SOCIOCULTURAL THEORY FOR ACADEMIC LITERACY RESEARCH INVOLVING ARGUMENTATION IN INSTITUTIONS OF HIGHER LEARNING

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ABSTRACT

Researchers in the field of academic literacy, specifically those focused on the first-year level in universities, are often required to articulate the theoretical framework that informs their critical orientation. In this process, an indication of the researcher's ontological view of the nature of academic literacy practices should also be declared. Ontologically, this study questions whether academic literacy constitutes a mechanistic technology or a socially emergent mode of arguing in higher education. This article reviews concepts and theories that warrant the second stance and a sociocultural paradigm of academic literacy research. A sociocultural explanatory framework incorporates human identities and cultures into analyses of the ways that humans employ language in universities. This framework accentuates the influences of social context and power relationships in the designation of acceptable modes of argumentation in the university. The results of the study indicate that theoretical discussions in academic literacy research are epistemic and ontological in nature. Theoretical frameworks are epistemic constructs as they reflect a researcher's conceptual understanding of the field of academic literacy. Conceptual paradigms are also ontological constructs due to their exposure of the researcher's understanding of the nature of academic literacy practices as an element of human existence. The study concludes by articulating a seven-point ontology that researchers can apply towards theoretically framing their own studies in the field of academic literacy and argumentation.

Keywords: academic literacy, sociocultural discourse, epistemology, ontology, higher education

INTRODUCTION

When academic literacy practices, including written or verbal argumentation, are approached as social and cultural phenomena, it is reasonable to expect a degree of consciousness of those values and principles which underpin how they are applied in disciplinary structures. Cultural

awareness and the ability to apply linguistic tools for learning purposes are necessary for student development and argumentation (Byram 2012, 5). Mechanics involved in argumentation, including proper structuring of claims, incorporating expert ideas and considering counterarguments, are cultural tools for interacting with disciplinary knowledge. Students must master the application of these tools (Newell et al. 2011, 274). Not all first-year students enrolled in South African universities, however, arrive at campuses equipped with the same levels of such awareness and preparedness to employ the academic literacy practices that are needed for argumentation (Chokwe 2013). Likewise, not all students exert their agency in the same ways to understand values and principles associated with argumentation in universities. Instead, according to a realist explanatory framework (see Figure 1), students draw on social structures, culture and agency in uniquely individualised ways in their attempts to demonstrate mastery of argumentation by way of academic literacy practices. Archer (1995) describes the interplay of structures, culture and agency towards generating human experiences as a morphogenic system (Figure 1).
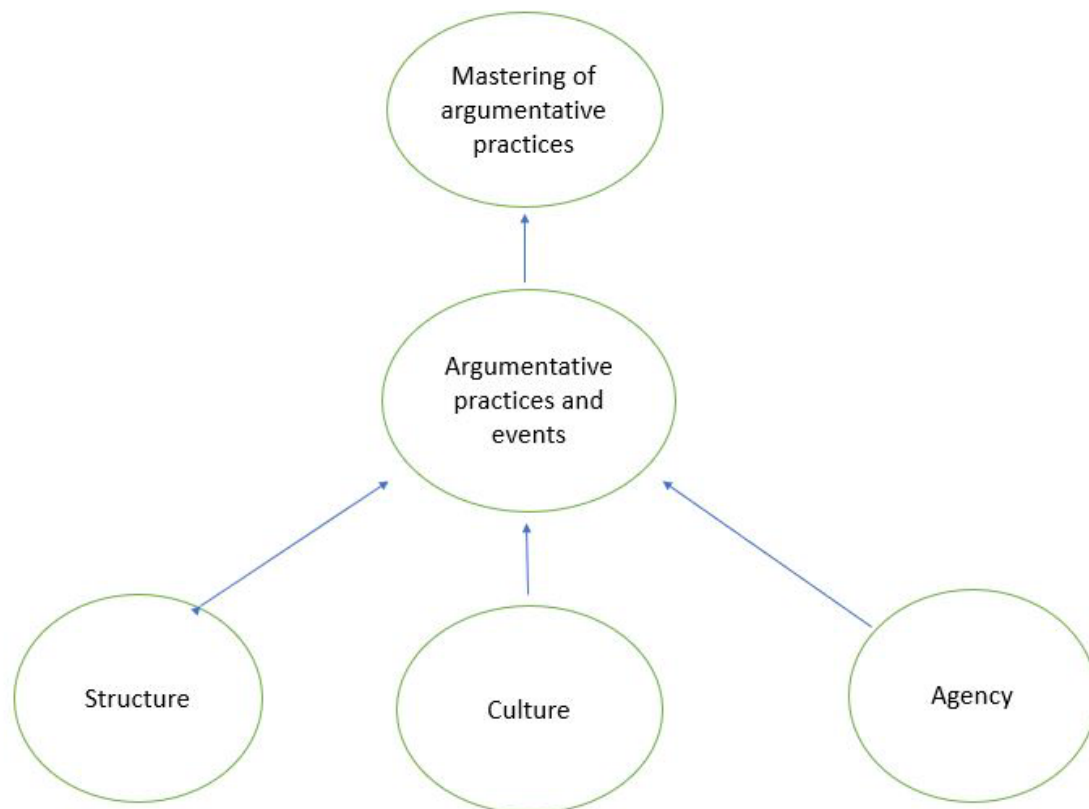

Figure 1: Morphogenic experience of mastering argumentative practices (Eybers and Paulet 2022).

ACADEMIC LITERACY AS ONE OF MULTIPLE LITERACY MODES

Academic literacy and its associated conventions may theoretically be situated in the broader

field of multiple literacies (Klein and Kirkpatrick 2010; Cope and Kalantzis 2006). Academic literacy is one of multiple modes of literacy and is specific to the higher education domain. As a communicative approach, multiple literacies, which are conceptually aligned with multimodality, recognise that humans employ diverse strategies and techniques to share knowledge and communicate. These strategies are always socially and historically emergent and contextualised (Cope and Kalantzis 2006). In the parameters of scientific teaching, Klein and Kirkpatrick (2010) describe the function of multiple literacies as enabling diverse representations of disciplinary knowledge and phenomena. For example, the employment of multiple literacies may aid scholars in their attempts to comprehend scientific concepts while linking them to broader abstract theories (Klein and Kirkpatrick 2010). Academic literacy modes that are applied while scholars are active in online environments, or when they apply additional tools (such as EndNote or Skype) as they engage disciplinary content, enable the use of multiple literacies for knowledge advancement. Multiple modes of literacy manifest in numerous forms. They may be visual in the form of images, graphs or charts (Alberto et al. 2007), or they may draw on specific literacy traditions, including writing, which are specific to academic departments (Ioratim-Uba 2019).

The theory of multiple literacies is significant to the context of this study for several reasons. University students based in South Africa, including those who were the focus in this analysis, emerge from diverse ethnic and geographical backgrounds. Each of these domains, namely students' ethnicity and their geographic origins, employs literacy and discursive practices which are distinctive to it. This theory is encapsulated in sociocultural linguistic stances (Arnold 2019; Pérez Báez 2018). Gee (2012; 2015) postulates that Discourses (with a capital D) emerge from among different kinds of people with varying histories and identities. The significance of this theory in analyses of language practices applied in universities is that science faculties contain multiple Discourses associated with disciplines. Furthermore, they also contain multiple literacy modes of communicating which are affiliated with the Discourses. For example, biologists will employ linguistic practices which are particular to their domain, chemists to theirs, and so on. Such application occurs in two domains: (1) the core disciplinary domain and (2) generic academic literacy modules which aim to empower students in language use (Kamberelis, Gillis, and Leonard 2014; Carstens 2009). While genres manifest as written products and processes in learning events, they also incorporate relationships between disciplinary members due to their social nature (Badger and White 2000).

MULTIPLE IDENTITIES AND ACADEMIC LITERACY PRACTICES

Like the theory of multiple literacies, the concept of multiple identities is significant to the

focus of academic literacy research. Its significance is two-fold. Firstly, students bring to the university their personal and multiple identities. These include being family and community members, scholars, aspiring disciplinary members, future experts, citizens or refugees (Martiny et al. 2017, 400). The notion of multiple identities in the South African higher learning context has special meaning. South Africa is a multilingual and multicultural society. While our country has twelve official languages, including sign language, there are multiple variants to each of these. Because languages are an integral feature of cultures and cultures feature integrally in languages (Brock-Utne 2018), South African universities are flooded with cultural richness when they admit first-year students on an annual basis.

THE ACADEMIC LITERACIES MODEL

 While academic literacy practices are identifiable as part of a collective of multiple literacies, they evidence communicative features which are not always practiced in as critical and in-depth ways as in non-academic communities. Communicative features which distinguish written academic literacy practices from non-academic modes of communicating include avoiding plagiarism or applying concepts and theories which are common to disciplinary departments (Irwin and Liu 2019). Street's (1998) foundational academic literacy model is useful in conceptualising what is meant by academic literacy. Lea and Street (2006, 227) assert that academic literacy practices vary according to context, culture and genre. The disciplinary context of applying academic literacy practices shapes how students and scholars apply them. To connect Street's (1998) construct of academic literacy to this study's objectives, first-year students who are enrolled in the extended degree programme in science enter a process of transitioning from using language in cultural ways, which were applied in their secondary schools, to the ways in which senior scholars in their faculties are seasoned and accustomed.

The academic literacy construct, as articulated by Lea and Street (2006, 229), is not restricted to a focus on discipline specific subjects or modules. Rather, its emphasis is on students' application of multiple genres or modes of communicating which are required to demonstrate understanding and mastery in disciplinary domains (Lea and Street 2006, 230). Examples of genres which students apply to demonstrate disciplinary understanding through writing are reports, essays, summaries and, in some institutions, narratives. Lea and Street (2006, 227) distinguish the academic literacies model from the study skills and academic socialisation models. The first model, the study skills model, approaches academic literacy practices as "individual and cognitive skill[s]" (Lea and Street 2006, 227). The second, the academic socialisation model, highlights processes of culturalisation in the application of discourses, while the academic socialisation model differs slightly while sharing characteristic

traits with these models. A key distinction between the academic literacies model and the aforementioned models is the academic literacies model's accentuation of "meaning making, power, identity [...] authority and [...] what counts as knowledge in any particular academic context" around communicative processes (Lea and Street 2006, 227). Disciplinary departments value theories, concepts and linguistic modes of presenting these. The privileging of theoretical constructs and associated concepts in disciplinary domains is shaped by powerful individuals in academic departments. Valued theories and concepts in academic departments constitute the epistemic culture of these domains. These theories, concepts, and the ways by which they are linguistically employed are new to first-year students. They do not always reflect cultural principles and practices which students bring to the university. How students negotiate their cultural orientations to knowledge and the rigid written expectations of universities are central interests and foci of academic literacy research.

ACADEMIC LITERACY PRACTICES AND EVENTS

 An academic literacy practice is an act; it is a mode and a communicative tool applied within educational environments (Kalman et al. 2008; Carstens 2009) to convey ideas and arguments. Academic writing constitutes an academic literacy practice (Kalman et al. 2008). In a discursive framework, academic writing may be construed as a cultural tool for advancing values and knowledge according to the goals of communities. In this sense, students employ academic writing practices, including argumentative writing, to demonstrate aspects of their academic and cultural identities (Carbone and Orellana 2010, 294) in disciplinary communities. This is also the function of secondary discourses in universities. Scholars apply secondary discourses (Gee 2012), which include writing, to demonstrate their understanding and awareness of the principles that govern argumentation in their academic communities. In her construct of academic literacy, Carstens (2009) specifies discussion, analysis, argumentation, explanation, and description as key written modes which undergraduate students must master. In an academic literacies model (Street 1998), students often apply these conventions in tandem.

Academic literacy practices occur within events. Kalman et al. (2008) theoretically construes these events as being embedded in larger social domains, including faculties and academic departments. In the university environment, academic literacy events always involve literacy tools, genres or modes as students engage in comprehension processes or knowledge generation. As socially constructed phenomena, academic literacy events are governed by multiple policies and regulations, as well as cultural frameworks embedded in institutional cultures (Kalman et al. 2008). Actual lectures, participation in group projects, and searching for information online constitute literacy events within the broader context of courses, the

department, and the faculty. Finally, Kalman et al. (2008) depicts academic literacy events as involving interactive dynamics between participants. As students participate in academic literacy events, they do so by employing those communicative modes identified by Carstens (2009). Some of these events require individual modes of communication, including solitary submission of assessments and the genre construction involved in writing essays. Alternatively, designing an infographic requires interactive academic practices, such as oral exchange and collaborative accessing of data for the project.

McWilliams and Allan (2014, 1) list additional academic literacy practices and modes of communication which include, but are not limited to, critical thinking, database searching and referencing, use of formal register, and manipulation of a range of academic genres. In Blanton's (1994, 4) seminal study, academic literacy is characterised as involving interpreting texts, agreeing or disagreeing with them, linking them to each other, extrapolating data from them, and presenting them in a manner which is appropriate to the audience. Despite being in their first year of enrolment and at a level of lesser criticality than senior scholars, first-year students are still expected to apply these conventions.

The significance of academic literacy practices, when approached in a sociocultural framework (Gee 2012), is that they are specific to the higher education domain. While it is not denied that off-campus communities apply argumentative practices and modes which are specific to their cultural systems, these do not always mirror the modes, rules and conventions which are mandatory in universities and institutions of higher learning. Here, reference is made to conventions which are necessary for academic essays, articles or theses to be accepted according to standards established by peers in disciplinary communities. Whereas members of off-campus communities determine the character or form of literacy events and practices, on-campus literacy events and practices are governed by influential agents, including deans, professors, lecturers, and curriculum designers. Therefore, when off-campus literacy practices are compared with the modes which agents in the university apply to generate knowledge, it is evident that there are noticeable distinctions.

Wittek and Habib (2013, 275) state that "academics have been portrayed as identifying strongly with their disciplines [and] as embracing the culture of their disciplines in a way that evokes the workings of tribal life". Off-campus actors, who may share interests that mirror disciplinary concerns, do not write about these concerns in the same investigative or critical level of depth as students and lecturers are expected to. Rather, some individuals may apply what Torres (2018) refers to as heritage languages: those languages applied in the non-academic setting. Therefore, when first-year students enter the academy from outside of the university, it is necessary to implement interventions that increase their awareness of those disciplinary

principles that give shape to academic literacy practices and develop the skills which are essential for demonstrating the comprehension of course material.

Blanton (1994, 2) suggests that acceptable ways of participating in the above-mentioned conventions in universities are determined by influential agents. This is because there exist "power[s] of community to mould language, language behaviour, and operational assumptions about reading, writing, books, and schooling", which shape norms of pedagogy around academic literacy (Blanton 1994, 2). Students are required to demonstrate competence in academic literacy and argumentative practices as they attempt to demonstrate understanding and mastery of disciplinary content. Within the domain of social linguistics, discursive practices constitute more than technical or mechanistic acts. By effectively employing them, students demonstrate their ability to adopt identities, roles, and ways of doing which are recognised within their disciplines (Hyland 2002). Approached through a sociocultural framework, academic literacy productions, be they written texts, arguments, or reports, may be labelled as products of what particular communities accept as genuine forms of knowledge (Boldyrev and Dubrovskaya 2015, 27). These products are in turn given shape by the behaviours, ways of doing and identities of disciplinary practitioners, which include students (Boldyrev and Dubrovskaya 2015).

When the above academic literacy-associated processes are viewed through social lenses, such as Street's (2006) ideological model, it is possible to approach academic literacy conventions, including argumentation, as indispensable features of knowledge construction for first-year students. Hyland (2002, 120) suggests that students often view academic literacy as constituting alien genres for communication. He warns that when academics or facilitators of academic literacies approach associated conventions as impersonal or a-cultural processes, they risk doing more harm than good to the very students they aim to empower (Hyland 2002, 120–121). It is therefore necessary to make explicit to students the principles which motivate the application of literacies which are employed on campus, and how these ways of doing are linked to their own academic development.

ACADEMIC LITERACY AS A SOCIOCULTURAL DISCOURSE

Theories of sociocultural linguistics enable analysis of the interplay between agency, culture, and structures in students' engagements of academic literacy practices (Hodges 2015; Boldyrev and Dubrovskay 2015). This is because these theories value and place emphasis on how various social mechanisms give shape to the human usage of language and literacy practices. Culture is one such social variable. Bucholtz and Hall (2005, 586) define sociocultural linguistics as "the broad inter-disciplinary field concerned with the intersection of language, culture and

society". This conception is relevant to the current study as it, too, values the cultural activities of disciplines in researchers' experiences of developing a theoretical framework of argumentation, writing and other academic literacy practices that embody culture and society. Principles of sociocultural linguistics correlate with values of the New Literacies Movement (Kist 2004). Street, in Collin and Street (2014, 351), asserts that literacy practices are always embedded in and emerge from social contexts. This embedding occurs in the contexts of work, educational settings or among ethnically related cultural collectives (Collin and Street 2014, 354). Social literacies that are active among families, in communities or academic departments are shaped by those agents who apply them. These individuals include agents who approve curricula, curricula designers, lecturers, tutors, and students. The combined actions of these individuals, within a social realist ontology, determine the emerging forms of academic literacy practices in university spaces. A sociocultural approach towards academic literacy emphasises the social and human features of language use. It recognises that such practices draw on the cultures and values which are contextually situated in them. University departments are examples of such social structures.

PRIMARY DISCOURSES AND ACADEMIC LITERACY PRACTICES

Social discourses incorporate the identities, cultures, histories, values, and principles of communities (Flowerdew and Wang 2015, 82). They also manifest in the ways that humans apply literacy practices. Primary and secondary discourse theories aid in interpreting students' literacy and argumentative experiences as they transition from their pre-university lives to being new members of the academy. In Gee's (2012, 156) outlook, primary discourses are those Discourses we acquire in an early stage of our lives. These Discourses shape our ways of being a person – specifically, a non-professional person (Gee 2012, 156). From within a social realist ontological framework, primary Discourses are acquired due to the interplay between structures (such as the home, family, and community) and agents (including parents, guardians and community members) (Archer 1995, 8). Primary Discourses provide humans with a sense of "self" (Gee 2012, 156) and a foundation for how they use language in everyday life.

The theory of primary discourses is relevant to the contextual concerns of this study as it suggests that the ways in which students used language or literacy practices before arriving at university do not always reflect academic literacy discourses and practices. Makalela (2018, 825) states that "very little is known about how remote rural African communities where indigenous literacy patterns can still be discerned make sense of their world". Here, a distinction is drawn between literacy and discursive practices of rural and urban domains. South African universities are populated with students who emerge from such environments. The pedagogic

implications of this discursive variation, as Makalela (2018) argues, are the disjuncture between academic discourses and the cultural and agential characteristics of some students. The existence of such literacy disjuncture and experiences is not restricted to students who emerge from rural environments. Rather, students from multiple and diverse social and cultural contexts must adjust in unique ways to the peculiarity of academic literacy practices.

SECONDARY DISCOURSES AND ACADEMIC LITERACY PRACTICES

Unlike primary discourses, secondary discourses are associable with expert and professional communities of practice (Gee 2012; Geisler 1994, 81). Literacy modes and practices which are active in universities are simultaneously affiliated with the acceptable ways of using language and literacy practices in expert or professional settings. Secondary discourses, including those beginning with a capital "D", and disciplinary discourses aid language users to identify themselves as members of social networks or groups (Gee 2012, 161). This process occurs in universities when students apply academic literacy practices in ways that demonstrate their understanding of course content to assert their disciplinary identities in order to be accepted as competent students.

CONCEPTIONS OF IDENTITIES

At this juncture, it is imperative to acknowledge that multiple disciplines conceptualise culture in unique ways. Psychologists, including Kang and Bodenhausen (2014, 550), argue that all human beings embody multiple identities. For example, a single individual may simultaneously be a parent and child, a novice scholar and disciplinary member in the university. From a psychological perspective, what the theory of multiple identities enables is a construct of cultural identity as being multifaceted and shaped by social context. Reasoning from within the field of language and education studies, Parkinson and Crouch (2011, 84) construct identity as something that humans *do* instead of it being something that we *are*. This is a profound concept as it suggests that our actions in different social contexts define our identities as human beings. According to Ochs (1993, 288), who reasons within the field of language and social interaction, the concept *identity* is broad and denotes "a range of social personae, including social statuses, roles, positions, relationships [...] institutional and [...] community identities". The theory of multiple identities is applicable to the experiences of first-year university students. As they join the university as new members, their status is that of novice disciplinary members. Their roles include being learners, but also novice knowledge producers through argumentation. Further, the university environment requires that students participate in multiple interactions in disciplinary and other communities to advance personal learning projects.

Conceptions of cultural identities

Deriving from the above theory of multiple identities, one of the identities which humans possess is their cultural identity. Cultural identities are active in the university environment and are abundant (Välimaa 1998, 120). Cultural identities operate in and navigate three domains. These are institutional (Suransky and Van der Merwe 2016, 578), disciplinary (Teferra 2017, 200), and personal cultural domains. Cultural identity is rooted in the very notion of culture itself. Välimaa (1998, 120) describes culture as an analytic device for understanding shared human experiences. According to Esteban-Guitart and Moll (2014, 31), culture evidences socio-demographic traits, social institutions, artifacts, agency of people, practices and activities. Culture also involves values and norms which motivate the actions of individuals and social groups (Van den Bos et al. 2005; Greenberg, Solomon, and Pyszczynski 1997). The synthesised proposition from these theorists is that before humans engage in actions, they intrapersonally consider the values, principles or norms of a particular community which frame the options of their behaviour (Van den Bos et al. 2005, 92). Such introspection occurs in the home, community, and in schools.

In addition to students' cultural identities, first-year science students enter the university as a cultural environment (Bojuwoye 2002, 277–278). Whether at the level of the institution or the discipline, first-year students are required to adopt or, at the very least, demonstrate awareness of the values, principles and norms which motivate the ways through which their senior counterparts engage in argumentation (Välimaa 1998, 121). Data in South Africa, however, suggest that first-year students are struggling to adapt to the cultures of institutions of higher learning. Annually, South Africa loses roughly 30 per cent of all first-year students; these students either drop out or do not successfully complete their first year of enrolment (Young 2016, 15–16). While culture is not the only learning impediment to first-year student success, its powers (Archer 1995, 145) and activities may be constraining in student development. Academic literacy practices and argumentation (Polo et al. 2016) are cultural tools for conveying knowledge – sometimes in emotional ways. As such and within the framework of secondary discourses (Gee 2012), students must master conventions for the purposes of learning success in higher education. Processes of mastering such conventions, which constitute critical literacy (Vasquez, Janks, and Comber 2019), are essential for interactions between scholars in advancing knowledge. In a sociocultural linguistic framework (Gee 2012), academic literacy conventions are construable as one set of cultural practices which disciplinary members apply to demonstrate their mastery of linguistic and argumentative practices in their communities.

Methodologically, accessing students' pre-university experiences enables researchers to gain insights into their previous employment of discourses, roles, or identities. With knowledge of students' pre-university experiences of literacies, discourses and cultural environments, researchers are enabled to develop an understanding of how students attempt to negotiate the linguistic activities of their pre-tertiary worlds with the required literacy practices on campus. Sapir (1949, 32) states that "language is a guide to social reality [which] conditions all our thinking about social problems and processes". He continues to assert that "the 'real world' is to a large extent unconsciously built up on the language habits of the group" (Sapir 1949, 32). Thus, language is foundational to communication, and also in understanding it.

Epistemology and cultural identities

Epistemology is a philosophical branch concerned with ways of knowing. Epistemological theories encapsulate the beliefs and theories that individuals come to hold about knowledge and knowing. When theoretically conjoined, epistemologies are construable as emerging from within primary and secondary discourses (Gee 2012). The philosophy of epistemology has implications for research and development in the fields of academic literacy and argumentation in South Africa's context. This is because students bring to the university a wide array of cultural identities and persuasions. Due to the emergence of first-year students from diverse cultural and socio-political domains, there is bound to be epistemic incongruence between some of their primary discourses and those discursive and epistemic traditions which are active in the academy. To be specific, what the researchers are asserting here is that students' pre-university epistemic experiences, like their primary discourses, may not mirror the epistemic and discursive practices which are mandatory at university. The philosophy of epistemology aids in conceptualising academic literacy practices and argumentation as epistemic phenomena in universities that are embedded in culture and identities (Street 1998; Gee 2012), but do not necessarily incorporate and apply these in ways that reflect students' pre-university epistemic experiences.

It is vital to recognise that in the same ways that students possess multiple identities and discourses, so do they employ multiple epistemologies or ways of knowing in their attempts to make sense of the world. This concern is acute in South Africa where scholars including Angu (2019) highlight the need to de-marginalise students' epistemic identities in the curriculum and through learning experiences. These epistemologies, often affiliated to fields of study, operate at the level of the institution and department, and among agents; this includes academics and scholars (Ellery 2017, 923). A positive understanding of these epistemic modes is also demonstrated through the application of discourses, academic literacies and argumentation.

Argumentation in disciplinary discourses

Argumentation is a specialised secondary discourse that scholars apply to advance and contest knowledge in higher education. Verbal and written argumentation are discursive phenomena due to their reliance on linguistic genres that convey scholars' reasoning and logic (Amossy 2009). Examples of academic genres that are regularly employed to advance arguments in universities include scientific reports, argumentative essays and multi-modal posters that incorporate qualitative and quantitative data. Scholarly argumentation is also discursive in nature due to its embeddedness in disciplinary interactions around experimentation and field research (Henderson et al. 2018). As scholars collaborate with each other and interact with empirical data, linguistic mechanisms, also known as litera*cies*, are activated to reason about and contest disciplinary knowledge. As a secondary Discourse (Gee 2015), argumentation is ubiquitous in all phases in the production of texts that share knowledge with the broader academic community. Since Discourses (Gee 2015) incorporate identities, ways of being and the epistemologies of members of academic departments, they determine powerful and acceptable modes of warranting theories and data in persuasive strategies.

One of the central concerns of the current analysis, as related to developing the discursive argumentation capacities of first-year students in South African universities, pertains to the Discourse chasms between *some* of their pre-university Discourses and unavoidable argumentative discourses that must be mastered in universities. Not all first-year students emerge from homes, communities and schools that practice the same rigid, written and oral modes of argumentation as is mandatory in higher education. Bangeni and Kapp (2020) reason that first-year students migrate to new epistemological homes upon enrolling in universities. Due to the power of disciplinary discourses in academic departments and the need to master them in order to succeed academically, Bangeni and Kapp (2020, 266) claim that students' "home discourses [often] make way for the more dominant discourses of the institution which are perceived as being socially advantageous". Bangeni and Kapp's (2020) observation has implications for academic literacy and mainstream degree curriculum designers in post-Apartheid universities who value curriculum transformation. It is evident that due to the realism of students' Discourse diversity, most of them do not emerge from pre-university cultural domains, which in some cases include schools, that adequately prepare them for dialectical and rhetorical argumentation in universities. Possibly mirroring the disjunction between students' Discourses and their capacity to master powerful argumentation discourses, is the reality that each year South African universities lose roughly 25,000 of their first-year university to attrition (Otu and Mkhize 2018). Ferretti and Graham (2019, 1346) observe that contemporary studies

of written arguments, which they describe as "meta-representation[s]" of "concepts and principles", often negate "alternative perspectives" of how arguments emerge. To increase awareness of the emergence of arguments, we advance a sociocultural approach towards the analysis of dialectical and written argumentation in South African universities. This method of foregrounding the strategies that students employ in their attempts to demonstrate competence in argumentation enables researchers to acknowledge students' s multiple identities, languages and cultures in their analyses.

DISCUSSION

A comprehensive sociocultural framing of empirical or conceptual studies around academic literacy practices that involve argumentation should incorporate the following, as discussed in the preceding sections:

- The researcher's epistemic orientation.
- The researcher's ontological stance regarding the nature of academic literacy.
- Intersections between primary and secondary Discourses (especially for first-year students' analyses).

The incorporation of the above considerations is important because, with respect to epistemic orientations, a study's theoretical framework "provides direction and impetus" reflecting the researcher's interests (Adom, Hussain, and Agyem 2018, 438). Theoretical frameworks also provide structure that integrates a "study philosophically, epistemologically, methodology and analytically" (Adom et al. 2018, 438). Osei Mensah et al. (2020, 59) claim that theoretical frameworks "make research findings more meaningful [and] acceptable to [...] theoretical constructs in the research field". In the context of this study, theoretical frameworks are tools that permit the researchers' disciplinary community to distinguish intersections between the students' Discourses, expert secondary discourses, and critical process of argumentation.

Sociocultural theory and emancipatory pedagogy

In addition to integrating epistemic, ontological and practical concerns, sociocultural theory for literacies praxis must consider the emancipatory role of language and pedagogy among humans (Winarti 2018; Freire 2000). In the Covid-19 and #BlackLivesMatter dispensation, researchers and facilitators of literacies in higher education are suitably positioned to facilitate Discourses that prepare students for a new global order. Kalantzis (2006) suggests that educators possess

powers to expose students to new *lifeworlds*. Ontologically, lifeworlds embody the cultural, agentic and epistemic visions of individuals and communities (Kalantzis 2006). However, in an era where protests against racial inequality, police brutality, along with scholarly agitations for decolonised education that values epistemologies from the Global South, language practitioners are more challenged than ever before (Weiner 2016; Chaka, Lephalala, and Ngesi 2018). Previously marginalised voices in higher education are demanding inclusive pedagogy that incorporates the lived experiences and aspirations of the poorest among us. Frantz Fanon
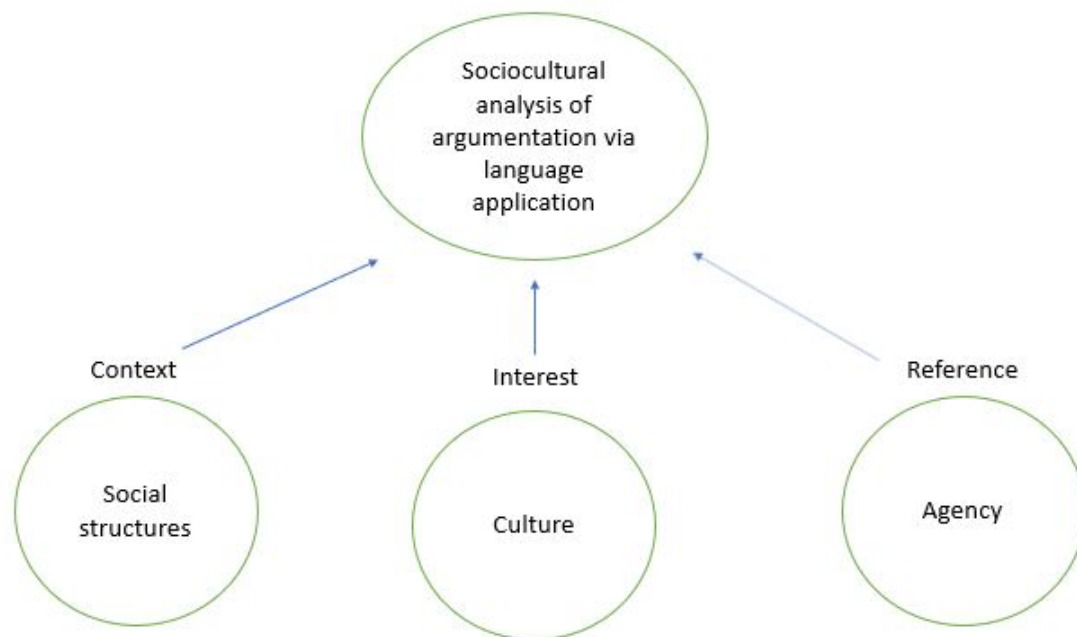

Figure 2: Sociocultural ontology for academic literacy research (Eybers and Paulet 2022).

(1963, 36) described those voices as emerging from "the wretched of the earth". If sociocultural theory is applied in empirical studies, researchers can address societal concerns related to discrimination and alienation by incorporating students' primary Discourses into their analyses. To achieve the goal of generating epistemically inclusive data, this study recommends a sociocultural ontology (see Figure 2) that researchers can employ. The ontology represents intersections between Cope and Kalantzis' (2006) semantic framework with Archer's (1995) morphogenic theory. It illustrates to researchers how linguistic experiences that involve argumentation may analytically be interrogated by highlighting the activities of culture, structure and agency in the ways that participants extract and generate meaning through reading and writing.

CONCLUSION

Researchers in the field of academic literacy must articulate the theoretical framework of their

analyses. This framework should embody and illustrate the researcher's epistemic, ontological and analytical orientation to the discipline of academic literacy. Scholars who aim to generate new knowledge about language use in higher education that emphasises identity and culture stand to benefit from a sociocultural paradigm (Gee 2008). This is because sociocultural linguistics approaches applied language use, including academic literacy practices, as phenomena that are shaped by the people, contexts and principles in which they emerge (Street 1998). A sociocultural ontology enables researchers to balance their scholarly subjectivity with the necessary objectivity that is required in scientific analysis. This process can be achieved when writers juxtapose their preferred theoretical frameworks with their participants' structural, cultural and agentic interactions in arguing and producing meaning (Cope and Kalantzis 2006). Since we are experiencing tensions and social unrest which are further exacerbated by Covid-19, sociocultural analysis can fulfil an emancipatory role. Academic literacy researchers who value their students' cultures, identities and languages can expose their disciplinary communities to new ways of approaching the field by de-marginalising previously neglected ontologies and epistemic orientations.

REFERENCES

Adom, Dickson, Emad Hussain, and Joe Agyem. 2018. "Theoretical and conceptual framework of quality research." *International Journal of Scientific Research* 7(1): 438–441.

Alberto, P. A., L. Fredrick, M. Hughes, L. McIntosh, and D. Cihak. 2007. "Components of visual literacy: Teaching logos." *Focus on Autism and Other Developmental Disabilities* 22(4): 234–243.

Amossy, R. 2009. "Argumentation in discourse: A socio-discursive approach to arguments." *Informal Logic* 29(3): 252–267.

Angu, P. 2019. "Understanding Voices from the Margins: Social Injustice and Agency in First-Year Students' Literacy Narratives." *Journal of Further and Higher Education* 43(8): 1152–1162.

Archer, Margaret. 1995. *Realist Social Theory: The Morphogenetic Approach.* Cambridge.

Arnold, L. 2019. "Accompanying as accomplices: Pedagogies for community engaged learning in sociocultural linguistics." *Language and Linguistics Compass* 13(6): 1–20.

Badger, R. and G. White. 2000. "A process genre approach to teaching writing." *ELT Journal* 54(2): 153–160.

Bangeni, B. and R. Kapp. 2020. "Shifting Language Attitudes in Linguistically Diverse Learning Environments in South Africa." *Journal of Multilingual and Multicultural Development* 28(4): 253–269.

Blanton, L. L. 1994. "Discourse, artifacts, and the Ozarks: Understanding academic literacy." *Journal of Second Language Writing* 3(1): 1–16.

Bojuwoye, O. 2002. "Stressful experiences of first year students of selected universities in South Africa." *Counselling Psychology Quarterly* 15(3): 277–290.

Boldyrev, N. N. and O. G. Dubrovskaya. 2015. "Context of sociocultural knowledge in discourse construction." *Mediterranean Journal of Social Sciences* 6(1 S2): 25–30.

Brock-Utne, B. 2018. "Researching language and culture in Africa using an autoethnographic

approach." *International Review of Education: Journal of Lifelong Learning* 64(6): 713–735.

Bucholtz, M. and K. Hall. 2005. "Identity and interaction: A sociocultural linguistic approach." *Discourse Studies* 7(4–5): 585–614.

Byram, M. 2012. "Language awareness and (critical) cultural awareness – relationships, comparisons and contrasts." *Language awareness* 21(1–2): 5–13.

Carbone, P. M. and M. F. Orellana. 2010. "Developing academic identities: Persuasive writing as a tool to strengthen emergent academic identities." *Research in the Teaching of English* 44(3): 292–316.

Carstens, Adelia. 2009. "The Effectiveness of Genre-Based Approaches in Teaching Academic Writing: Subject-Specific Versus Cross-Disciplinary Emphases." PhD dissertation, University of Pretoria.

Chaka, Chaka, Mirriam Lephalala, and Nandipha Ngesi. 2018. "English studies: Decolonisation, deparochialising knowledge and the null curriculum." *English Studies* 35(2): 208–229.

Chokwe, Jack. 2013. "Factors Impacting Academic Writing Skills of English Second Language Students." *Mediterranean Journal of Social Sciences* 4: 377–383.

Collin, R. and B. Street. 2014. "Ideology and Interaction: Debating Determinisms in Literacy Studies." *Reading Research Quarterly* 49(3): 351–359.

Cope, B. and M. Kalantzis. 2006. "From Literacy to 'multiliteracies': Learning to Mean in the New Communications Environment." *English Studies in Africa* 49(1): 23–45.

Ellery, K. 2017. "Conceptualising knowledge for access in the sciences: Academic development from a social realist perspective." *Higher Education* 74(5): 915–931.

Esteban-Guitart, M. and L. Moll. 2014. "Funds of identity: A new concept based on the funds of knowledge approach." *Culture and Psychology* 20(1): 31–48.

Fanon, F. 1963. *The Wretched of the Earth*. New York: Grove Press.

Ferretti, R. and S. Graham. 2019. "Argumentative writing: Theory, assessment, and instruction." *Reading and Writing* 32: 1345–1357.

Flowerdew, J. and S. H. Wang. 2015. "Identity in academic discourse." *Annual Review of Applied Linguistics* 35: 81–99.

Freire, P. 2000. *Pedagogy of the oppressed*. 30th anniversary edition. New York: Continuum.

Gee, J. P. 2015. "Discourse, small d, big D." *The International Encyclopedia of Language Social Interaction*: 1–5.

Gee, J. P. 2008. *Social Linguistics and Literacies*. Milton Park: Routledge.

Gee, J. P. 2012. *Social Linguistics and Literacies: Ideology in Discourses*. 4th edition. Abingdon, Oxon: Routledge.

Geisler, C. 1994. *Academic Literacy and the Nature Of Expertise: Reading, Writing, and Knowing in Academic Philosophy*. New Jersey: Lawrence Erlbaum Associates.

Greenberg, J., S. Solomon, and T. Pyszczynski. 1997. "Terror management theory of self-esteem and cultural worldviews: Empirical assessments and conceptual refinements." *Advances in Experimental Social Psychology* 29: 61–139.

Henderson, J., K. McNeill, M. Gonzalez-Howard, K. Close, and Mat Evans. 2018. "Key challenges and future directions for educational research on scientific argumentation." *Journal of Research in Science Teaching* 55(1): 5–18.

Hodges, A. 2015. "Sociocultural linguistics." *The International Encyclopedia of Language and Social Interaction*: 1–11.

Hyland, K. 2002. "Genre: Language, context, and literacy." *Annual Review of Applied Linguistics* 22(1): 113–135.

Ioratim-Uba, G. 2019. "Datasets evidencing research on classroom practice in L2 disciplinary writing." *Data In Brief* 25: 1–11.

Irwin, D. and N. Liu. 2019. "Encoding, decoding, packing and unpacking via agnation: Reformulating

general knowledge into disciplinary concepts for teaching English academic writing." *Journal of English for Academic Purposes* 42.

Kalantzis, M. 2006. "Elements of a science education." *Australian Educational Researcher* 33(2): 15–42.

Kalman, C., M. W. Aulls, S. Rohar, and J. Godley. 2008. "Students' perceptions of reflective writing as a tool for exploring an introductory textbook." *Journal of College Science Teaching* 37(4): 74–81.

Kamberelis, G., V. R. Gillis and J. Leonard. 2014. "Disciplinary literacy, English learners, and STEM education." *Action in Teacher Education* 36(3): 187–191.

Kang, Sonia and Galen Bodenhausen. 2014. "Multiple identities in social perception and interaction: Challenges and opportunities." *Annual Review of Psychology* 66(1): 547–574.

Kist, W. 2004. "The New Literacies movement." *Independent School* 63(4): 28–36.

Klein, P. D. and L. C. Kirkpatrick. 2010. "Multimodal Literacies in Science: Currency, Coherence and Focus." *Research in Science Education* 40(1): 87–92.

Lea, M. and B. Street. 2006. The "academic literacies" model: Theory and applications." *Theory into Practice* 45(4): 227–236.

Makalela, Leketi. 2018. "Community elders' narrative accounts of ubuntu: Learning and teaching in African education." *International Review of Education* 64: 823–843.

Martiny, S. E., L. Froehlich, K. Deaux, and S. Y. Mok. 2017. "Defining ethnic, national, and dual identities: Structure, antecedents, and consequences of multiple social identities of Turkish-origin high school students in Germany." *Journal of Community & Applied Social Psychology* 27(5): 400–410.

McWilliams, R. and Q. Allan. 2014. "Embedding academic literacy skills: Towards a best practice model." *Journal of University Teaching & Learning Practice* 11(3): 1-20.

Newell, G. E., R. Beach, J. Smith, and J. Van Der Heide. 2011. "Teaching and learning argumentative reading and writing: A review of research." *Reading Research Quarterly* 46(3): 273–304.

Ochs, E. 1993. "Constructing social identity: A language socialization perspective." *Research on Language and Social Interaction* 26(3): 287–306.

Osei Mensah, R., Frimpong, A., Acquah, A. Babah, P., and J. Dontah. 2020. "Discourses on conceptual and theoretical frameworks in research: Meaning and implications for researchers." *Journal of African Interdisciplinary Studies* 4(5): 53–64.

Otu, M. and Z. Mkhize. 2018. "Understanding black student attrition in the context of transformation in South African higher education institutions." *Journal of African Foreign Affairs* 5(1): 149–171.

Parkinson, J. and A. Crouch. 2011. "Education, language, and identity amongst students at a South African university." *Journal of Language, Identity, and Education* 10(2): 83–98.

Pérez Báez, G. 2018. "Linguistic diversity, language vitality and the advancement of linguistics as a science." *Acta Linguistica Hafniensia* 50(2): 180–207.

Polo, Claire, Kristine Lund, Christian Plantin, and Gerald P Niccolai. 2016. "Group emotions: The social and cognitive functions of emotions in argumentation." *International Journal of Computer-Supported Collaborative Learning: An Official Publication of the International Society of the Learning Sciences* 11(2): 123–56.

Sapir, E. 1949. *Selected Writings of Edward Sapir in Language, Culture and Personality*. California: University of California Press.

Street, B. 1998. "Student writing in higher education: An academic literacies approach." *Studies in Higher Education* 23(2): 157–172.

Suransky, C. and J. C. van der Merwe. 2016. "Transcending apartheid in higher education: Transforming an institutional culture." *Race, Ethnicity and Education* 19(3): 577–597.

Teferra, K. 2017. "Curriculum responsiveness within the context of decolonisation in South African higher education." *Perspectives in Education* 35(2): 196–207.

Torres, T. 2018. "The acquisition of heritage languages." *Language* 94(1): 223–225.

Välimaa, J. 1998. "Culture and identity in higher education research." *Higher Education* 36(2): 119–138.

Van den Bos, K., P. M. Poortvliet, M. Maas, J. Miedema, and E. J. Van den Ham. 2005. "An enquiry concerning the principles of cultural norms and values: The impact of uncertainty and mortality salience on reactions to violations and bolstering of cultural worldviews." *Journal of Experimental Social Psychology* 41(2): 91–113.

Vasquez, V. M., H. Janks, and B. Comber. 2019. "Critical literacy as a way of being and doing." *Language Arts* 96(5): 300–311.

Weiner, Melissa, F. 2016. "Colonized curriculum: Racializing discourses of Africa and Africans in Dutch primary school history textbooks." *Sociology of Race and Ethnicity* 2(4): 450–465.

Winarti, Eny. 2018. "Emancipatory education and the preparation of future teachers." *On the Horizon* 26(2): 113–121.

Wittek, L. and L. Habib. 2013. "Quality teaching and learning as practice within different disciplinary discourses." *International Journal of Teaching and Learning in Higher Education* 25(3): 275–287.

Young, D. G. 2016. "The case for an integrated approach to transition programmes at South Africa's higher education institutions." *Journal of Student Affairs in Africa* 4(1): 15–32.