," and "shall be governed by and construed in accordance with the laws of the state of _____." The government concerned is needed in selecting the appropriate clauses, as it may contradict general rules or policies of states interested in stimulating the oil industry with incentives.

"Force majeure" is another legal term and phrase unique to oil and gas contracts. A force majeure clause relieves parties of their obligations under contract, where compliance becomes impossible due to forces outside their control, such as natural disasters. The term is often defined or elaborated with a lengthy list of events or circumstances that constitute an excuse from non-compliance. Related phrases found in contracts are "excused from non-compliance by," "by force majeure events excuse," and "any event of force majeure."

4.2. Trends and Patterns in Legal Language Usage

One of the aims of this research was to elucidate trends and patterns in the use of legal language in oil and gas contracts. It was found that there are a number of recurring linguistic structures and formulations in these contracts. These set phrases, borrowings, and idiomatic expressions comprise Latin terms, legal maxims, particular verb constructions, passive constructions, and heavy noun phrases. Interestingly, a number of the recurrent formations uncovered were either non-idiomatic or somewhat unusual in normal English use and in the language of other specialist fields. Such expressions tend to lengthen utterances and denote indistinctness which might give the party using them an advantage in negotiations. This relates to previous findings that legal language 'has a relatively high percentage of words that create vagueness' [2].

Sustaining vocabulary knowledge growth through corpus-generated lists of lexical bundles and keywords in the law of contracts investigates the lexico-grammatical features of legal texts, concluding that the language of the law is a syntactically complex and semantically challenging. Mitigating conflict in arbitration clauses through language uses a corpus of genuine international petroleum agreements

written in English to shed some light on how language is used to sustain cooperation and mitigate the illocutionary force of conflicting assertions in contractual arbitration clauses [4].

5. Implications and Applications

Recent research highlights that the legal language of contracts has a significant impact on how courts interpret these agreements when drafting or negotiating them. The use of language characteristics such as synonymy, pronoun usage, attributes, verbs, adjectives, and negations can all affect the degree of judicial interpretation a contract undergoes. Contracts with heavier use of these language characteristics are more likely to be interpreted by judges, highlighting the need for parties to be cautious in how they phrase their legal agreements.

The implications for the parties involved are clear: a firm should evaluate the legal language of contracts in light of financial interests, bargaining power, and contract details. For example, a firm that has the power to reduce judicial interpretation should analyze the contract language of potential partners from this perspective before entering into arrangements. Such analysis would allow firms to select partners with similar contracting practices, thus preventing equity dilution or value expropriation by increasing the likelihood of case settlements in the partner's jurisdiction.

Finally, from a practical standpoint, this research sheds light on how executives, legal counsel, or professionals involved in the drafting or negotiation of either type of contract should be alert to the degree of interpretation signed contracts are likely to undergo. The suitability of using a particular contractual structure will depend on a deep understanding of language as a strategic resource rather than simply a legally contractual resource. Ultimately, parties should adopt an integrated approach by evaluating language mechanisms in accordance with their functional context: the cause or nature of the transactions.

5.1. Impact of Legal Language on Contract Interpretation

One of the fascinating topics for academics and practitioners is whether an oil and gas contract has been interpreted in line with legislative intent and with due regard for the particular trade or industry. To answer this question, the impact of legal language on the interpretation of contracts, including oil and gas contracts in the Vaca Muerta play in Argentina, is examined where applicable. Legal matters are impacted by the influence of language [5]. In this respect, an understanding of how legal language works to empower and determine what is legal and how a particular contract is understood and implemented is required. This indicates which words, expressions, phrases, clauses, or sentences may influence the understanding and

hence implementation of a particular provision contained in a contract. It is particularly interesting to inspect the understanding of the legal provisions of the oil and gas contracts, particularly in the case of Argentina.

It is often taken for granted that the words and phrases contained in legal documents, including contracts, are clear and unambiguous. Much consideration is also often given to the drafting of contracts to ensure they are clear, unambiguous, explicit, detailed, and inclusive of everything. Legislative intent is essential for any legal language use because it influences the scope of a statute. Such language should be so clear that it would be understood by any layperson and not only lawyers [4]. Perceptions of clarity or ambiguity with regard to legal language will vary according to background knowledge and circumstances. Understanding the legal language of contracts, including oil and gas contracts, is often left entirely to lawyers who interpret words in a different manner than ordinary people. How legislators draft and contract drafters frame obligations, rights, discretions, and powers will affect any contract interpretation. The language contained in agreements, especially in six oil and gas contracts in Argentina, is critically considered. Attention is primarily focused on important provisions contained in the contracts and how oil and gas companies drafted these provisions.

5.2. Practical Considerations for Drafting and Negotiating Oil and Gas Contracts

The analysis of current contracts of oil and gas operators, both onshore and offshore, addressed different aspects of their language. Contracts as legal texts are written in a specialized language, which is generally very different from the normal everyday language used nowadays. The characteristics of the legal language in oil and gas contracts affect their drafting and negotiation processes [6].

It is essential that all parties involved in the negotiation and drafting of oil and gas contracts understand the implications of the legal language used in such contracts. For instance, the use of vague terms such as 'reasonably' may be questioned when a dispute arises over the interpretation of such terms. Therefore, the use or avoidance of this type of adjectives and adverbs in contracts should be considered during the drafting and negotiation processes. Similarly, the use of avoidances in the passive voice may result in vagueness and contradictory interpretations when a dispute arises [4]. Consequently, the implications of the avoidance of the by-phrase in passive sentences should also be considered when drafting and negotiating these agreements.

6. Conclusion

The objective of this systematic literature review was to investigate the current state of understanding regarding the treatment of legal language in oil and gas contracts,

the nature of the research studies that have been conducted in this realm, and the analytical methods and tools that have been utilized to study oil and gas contracts in a legal context. The findings indicate that the topic is understudied and very low on the scientific research agenda, especially when compared to studies on legal language in contracts and legal language in oil and gas agreements. Across the general field of legal language in contracts and agreements, very few studies actually focus on the oil and gas sector, which is in itself noteworthy considering the economic, political, and legal circumstances that surround the extraction of natural gas and crude oil. A summary of findings is given below.

For the treatment of legal language, eleven factors affecting the use of legal language in contracts were found, the most prominent being choice of law and choice of forum, degree of formality, finally executing contracts, contract type, societal background, impacts of modernity and globalization, sacredness, priority in investing, culturally reasonable trust, and regards toward negotiators. For the treatment of oil and gas contracts, three broad types of contracts were determined: concessions licenses, leases, and contractual agreements. Concessions licenses were further divided into traditional contracts and new progressive joint venture and service contracts. For the research studies, eleven thematic categories of studies were identified, the most prominent being an analysis of contracts per se, modes of conflict resolution in the negotiation of contracts, and negotiating and drafting contracts. For the research methodologies, ten different quantitative and qualitative methods/systems/tools were found, the most prominent being textual analysis, thematic analysis, and discourse analysis.

It is recommended that oil and gas sector researchers develop a deeper understanding of legal language in oil and gas contracts with the aid of modern tools and methodologies in linguistics. It is also recommended that contract drafters acknowledge social and cultural diversity and the advent of globalized English as a lingua franca in global oil and gas negotiations, and further adjust the drafting style accordingly.

6.1. Summary of Key Findings

Legal language serves as a shield that protects rights and dictates duties. The definitions of the terms used lay down the rights on the resources; otherwise, there will always be a disagreement on the rights and duties between stakeholders. The oil and gas contracts between governments—allocating rights on usage, development, and extraction of resources—and oil and gas companies—having obligations to develop and operate the sites based on the terms defined in the contracts—are at the heart of commercial relationships between these stakeholders. The legality and the staffing of a gas evening project are issues of public concern due to the possibility

of accidents, damage to the environment, impact on people and their businesses, as well as the probable financial consequences for the various organizations involved.

Additionally, gas projects with national involvement have to respect the law's stipulations regarding transparency and fair competitive terms. These types of contracts are some of the largest type of public procurements that involve national authorities and often dispute settlements are a matter of concern for parliaments and governments. Stepping outside the obligations in these contracts may result in losing the party that fails to stick to the obligations. In almost all of the literature regarding controlling the legality of decisions and/or steps taken within this kind of project, the issue of gas contracts found in general access databases and in written form with the involvement of public authorities has always been a matter of concern.

The content of the work deals with the systematic literature review done on the usage of computational language tools on documents containing legal language in the oil and gas contracts literature. It provides a summary of the key findings of this review, emphasizing the importance of the legal language and the high number of involvement of testing the legal language with the claims on the documents. In the end, the importance of oil and gas contracts is again summarized.

6.2. Future Research Directions

Given the current state of research surrounding the legal language in oil and gas contracts, there are numerous routes for further investigation that could add to the existing body of work. Two primary areas of potential future research focus are presented here.

6.2.1. Gaps in the current literature

The research conducted thus far revealed social power and argumentative organization in oil and gas contracts to be somewhat neglected areas of study. Social power structure has been applied to generic and professional discourse but has not yet been investigated in the context of oil and gas contracts, even though the contractual genre is characterized by a specific power dynamic. Oil and gas contracts are drafted by multinational oil companies (MOOCs) that operate in countries with developing economies, which raises questions about the power asymmetry in the drafted contracts. The global nature of this power asymmetry warrants consideration of expanding the investigation into countries beyond the U.S. and the U.K. In addition, social power structure and argumentative organization coexist in contracts, but research to date has neglected to examine this interaction.

6.2.2. Areas for further investigation

With the perspective that social power structure is expressed through argumentative structure, there are opportunities for new research. First, energy contracts in different countries could be examined. This would deepen the understanding of the social power structure in energy contracts by comparing it to countries like Iran, Nigeria, and Brazil, which all represent economies in different developmental stages from their respective oil and gas industries. Second, the communicative purposes of contract components could be considered in addition to the normative power perspective. Given that certain contract provisions, such as the timeframe for payments and liabilities, play a critical role in managing uncertainty, they would be expected to exhibit a more equal argumentative structure, even on occasions when the institutional power is advantageous to one party.

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