Applied linguistics theory and application

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Abstract---Applied linguistics is an interdisciplinary field that identifies, investigates, and offers solutions to language-related real-life problems. Some of the academic fields related to applied linguistics are education, psychology, communication research, anthropology, and sociology. Theoretical Linguistics focuses on the examination of the structure of English in all its manifestations (phonetics, phonology, morphology, syntax, grammar at large). Other branches of Applied linguistics offered are, for instance, the acquisition of a second language and sociolinguistics. applied linguistics is a branch of linguistics where the primary concern is the application of linguistic theories, methods and findings to the elucidation of language problems that have arisen in other areas of experience. Today the governing board of AILA describes applied linguistics 'as a means to help solve specific problems in society. Applied linguistics focuses on the numerous and complex areas in society in which language plays a role.'

Keywords---applied linguistics, morphology, phonetics, phonology, syntax.

Introduction

Van Lier 2010), it is generally accepted that the American has one of the oldest language traditions in the world, with a number of written texts dating back some 3000 years. Issues related to language have been at the heart of many of the key philosophical debates in American intellectual history (Hansen, 1983). In addition, America has had a long history of classical lexicography dating from the work of Hsu˘ Shen in the 1ˢᵗ century A.D. to the present (Wang & Asher, 1994). When the first Catholic missionaries under Matteo Ricci began to visit America from the late 16ᵗʰ century on, they were immediately impressed by the intellectual culture they encountered.

Catenaccio, Cotter, De Smedt, Garzone, Jacobs, Macgilchrist & Van Praet (2011), the first pioneers of modern dialectology were arguably the Protestant missionaries who arrived from the early 19ᵗʰ century on. They were fired by the desire to map the dialects of America in the service of their churches and were keenly concerned with learning and codifying the vernacular languages of their constituencies, including the Canton dialect, Hokkien, and the Amoy (Xiamen) dialect (Bolton & Luke, 2005). A number of the Protestant missionaries were also convinced of the need for language reform, and their proposals included the vernacularization of the American writing system and the use of various romanized writing systems alongside or instead of American characters.

To understand the role of applied linguistics in foreign language education, it is necessary to also consider the history of American's international relations and foreign policy. In broad terms, one can identify six hashes of foreign language education since 1949 (Lam, 2002, 2005). Russian lessons were the first broadcast in Beijing in 1949, and in the early 1950s, in line with its political orientation, America promoted Russian in education. In 1950, Russian departments were established in 19 higher-education colleges, and Russian training courses were organized in several party, government, and military sections. By the following year, these courses had been set up in at least 34 universities and colleges.

Hüttner, Smit & Mehlmauer-Larcher (2009), the emphasis on Russian continued until 1956–1957 when America's foreign policy moved away from the Soviet Union. From that point onward, English replaced Russian as the most important foreign language in America's schools. In 1957, a draft syllabus for teaching English in junior secondary school was distributed, and in 1960, the Beijing Foreign Language School piloted the teaching of English from Primary 3. In 1961, the syllabus for English majors at the university level was designed, and in 1962, the first English syllabus for non-English majors in science and technology was published.

Duff & Li (2004), the promotion of English at this time might have continued unabated but for the Cultural Revolution, which broke out in 1966 and swept throughout the country. During this period, all academic learning (including foreign language learning) was condemned, although Zhou Enlai, America's Premier from 1949 to 1976, managed to deploy a small number of students to jobs requiring foreign languages. In 1971, in the midst of the Cultural Revolution, America was recognized as a member of the United Nations, and in 1972 Richard Nixon, then President of the United States of America, visited America, establishing a new era of United States–America diplomacy. The biggest breakthrough in foreign language teaching, however, came after the Cultural Revolution, when Deng Xiaoping announced his policy of the Four Modernizations in 1978. In the same year, plans to teach foreign languages from primary school were announced, and the recruitment of foreign teachers to America resumed. Throughout the 1980s, much work was done in drafting or revising syllabi, developing materials and tests, and training teachers at various educational levels, including universities.

Method

It is generally agreed that language is formulaic in nature, whether it is spoken or written (Ellis, 1996, 2008; Granger & Meunier, 2008; Pawley & Syder, 1983; Sinclair, 1991, 2004; Wray, 2002). Studies show that formulaic language plays a crucial role in academic writing, as it contributes to 21–52.3% of written discourse (Biber, Johansson, Leech, Conrad, & Finegan, 1999; Erman & Warren, 2000). Specifically, it has been observed that advanced and fluent writing is characterized by appropriate and frequent use of formulaic language, which also helps language users maintain an identity in a disciplinary community; conversely, the absence of such formulaic language may indicate writers' experience or lack of expertise in an academic context (Bamberg, 1983; McCully, 1985; Wray, 2002).

Discussion

There is a growing awareness that the unnatural, unidiomatic nature of papers written by L2 students is due to a lack or misuse of formulaic language (Granger, 1998; Howarth, 1998; Meunier & Granger, 2008). In the field of EAP and L2 writing, researchers have shown a great interest in understanding how the formulaic language is used by L2 writers and native English speakers speaker differs. For example, Chen & Baker (2010) conducted both structural and functional analysis of lexical bundles in academic writing by American EFL university students, native English-speaking university students and native expert writers. They found that native English-speaking expert writers used the widest range of

lexical bundles, whereas the American students had the smallest and also overused certain lexical bundles. Both groups of student writers underused some lexical bundles compared to expert writers. Hyland (2008a) composed a corpus from published articles in four disciplines (electrical engineering, business studies, applied linguistics, and microbiology) and identified the most frequent four-word clusters.

These were then compared to the four-word clusters identified in Ph.D. dissertations and Master's theses from the same four disciplines written by American-speaking university students in Hong Kong. Interestingly, the number and range of four-word clusters employed by the graduate students exceeded those used by the published writers. Using the same data as in Hyland (2008a), Hyland (2008b) also found that Master students used more clusters than published writers, probably due to the pedagogic genre of these, where students were expected to display their research skills and mastery of disciplinary knowledge. In addition, Master students, doctoral students and published writers employed different clusters, with less than half of the 50 most common clusters overlapping among the three groups (Wilson, 2000).

The aforementioned studies compare lexical bundles extracted from academic journal articles to texts written by L2 writers to examine whether the two groups use the same or different bundles. Approaching the issue of the use of lexical bundles from a different perspective, however, an important question remains relatively unexplored, namely whether the use of lexical bundles by novice L1 or L2 writers more approximates target constructions in an academic field as they become more experienced.

One of the few relevant studies was conducted in an L1 academic setting by Cortes (2004). She first identified four-word lexical bundles in published academic articles in the discipline of history and biology, and then examined the use of these bundles in the writings of English-speaking university students at three levels of study (undergraduate lower division, undergraduate upper-division and graduate-level) in each discipline. Students at higher levels of study in biology were found to use more target bundles, especially in the use of text organizers and stance bundles, whereas students at different levels of study in history did not show much difference. Generally, student writers from both disciplines rarely used the target bundles and, even if they used them, their functions did not match those employed in published articles. Little research, so far, has been conducted in the usage of target lexical bundles by L2 academic writers.

Analytical paradigms

Flowerdew (1998), the approach to news production presented here is not based on a common methodology, we believe it is possible to extract a shared ontological perspective. We see the individual as immersed within a larger network of relationships; we stress the importance of process and participation, and at all times pay careful attention to the fluidity, complexity, and intricacies involved in jointly negotiating to mean. In that sense, the research called for in this position paper is conducted from the epistemological position of social constructionism: its central idea is that there is no inherent or genetic knowledgebase or uncontested reality; people actively construct knowledge and incorporate new information into what they already know, building on their prior experiences, combining it with reflection and social interaction, and creating different understandings of ideas and concepts.

Further, although we are open to a diverse array of approaches to the linguistic study of news production, this diversity is underpinned by a shared view that "language and the

social world are mutually shaping, and that close analysis of situated language use can provide both fundamental and distinctive insights into the mechanisms and dynamics of social and cultural production in everyday activity" (Rampton *et al.,* 2004). We approach news discourse not as text, but as text-in-co(n)text (Silverstein & Urban, 1996), viewing it not as a static reflection, affirmation, or re-affirmation of context, but as a process, or a series of processes of entextualization and contextualization. We strive to avoid a binary opposition between text and context since we feel it does not adequately explain the complexities inherent in the co-construction of discourse, let alone those of human experience in practice. In this respect, we share the theoretical perspectives of linguistic anthropology, interactional sociolinguistics, cultural semiotics, and context-oriented and Gricean pragmatics. We also draw on ethnography of communication traditions (Hymes, 1996; Gumperz & Hymes, 1972) which aim to account for the ways in which language shapes social life as well as the patterns of communication and cultural and communicative values that constitute membership in a community or group (Heath, 1983; Briggs & Hallin, 2007).

Our approach clearly approximates the critical realism of much recent work in CDA, its recognition of a dialectical relationship between text and context, and its assumption that "the discursive event is shaped by situations, institutions and (other) social structures, but it also shapes them" (Fairclough & Wodak, 1997: Weiss & Wodak, 2003; Wodak & Meyer, 2001). Regarding journalism, in particular, CDA recognizes that 'the news' is "the outcome of specific professional practices and techniques, which could be and can be quite different with quite different results" (Fairclough, 1995), appreciating that news discourse occurs in social settings (of production and consumption) and the construction of discourse "relates systematically and predictably to [these] contextual circumstances" (Fowler, 1991). However, in the rush to analyze the "relationships between concrete language use and the wider social-cultural structures" (Titscher *et al.,* 2000), CDA has tended to skip over the complex, and often messy, work that goes on in any discursive event (Barkho, 2008b; Berglez, 2006; Richardson, 2007; Richardson & Barkho, 2009).

At this point, the relevance and value of ethnography come into the picture. We suggest that a fuller, more insightful examination of news discourse can be achieved through adopting "an ethnographic eye for the real historical actors, their interests, their allegiances, their practices, and where they come from, in relation to the discourses they produce" (Blommaert, 1999). In contrast with traditional highly text-dependent approaches to media discourse, ethnography assigns a much more active role to the language user and communicative participant (Hymes, 1972). Ethnographers consider an exclusive (Gumperz, 1999) focus on the text to be problematic because it leaves out of the communicative process the active work done by participants as well as the cultural context that underpins the action. Rather than an "agency implied in the text", ethnography brings speech-community members into focus as real people with actual identities who actively construct social meaning.

Through various fieldwork efforts – including observation, participation, semi-structured interviews, informal conversations, collection of contextualizing textual data, etc. – "the researcher learns to interpret and follow the rules that govern the practices of the field and to understand (and make explicit) its structures of meaning" (Oberhuber & Krzyżanowski, 2008). Combining ethnographic interpretation with fine-grained or text-dependent analyses of meaning draws the participants into the investigation and helps researchers gain analytic leverage to arrive at a more nuanced understanding of institutionalized discourse processes. In that sense, we consider our approach to be part of a larger plea for accepting a participant-oriented approach in media discourse analysis, building on seminal work by Verschueren (1985) and Bell (1991), and recent ethnographic work by Briggs & Hallin (2007), Perrin & EhrensbergerDow (2008) & Cotter (2010).

Viewing journalists, sub-editors, editors, readers, etc. as active and dynamic participants in the research process implies accepting the issues that go along with fieldwork, including the resistance and complexities inherent in the research consultant (or observer-observed) relationship. Attendant on anthropological methodologies is the recognition that the observer, the ethnographer's self, is a consequential presence and thus an appropriate object of study (Emerson *et al.,* 1995). Or, put in Hymes's words: "there is no way to avoid that the ethnographer is a factor in the inquiry" (1996). Discussions along these lines are essential to ethical academic practice and de rigueur in human subjects applications. Given the distancing filters that some research methodologies provide, our position requires explicit articulation: a researcher is not merely an instrument of data collection, but must recognize his or her active role in the interpretation of a community's actions. Similarly, we treat journalists not only as producers of text, but also as interpreters, whose standpoints we are eager to know, opening up our research perspective away from the empirically observable facts of language visible in the text, trying to retrieve at least acknowledged intentions and interpretations (by means of, for instance, observation, interviews, and consultations).

Contributing between theory and practice

In order to fully address the challenges of developing ESP teacher education that is theory-informed and yet relevant to teaching practice, we adopt Widdowson (2003) model of mediation. Here, mediation is offered by applied linguistics between relevant linguistic and pedagogic theories and classroom realities. In this model, theory and practice are considered interdependent and the task of applied linguistics is to formulate principles that are of potential relevance for language teaching. As illustrated in Figure 1, these principles are critically appraised, adapted and operationalized. Ideally, the relevance and application of principles are evaluated and the results of this evaluation process are taken up by applied linguistics.
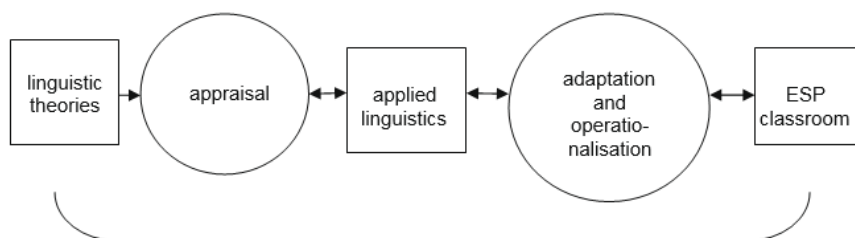

Figure 1. Contributing to the mediation process

In line with this model, language teachers and their educators are not mere implementers of the theoretical constructs of applied linguistics but they take over responsibility as active mediators, helping to create the nexus between theory and language teaching practice. The role and function of applied linguistics in this model is a supportive one and requires close contact and exchange between theorists and practitioners (Widdowson, 1990).

Alonso, Pérez, Cabrerizo & Herrera-Viedma (2013), the two end-points of this process, *i.e.* 'linguistic theories' and 'ESP classroom', interact in that classroom teaching relies on an accurate description of professional discourse. Such descriptions involve various levels from structural-functional regularities on the macro level to lexico-grammatical patterns on the micro-level. To arrive at such a detailed linguistic description of professional discourse, the findings of corpus linguistics and genre analysis appear most relevant.

Systemic-functional grammar

Two areas of systemic-functional grammar which have received particular attention from systemic linguists working with computerized corpora are the interpersonal level and the thematic structure (theme+rheme), which can encompass all three of Halliday's metafunctions.

Interpersonal level. Although many researchers have examined the area of interpersonal strategies largely in academic scientific text, very few of these have adopted a corpus-based approach. Moreover, those that (Holmes, 1988; Hyland, 1996; Hyland & Milton, 1997) have noted that the findings have made little impact on teaching materials. ESP writing textbooks tend to ignore or under-represent the significance of hedging and most explanations of epistemic devices are generally ill-informed and inadequate (Hyland, 1996). The research of Hyland & Milton (1997) compared the expressions of doubt and certainty in the examination scripts of argumentative writing of 900 Cantonese speaking school leavers writing in English with those of 770 British learners of a similar age and educational experience.

They conclude that: `The Hong Kong learners employed syntactically simpler constructions, relied on a more limited range of devices, offered stronger commitments to statements and exhibited greater problems in conveying a precise degree of certainty' (Hyland & Milton, 2000). However, the pedagogic applications of their corpus ®ndings are only sketched brief. Flowerdew (1997) has also examined interpersonal strategies in a learner corpus of academic report writing of undergraduate tertiary-level students. She analyzed the use of author comment and also boosters and downtoners in the section on reporting data, and the use of various hedging devices for giving a possible explanation for the data and stating the implications of the findings in the discussion section of the report. The corpus analysis revealed that a restricted range of such devices utilizing a limited grammatical repertoire was used. Although some suggestions for exercises are given to target this problematic area, again, these are only briefly presented (Bolton & Lam, 2006).

Thematic structure. The most innovative corpus-based work to date in the area of systems is by Matthiessen (1997) and a Systemic Meaning Modelling Group at the University of Macquarie, who have devised a set of computational tools (SysFan and SysConc) which analyze and present the corpus results according to marked theme and rheme, in addition to various other systemic parameters. The advantage of this type of analysis is that it presents a snapshot of the systemic progression in text and can show how themes are built up across the text.

Other systematists have used corpus software to identify themes for defining genres. Ghadessy (1995) shows how the grammatical and lexico-semantic properties of clause themes differ according to the type of genre/register. From his analysis of a computerized corpus of 37 newspaper sports commentaries, Ghadessy concludes that the theme in this type of register generally deals with participants as actors/agents which, he remarks, is no doubt related to the fact that in the case of sports commentaries the processes are material (*e.g.* kick, shoot, lead, score). Francis (1989) has also explored the concept of how themes can encode genres, noting how the themes in analytical expository text of newspaper editorials have clauses where the point of departure is an anticipatory or existential subject, it or there. However, to date, very little of this work has been taken up in applied corpus linguistics. In the following section, we consider, in greater detail, the role that genre analysis plays in corpus-based research.

Baldauf & Kaplan (2010), applied Linguistics is a diverse field that is comprised of a substantial number of subfields, sub-specializations and related fields. To see that this is the case, one need only examine the various handbooks and encyclopedic references that have been published in the last ten years to see the wide range of topics that have been

covered. Another indication of this diversity is that up until 2005 the International Association of Applied Linguistics (AILA) had 24 different "Scientific Commissions" that represented the various areas of Applied Linguistics.

In the current Australian context where the Australian government is putting together a research evaluation process (Excellence in Research for Australia – ERA), this diversity may mean that research in Applied Linguistics is categorized under a number of different research codes. Finally, even the name Applied Linguistics is somewhat controversial, for example, as some would prefer the term Educational Linguistics (*e.g.* Spolsky, 1978; Spolsky, 1999; Spolsky & Hult 2008).

Qin (2014), the structure and relationship of the particular interests of applied linguists to topics within the field initially was explored through an analysis of articles published in applied linguistics journals over a five-year period between 2004 and 2008. The 27 key journals that were selected to represent Applied Linguistics. As this study was interested in the relationship of Australian Applied Linguistics to international trends, the Australian Review of Applied Linguistics was added to this list as a "marker" journal, while other national association journals were excluded.

Much of applied linguistics research is in the area of second language acquisition (SLA), a more detailed analysis of which is presented in the recent Handbook of Second Language Acquisition (Doughty & Long 2003). While SLA is segregated into a number of subfields, there is no widely agreed-upon taxonomy for it, so this arrangement of sub-fields makes no claims to be definitive. Cognitive SLA, as a general cover term, is by far the largest grouping within SLA including all those areas that perceive second language learning as an individual developmental process and exploring various alternative views on the ways in which learning occurs, both in the short and in the long-term. There are two ways to conceptualize it; one is to distinguish functional from formal linguistic orientations; a second is to distinguish representational from processing orientations.

Corpus linguistics

Corpus linguistics has emerged as an important area in Applied Linguistics over the past decade. A major activity for corpus linguistics has been the use of corpora in writing grammars and dictionaries, in exploring genre and register differences, and in language teaching resources (Conrad & Biber 2001). John Sinclair (1933; 2007) and his group at the University of Birmingham have been pioneers in this area, as demonstrated by the series of books under the Collins Cobuild label.

Anderson (2009), corpus linguistics has been used for a variety of specific purposes: the role of discourse markers, the nature of textbook language, the role of power and status in language, the study of lexis in texts, and the selection of text segments in teaching materials and assessment tasks. These activities can be carried out through the use of large corpora or of smaller corpora collected for specific purposes. Hinkel (2002) provides one excellent example of an analysis of L2 student writing development from a smaller corpus of student texts.

New trends on applied linguistics

Quan (2015), the field of Applied Linguistics is constantly evolving. Space does not permit a fuller exploration of these emerging trends. Sign languages are emerging as an important area in which major language problems deserve greater attention, and this trend is likely to

grow (see Hogan-Brun 2009). However, there is an important disagreement between non-deaf proponents of sign language, whose stance may be self-serving, and pre-lingually deaf scholars whose view is that sign languages (*e.g.*, ASL) may be unnecessary and that deaf individuals may become fully proficient either with the aid of rapidly evolving technologies like the cochlear implant or through historically validated vibrotactile-haptic methods (Seamans 2005).

There is now greater general recognition of the importance of fairness and ethical responses to language issues (Ellwood, 2006), whether the issues involve sexuality, instruction, assessment, policy, or appropriate access, and this recognition is also likely to expand in the coming decade.

Additional trends in Applied Linguistics include the growing recognition that, while linguistic theories may be important for some issues, descriptive linguistics (including the use of corpus linguistics) contributes more widely to addressing real-world language problems. Similarly, there is a growing recognition of the importance of language assessment not only as a means to measure student development in fair and responsible ways but also as a resource for appropriate measurement in research and in the emergence of effective tasks influencing teaching and learning.

Historical background

Some brief historical detail will help inform the current need to re-examine ergonomics. For much more background, interested readers are referred to Edholm & Murrell (1973); Singleton (1982) & Stockbridge (1989); two complete histories are also currently being written, by Pat Waterson for the Ergonomics Society and by Ilkka Kuorinka for the International Ergonomics Association.

Formal considerations of interactions between people and their working environments can be found in writings from ancient Greece, in medieval medical accounts and from Poland and Germany about 100 years ago (*e.g.*, Girault, 1998; Jastrzebowski, 1857; Marmaras *et al.*, 1999). The modern history of ergonomics emerges from the 1939 to 1945 World War. In the UK, the ideas and expertise from different disciplines interested in the effectiveness of human performance (anatomy, physiology, psychology, industrial medicine, industrial hygiene, design engineering, architecture and illumination engineering), and an emphasis on theory and methodology led to the formation of the discipline of ergonomics with two strong sub-groupings: those of anatomy/physiology and experimental psychology. In parallel, the human factors profession was growing up in the United States, with strong inputs from the discipline of psychology and engineering. In Germany, The Netherlands and across Scandinavia a basis for ergonomics was growing out of work in medicine and functional anatomy while in Eastern Europe growth was largely from the industrial engineering profession (Singleton, 1982).

A typical view is that ergonomics has drawn from anatomy, physiology, and psychology, and has close connections with the applied disciplines of medicine and engineering. Extending this, Chapanis (1996) de "nes ergonomics as a multi-disciplinary" eld, with psychology (primarily experimental psychology), anthropometry (the applied branch of anthropology), applied physiology, environmental medicine, engineering, statistics, operations research and industrial design all contributing. For Wickens *et al.* (1998), however, the "eld of human factors` originally grew out of a fairly narrow concern for human interaction with physical devices but has broadened greatly in the last few decades. They believe that human factors intersect with certain disciplines within psychology and engineering (for instance, experimental psychology, social psychology, industrial engineering and bio-engineering) and that a number of disciplines have overlapped with some aspects of human factors, namely cognitive science, meaning "cial intelligence, industrial design, management and statistics.

It is interesting that at least some of these `overlapping disciplines themselves have some trouble with a clear definition, and particularly establishing distinction from constituent disciplines. This is true for `new disciplines such as meaning 'cial intelligence, biotechnology and systems engineering. For instance, Stoddart (1999) asks` what precisely is systemic engineering` and how do we determine who is a systems engineer? Indeed, is there is not yet a separate discipline of systems engineering.

It is a function of the modern world that disciplines of value are now, almost by default, multi- and inter-disciplinary and therefore less amenable to a simple definition. The fact that ergonomics was built upon other fundamental disciplines should not be a problem: engineering is built upon mathematics, psychology is built upon biology and economic science upon a number of bases, but no-one now denies them in the canon of academic study and practical application.

Conclusion

The interdisciplinary nature of Applied Linguistics continually encompasses further research perspectives and methodologies from related fields. The interdisciplinary nature of the field, the emerging trends in the field, and the increasing specializations in the major sub-fields, all raise important questions about the training of future Applied Linguists. It is inevitable that Applied Linguists if they are to address real-world language problems in an increasingly complex world, will need more complex and specialized training. It may be that the realization of the interdisciplinary state of the field may eventually lead to the recognition that major applied linguistics research and application efforts should involve teams of scholars, perhaps led by Applied Linguists, in order to engage necessary resources and expertise. How the training of applied linguists may evolve in the future – in order to permit serious work in the more complex perception of the nature of language-based problems in the real world – is a significant issue that will demand greater attention.

Major branches of applied linguistics include bilingualism and multilingualism, conversation analysis, contrastive linguistics, sign linguistics, language assessment, literacies, discourse analysis, language pedagogy, second language acquisition, language planning and policy, interlinguistics, stylistics, and pragmatics. The term applied linguistics refers to the use of language-related research in a wide variety of fields, among which include language acquisition, language teaching, literacy, literary studies, gender studies, speech therapy, discourse analysis, censorship, professional communication, media studies, translation studies. Linguistics helps teachers convey the origins of words and languages, their historical applications, and their modern-day relevance. Combined, this approach to teaching language helps students gain a better, more in-depth understanding of their assignments and work product expectations.

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