

RESEARCH ARTICLE**LANGUAGE, LAND, AND LEARNING: AGRARIA SPIRITUALITY AND ENVIRONMENT PEDAGOGY IN MAKASSAR MANTRAS****Supriadi¹, Eri Kurniawan², Aceng Ruhendi Saifullah³, Fadly Akbar⁴**¹Universitas Pendidikan Indonesia, Bandung, West Java, Indonesia / STIE AMKOP Makassar, South Sulawesi, Indonesia^{2,3} Universitas Pendidikan Indonesia, Bandung, West Java, Indonesia⁴Universitas Saweriganding Makassar, South Sulawesi, Indonesia**Article History**

Received 1 June 2025

Revised 11 June 2025

Accepted 9 July 2025

Keywords

Rice Mantra, Makassar Community, Ecossemiotics, Ecological Narrative, Agrarian Spirituality

ABSTRACT

This study explores the ecological, spiritual, and agrarian values embedded in the rice mantras of the Makassar community through an ecosemiotic lens. Employing a qualitative approach, data were drawn from traditional lontarak texts, field observations, and interviews with local farmers and traditional leaders. Analysis utilized the three-dimensional ecolinguistic model by Bang and Døør, biological, sociological, and ideological, alongside Barthes' semiotic theory to interpret signs and meanings within the mantra texts. Findings reveal that these mantras are more than ritual expressions; they serve as oral educational texts that encode agrarian knowledge, cosmological beliefs, and environmental ethics. For instance, expressions like "I will use it for good and enjoyment" convey ecological intent and socio-spiritual gratitude. Meanwhile, metaphors such as "my fortune is like a mountain" construct symbols of abundance tied to divine blessing. Moreover, references to cardinal directions emphasize a cosmic understanding of agriculture as an integrated relationship among humans, nature, and the divine. Viewed through the lens of educational discourse analysis, these mantras represent indigenous eco-pedagogy transmitting values, practical wisdom, and cosmological awareness across generations. The study calls for renewed recognition of local linguistic heritage as cultural artifacts and as sources of environmental education. Future studies are encouraged to explore how agrarian discourses can be integrated into formal and non-formal education to promote ecological literacy and sustainability ethics in rural and urban contexts.

Introduction

The journey and life stories of the people of Eastern Indonesia, particularly in South Sulawesi, which include the Bugis, Mandar, and Makassar ethnic groups, encompass their ways of politics, social interaction, trade, leadership, understanding of the origins of the earth, humans, plant seeds, as well as a lifestyle that harmonizes with nature, religiosity, and spiritual beliefs. All of these are contained in a thick manuscript called *Sureq I La Galigo*, currently known as the longest mythological work in the world. *I La Galigo* is a monumental work that contains the history, origin, mythology, and daily life stories of the Bugis ethnic community. In short, "*I La Galigo* is a classical literary work born in the land of the Bugis, South Sulawesi" (Zulfikar, 2017). "The manuscript is preserved in the Leiden University Library under the code NBG 188" (Pujié & Enre, 2017). If the story of *I La Galigo* is excerpted, it illustrates the "ancestors of the Bugis people whom they highly respect." Naturally, this story and ethos should be preserved (Iswiranda et al., 2022). Therefore, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) officially recognizes this work as a Memory of the World (Zulfikar, 2017). Finally, Homer's works from Greece (Sari, 2023) and the Mahabharata from India (Rahayu, 2020) are considered great literary masterpieces. In that case, both are surpassed by *La Galigo*, the longest manuscript in the world (Salam, 2008).

One important section in *La Galigo* contains the story of the origin of rice, which was descended from the upper world '*boting langiq*' to the human world (Pujié & Enre, 2017). Rice is introduced not only as a source of food but also as a gift of cosmic spirituality. Because it is rich in spiritual meaning, several ethnic groups in

Corresponding Author: Supriadi, Email: daengrhopu259@gmail.com
Universitas Pendidikan Indonesia, Bandung, West Java, Indonesia

Indonesia believe that rice must be honored as a form of sensitivity toward the universe. This form of respect is realized through rituals or thanksgiving ceremonies by communities in various regions, such as *Seren Taun* in Sunda (Setiawan, 2012), the *Mapag Toya* Ceremony in Bali (Ida Ayu Putu Aridawati, 2020) *Khanduri Blang* the Antar Padi ritual in Maluku (Kulapupin, 2021) the *Bawanang ritual* in South Kalimantan (Rahmadani et al., 2022) the Mappalili ritual among the Bugis (Somba et al., 2019), and among the Makassar ethnic group, rituals known as *Akkaleo' Dodoro* (Yani, 2022); (St Aisyah, 2023) *lammang* (Ayu Safitri et al., 2022) and the *A'pare-pare ritual* (Sawitri et al., 2024).

Ecological sensitivity in traditional agrarian societies is often rooted in a spiritual worldview that connects nature with the divine, ancestral heritage, and symbolic entities such as Dewi Sri. In several ethnic groups in Indonesia, this tradition is manifested through rituals and the recitation of mantras. Numerous studies have also examined ritual mantra recitations as a form of rice veneration and as prayers, such as those by Irianingsih et al. (Irianingsih et al., 2018); (Puji Hastuti & Sumarmi, 2018); (Anjani & Suparta, 2019); (Jumadi et al., 2019); (Adnyana, 2021); (A. W. Gaduh & Harsananda, 2021); (Geria, 2021); (Saharudin, 2021); (Suastini, 2021); (Hardin et al., 2022); (Miharja et al., 2022); (Suhardi & Huda, 2023); (Gaduh & A. Agung, 2024); (Riana et al., 2024).

Many previous studies, such as those conducted by Irianingsih et al. (2018), and Puji Hastuti and Sumarmi (2018), have examined the ritual recitation of mantras in rice veneration using qualitative methods, particularly ethnographic observation and interpretive cultural analysis. However, studies that specifically analyze the function of signs, myths, and ideology within mantra texts using semiotic and ecolinguistic approaches remain limited. This is the gap that the present study seeks to address. Based on this framework, the study poses the following research question: How do the narratives in the rice agricultural mantra texts of the Makassar community represent ecological, spiritual, and agrarian cultural values? To answer this, the study aims to explain how the narratives in the rice agricultural mantra texts of the Makassar community represent ecological, spiritual, and agrarian cultural values through an ecolinguistic and semiotic approach.

Literature Review

This study employs an ecosemiotics approach as its primary analytical framework, synthesizing ecolinguistics and cultural semiotics. Ecolinguistics explores the relationship between language and the environment, emphasizing how linguistic practices reflect and influence human interactions with nature (Fill & Mühlhäusler, 2001). The ecolinguistic approach in this research follows the framework of Bang and Døør (1993), which examines texts through biological, sociological, and ideological dimensions. Nonetheless, the broader understanding of the language environment relationship also aligns with the perspective of Fill and Mühlhäusler (2001), who underscore the role of language in shaping society's ecological attitudes.

Meanwhile, cultural semiotics as developed by Barthes, analyzes how signs and symbols within culture construct meaning and ideology (Barthes, 1972). The ecosemiotic approach integrates these two perspectives to understand the system of signs within human culture as it interacts with natural ecosystems. According to Maran and Kull (2014), Ecosemiotics studies the semiosis processes underlying ecological phenomena, focusing on the relationship between culture and nature. Maran (2020) further explains that ecosemiotics enables the analysis of cultural representations of nature and how these influence human behavior toward the environment. Using the ecosemiotics framework, this study aims to reveal that rice mantras in Makassar society function as cultural expressions and sign systems that reflect and shape the ecological relationship between humans and nature.

Beyond the cultural and ecological dimensions, this study also highlights the educational potential of mantras, particularly with discourse and literacy development in school-based learning. This article offers a conceptual contribution to school-based learning through revitalizing traditional knowledge, particularly in the form of mantras. By integrating mantras into the learning process, students are expected to develop an awareness of the importance of engaging with local knowledge, which is intertwined with ecological and educational values. This research also underscores the need to explore educational discourse as an implication of learning practices derived from local cultural traditions, particularly those referred to as

doangang. Therefore, discourse analysis within the educational context becomes relevant and can be combined with other approaches to enrich literacy across various dimensions.

To strengthen the educational dimension of this study, it is important to view mantras not only as cultural texts but also as pedagogical resources. Discourse analysis offers a useful lens to explore how these traditional forms carry implicit knowledge and promote students' cognitive engagement. As Hashemi & Ghanizadeh (2012) noted, discourse-based learning positively develops students' critical thinking skills. In classroom contexts, Syahrani et al. (2024) emphasize the relational dynamics of power between teachers and learners, showing how students can exert agency through language. These insights align with mantras' educational potential, allowing students to actively interpret, respond to, and even recontextualize local wisdom in meaningful ways. Barus et al. (2024) further underscore the importance of pedagogically grounded materials to foster student interest. This is echoed by Ande et al. (2025), who explore ritual language as a vehicle to reinforce cultural identity, which contributes to character education when integrated into school learning. Similarly, Paino et al. (2025) show how students can grasp metaphors and cultural references through discourse analysis, especially in texts rooted in indigenous traditions. Such studies affirm that cultural discourse like that found in Makassar rice mantras can serve as rich material for strengthening literacy, ecological awareness, and cultural understanding.

Amid the growing body of studies on the agrarian traditions of Indonesian communities, rice mantras are still often regarded merely as elements of mysticism or folklore. These mantras represent ecological and spiritual knowledge passed down through generations within agrarian societies. Several previous studies have highlighted the functions and types of mantras as forms of supplication to God, veneration of the Rice Goddess, and as integral parts of planting-to-harvest rituals. However, studies employing an ecosemiotic approach remain very limited. Yet, this approach enables the exploration of ecological narratives and cosmological values embedded in the language of mantras. Moreover, few studies have thoroughly examined the local cosmology that underpins the relationship between humans, nature, and the divine in the context of rice mantras. Therefore, this research offers a new reading of rice mantra texts as narrative expressions that shape and sustain the cultural ecology of agrarian communities through ecolinguistic and semiotic approaches.

Materials and Methods

This study employs a qualitative approach with ecosemiotics analysis, which combines ecolinguistics and semiotics to examine the relationship between language, meaning, and the environment. The ecolinguistic framework developed by Bang and Døør (1993) positions language as a sign system that is not neutral, but deeply rooted in society's ecological, social, and ideological structures. In this study, semiotics uncovers the meaning of agricultural mantras as a form of sacred communication between farmers, nature, and spiritual forces.

Data were collected through documentation of two rice-agricultural mantras sourced from the farming community known as the *Kelompok Tani Cangke-Cangkea*, which comprises 17 members. In addition, semi-structured interviews were conducted with 17 farmers and two traditional leaders who served as key informants. The interviews with the farmers were conducted in a group setting, while interviews with the traditional leaders took place at their respective residences. The fieldwork was carried out over a period of eight days, from Friday, September 6 to Friday, September 13, 2024, in Pangkajene Hamlet and Balla Borong Hamlet, Polongbangkeng Utara Subdistrict, Takalar Regency, Indonesia. This research integrates Creswell and Poth's (2016) descriptive qualitative approach, emphasizing the importance of purposive data selection, field observation, and narrative validation. Simultaneously, the interpretive approach of Denzin and Lincoln (2011) is employed to explore meaning deeply within the local context, based on the assumption that the researcher is an integral part of the meaning-making process. Combining these two approaches enables the researcher to capture the technical structure of field data collection and the symbolic depth embedded in texts and agricultural practices.

Data analysis was conducted using the three-dimensional framework of Bang and Døør (1993), which includes the biological dimension (relations with natural elements), the sociological dimension (social interactions within farming communities), and the ideological dimension (beliefs or values underpinning practices). Additionally, Barthes' (1977) semiotic approach was employed to examine symbols and signs within all verses of the mantras as a unified meaning to interpret their significance in the local context. The entire analysis was presented narratively and linked to the ecological context of the Makassar farmers.

Results and Discussion

The analysis process begins with the three-dimensional model that Bang and Døør (1993) introduced, which includes the ideological, sociological, and biological dimensions, all grounded in an understanding of *situation* or *topos*. From this point, four key roles in meaning production are identified: S1 as the producer or speaker of the text, S2 as the receiver or audience of the message, S3 as the subject present within the text, and O as the object or referent in the communication. These four elements dynamically interact with another important dimension, the *environment*, which in this context refers to the paddy field environment as an ecological and cultural space. To clarify the workings of the ecolinguistics process, the semiotic approach is used as an auxiliary tool to decode the meanings embedded within the mantra texts. The following conceptual framework is presented to facilitate understanding of the analytical thought process.

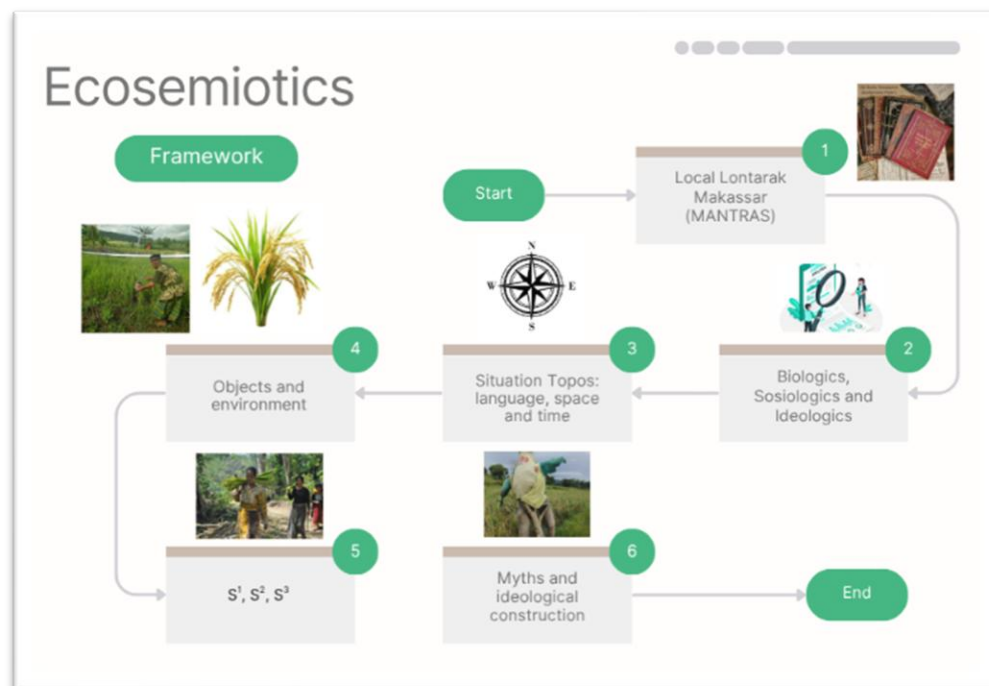


Figure 1. Ecosemiotics Framework: An integrated model combining ecolinguistics and semiotics to analyze language, tradition, and environmental relationships.

Having outlined the ecosemiotic mechanisms through which cultural and ecological meanings are constructed, this study extends its analytical scope by incorporating a framework of educational discourse. This addition responds to the need for a deeper examination of the pedagogical function of mantras, particularly concerning their relevance and application in formal education settings. This framework illustrates the extended analytical scope from ecosemiotics to educational discourse, focusing on transforming cultural and ecological meanings embedded in the mantras into pedagogical values relevant to formal education settings.

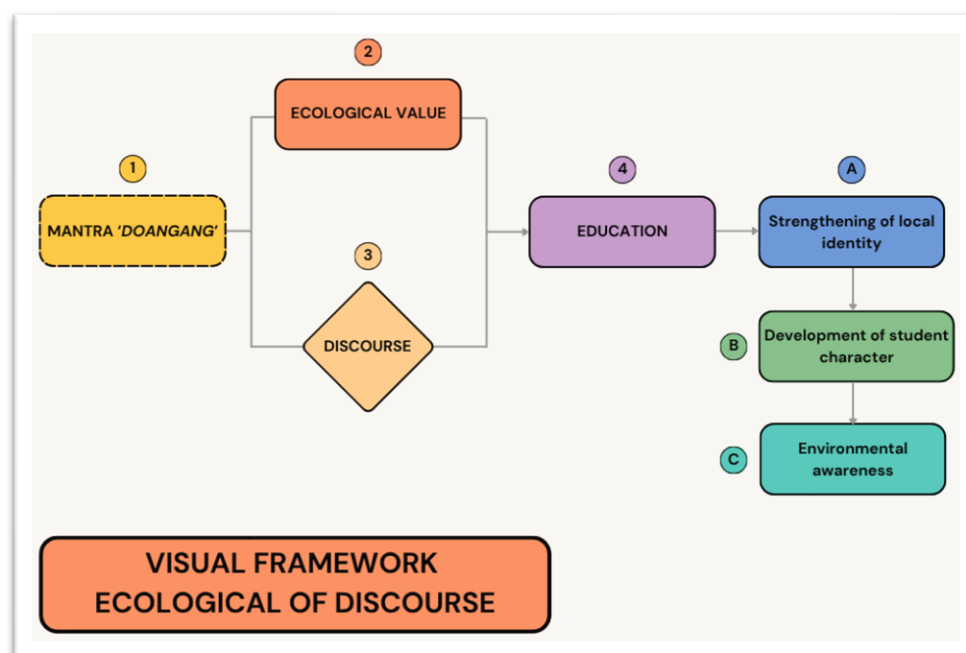


Figure 2. Educational Discourse Framework in the Context of Rice Mantras.

This study positions agrarian mantras as discursive texts that encode local ecological values and indigenous knowledge. Within the framework of critical discourse analysis (CDA), language is not merely a medium for description but a constitutive force of social and educational practice. (Fairclough, 1992) emphasizes that discourse is a form of social practice that simultaneously constructs and reflects reality, where texts serve as both products and processes of cultural transmission. This aligns with Rogers ' (2004) perspective in educational contexts that discourse shapes learning by mediating interactions, identities, and institutional ideologies. As such, agrarian mantras can be interpreted as educational discourse genres that embed ecological ethics, communal values, and spiritual beliefs into culturally situated knowledge systems. The ritualistic repetition of these mantras functions as a pedagogical event, allowing the oral transmission of ecological consciousness across generations.

Fairclough (2003) further highlights that educational discourse carries ideological weight, subtly organizing meanings about who can speak, what can be said, and what is considered legitimate knowledge. In this light, the mantras reflect cosmological views and perform a teaching function that reproduces and transforms social meanings within the ecological lifeworld of the Makassar community. The conceptual framework illustrated above begins with the *lontarak* as a guiding principle in the lives of the Makassar people. Within the *lontarak* lies a wealth of local knowledge, one of which concerns the auspicious and inauspicious days for going to the rice fields within a weekly cycle. This knowledge serves as a primary reference for farmers in organizing their agricultural practices' timing and behavioral conduct. A selected excerpt from the *lontarak* will be presented below to trace the meanings embedded in the mantra texts accompanying rice veneration rituals. This artifact is part of the Fort Rotterdam collection and is included in this study due to its close relevance to the *doangang* mantra, which constitutes the central focus of this research.



Figure 3. Source: Fort Rotterdam, Makassar. Photo taken by the researcher on 20 November 2024.

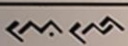
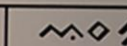
WAKTU					
HARI	ELE PAGI (6.00 - 9.00)	ABUENG SIANG (9.00 - 11.00)	TENGGAESSO TENGAH HARI (11.00 - 12.00)	LORO DUHUR (2.00 - 15.00)	ASSARA ASHAR (15.00 - 18.00)
 JUMA JUMAT	 LOBBANG KOSONG 	 UJU MATI 	 TUO HIDUP 	 POLEBOLA IMPAS 	 MALLISE BERISI 

Figure 4. Lontarak Fragment. (Documented by the researcher, 20 November 2024)

This fragment represents a rare example of traditional agricultural knowledge preserved by the Takalar community, specifically related to auspicious and inauspicious days for farming activities. As most original manuscripts have deteriorated with age and are considered sacred heritage, they are not widely shared to preserve their cultural integrity and honor the traditional knowledge they carry.

On Friday mornings, the community believes that agricultural activities conducted between 06:00 and 09:00 will result in *lokbang*, meaning empty or futile. If done between 09:00 and 11:00, the crops are considered to *uju* 'die'. Meanwhile, between 14:00 and 15:00, the outcome is referred to as *polebola*, which implies a break-even result, hard work that yields only ordinary returns. Among all the time intervals, only two are considered favorable: from 11:00 to 12:00 and from 15:00 to 18:00. However, since the 11:00 to 12:00 period coincides with the time of Friday prayers, Muslim farmers generally choose to begin their activities after the *Asr* prayer (*Assara*). This time is believed to bring life to the plants and blessings, in line with the belief that crops must be "alive and full". For farmers, these time intervals are not merely schedules but are

regarded as part of a sacred agricultural 'scripture' that guides every stage of cultivation from beginning to end. These values are manifested through concrete actions during the farming process's initial, intermediate, and final phases.

The excerpt from the *lontarak* above represents a form of local knowledge that guides the community, particularly within agriculture. Before further analyzing mantra texts, it is important first to understand how traditional farmers perceive and engage with the cultivation process. This worldview provides an essential starting point that strengthens the analytical direction and bridges the ecosemiotic framework with the lived experiences of farmers in the field. In this way, the visual and conceptual structure previously outlined is grounded in a solid cultural foundation. The following section presents the local mindset that shapes their agrarian practices.

The community recites the following mantra during the initial stage of rice cultivation, specifically when sowing rice seeds into the prepared planting containers or seedbeds. This practice marks a sacred moment, symbolizing the beginning of the agricultural cycle and invoking blessings for a successful harvest. The use of the mantra reflects not only a ritual obligation but also the embodiment of ecological awareness and spiritual connection with the land. The following section presents an analysis of the mantra text. This figure documents the traditional *akkaik* ritual, a rice harvesting practice performed with the recitation of mantras as an expression of gratitude and reverence for nature and agricultural bounty.



Figure 5. Agrarian Practice Accompanied by Mantra Recitation (*Akkaik* 'Rice Harvest'). Photo taken by the researcher on 15 November 2024.

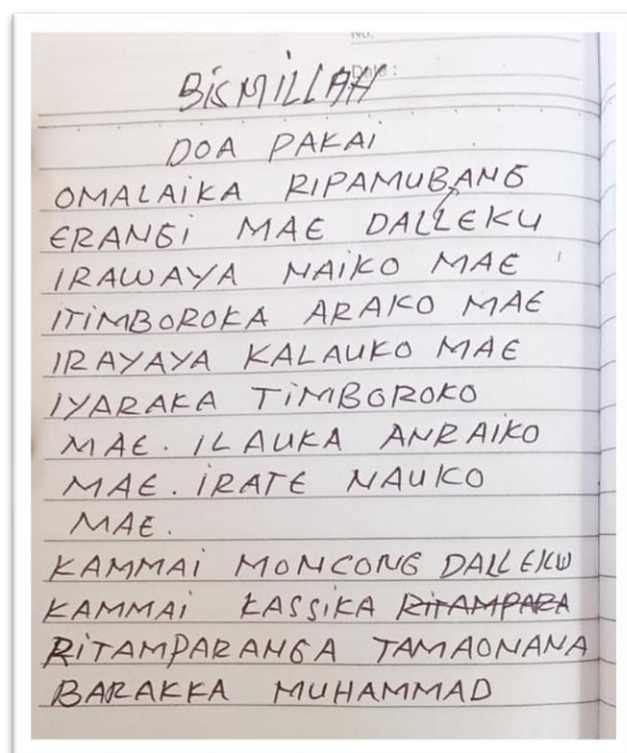


Figure 6. The Manuscript is part of a private collection owned by a farmer in Pangkajene Hamlet, Barugaya Village, North Polongbangkeng District, Takalar Regency.

Furthermore, as Van Dijk (2018) explains, discourse plays a crucial role in shaping and reproducing social cognition through language. Within the context of agrarian mantras, the consistent use of symbolic metaphors such as rice as life and harvest as blessing cultivate ecological consciousness and embed sustainable values across generations. These mantras, therefore, transcend their ritualistic function; they operate as ecological texts that construct an indigenous curriculum in which nature, spirituality, and ethics are pedagogically intertwined. The following table presents a structured analysis of selected agrarian mantras the Makassar farming community recited. These mantras, which accompany key phases of rice cultivation, encapsulate ecological knowledge, cosmological belief, and spiritual ethics. Through an ecosemiotic lens, each verse reveals layered meanings that operate simultaneously as ritual expression, cultural metaphor, and pedagogical discourse.

The table below identifies each mantra's discourse function, the embedded educational meaning, and its potential application within ecopedagogical contexts. This structure aims to demonstrate that such oral traditions are not merely folkloric but serve as indigenous educational texts capable of shaping sustainable ecological values across generations.

No.	Mantra Verse	Discourse Function	Educational Meaning	Cultural and Pedagogical Implications
1	"Kamma moncong dallekku" (<i>My fortune is like a mountain</i>)	Symbolic affirmation of abundance and divine blessing; metaphorical	Instills agrarian optimism, spiritual resilience, and gratitude in the face of ecological uncertainty	Functions as a cultural metaphor to inspire faith in natural cycles and divine provision; applicable in environmental

		framing of hope and sustenance		values education, especially to teach agrarian ethics and spiritual ecology
2	"Irateya naungko mae" (<i>The one above comes down</i>)	Depicts cosmic collaboration; implies divine participation in agriculture	Teaches the interconnectedness between heaven and earth in ecological processes	Fosters sacred cosmological awareness and supports teachings on ecological balance and spiritual farming
3	"Itimboroko arakko mae" (<i>South to North</i>) "Irayyaya kalauko mae" (<i>East to West</i>) "Iyaraka timboroko mae" (<i>North to South</i>) "Ilauka anraikko mae" (<i>West to East</i>)	Ritual mapping of cardinal directions; poetic structure of spatial harmony	Educates learners on indigenous orientation, sacred geography, and environmental balance	Suitable for systems thinking in local ecology education; promotes awareness of land, directionality, and harmony in the natural order
4	"Irawayya naikko mae" (<i>From the bottom to the top</i>)	Symbolizes life emergence; elevation of seeds to divine awareness	Embeds a metaphor of growth and potential from below to above	Encourages appreciation of life's process from soil to sustenance; supports lessons on food cycles, seed ethics, and agroecological literacy
5	"Bismillah" (In the name of Allah) "Baraka Muhamma" (blessings of prophet Muhammad)	Invocation of the divine name and prophetic blessings	Introduces sacredness in farming activity as worship and submission	Ideal for ecotheological education and religious-based environmental stewardship programs

Table 1. identifies each mantra's discourse function

As illustrated in the table above, each mantra line embodies ritualistic or symbolic expressions and educational content rooted in the ecological and spiritual consciousness of the Makassar agrarian tradition. These mantras function as a form of indigenous pedagogy, where knowledge about nature, divinity, and ethical farming is transmitted orally across generations. By encoding cosmological balance, spiritual gratitude, and environmental awareness, the mantras serve as a rich cultural text for shaping ecological literacy. The intersection between language, belief, and ecological practice reinforces the argument that such oral traditions can meaningfully contribute to contemporary frameworks of sustainability education.

2.d	<i>Irawayya naikko mae</i> 'from the bottom to the top'	S2, the recipients of the text, are represented by the four cardinal directions as referenced in the excerpts of mantra texts 2.e, 2.f, 2.g, and 2.f. Additionally, the next recipients of the text are the inhabitants of the earth and the inhabitants of the sky, as indicated in excerpts 2.e and 2.i.
2.e	<i>Itimboroko arakko mae</i> 'south to north'	
2.f	<i>Irayyaya kalauko mae</i> 'the one from east to west'	
2.g	<i>Iyaraka timboroko mae</i>	

	'The one from north to south is'	The cosmos is believed to actively move toward the harvest, with the universe working in harmony to support human endeavors.
2.h	llauka anraikko mae 'The one from the west to the east'	
2.i	lratelya naungko mae	
	'the one above comes down'	
2.j	Kamma moncong dallekku '	
	'my fortune is like a mountain'	

Table 2. The meaning of mantras

O (the referenced object) is the “moncong” or “mountain peak,” which symbolizes the abundance of sustenance. The verb *mocnong* serves as the main object, representing not only the physical rice seeds but also rice as a symbol of life itself. The speaker uses “moncong” to embody the farmer’s hope. Environmentally, this encompasses the agricultural land, local ecosystem, and the cultural and religious climate where the mantra is practiced. Furthermore, the ecosemiotic approach applies ideological, sociological, and biological dimensions. The mantra excerpt, “from south to east/north to west,” referring to the cardinal directions, implies the cosmological scope of the action. The mantra is not confined to the spatial field of the farm but extends to the universe, reflecting ecological and spiritual awareness that embraces all of nature.

From an ideological perspective, as framed by Bang & Døør’s ecolinguistic model this mantra instills the value that life originates from the soil and plants (rice); it embodies the belief in the sacredness of the farming process, where harvesting rice is not merely an economic act but a sacred one. It reflects a worldview centered on blessings, interconnectedness among beings, and the spiritual value of agrarian labor. Sociological dimensions (*sociologics*) are also evident: rice symbolizes the social values embedded in communal life. The farming community inhabiting the region fosters cooperation (*gotong royong*) as part of Indonesian cultural practices. There is also a strong intergenerational connection, positioning farming work as a contribution across generations. It reveals ecological solidarity and agrarian communitarianism. Biological dimensions (*biologics*) emerge through the rice seed as “life,” representing the ecological relationship between humans and nature. Harvesting is not only physical labor but is experienced as a transformation of life linking the plant to human existence and continuity. This reflects a hope for a better life, grounded in a harmonious relationship with the natural world.

Discussion

The analysis of the Makassar agrarian community recited rice mantras shows that these oral texts are more than ritual utterances; they function as forms of lived knowledge. Each mantra embodies meanings that connect the people with nature, the divine, and the cultural values of their environment. Through the repetition of these verses, ecological knowledge, spiritual belief, and ethical conduct are transmitted across generations in a way that is experiential, situated, and integrated into the rhythm of agrarian life.

For instance, the mantra “*Kamma moncong dallekku*” presents a strong metaphor of abundance and hope. This phrase is not merely aspirational; it affirms the belief that nature will provide sustenance when treated with respect and care. The act of voicing this belief during cultivation reinforces a mindset of gratitude and resilience, especially amid ecological uncertainty. In the learning process, this mantra shapes how individuals internalize values about nature, work, and *rezeki* (blessing) as an integrated whole.

Another set of mantras describing directions *south to north*, *east to west*, *bottom to top* constructs a sacred spatial awareness. These directions are not just geographical; they encode harmony, balance, and the farmer’s role within a larger cosmic order. Through these phrases, individuals are reminded of their place between the heavens and the earth, and of the ethical responsibility they carry as stewards of the land. Reciting such patterns serves a ceremonial purpose and reinforces spatial thinking, environmental awareness, and the rhythm of natural time.

The mention of divine names in mantras reflects how agriculture is positioned as a spiritual duty. Planting becomes an act of submission and supplication, where success is not solely dependent on technique, but also on intention and moral alignment. This shows how learning in this context involves both action and belief. Children and young people growing up in such an environment are not simply taught how to plant, but also how to think, speak, and feel about planting in ways that align with communal values and divine harmony.

The mantras also reflect a localized method of educating about life cycles, particularly in the way seeds are mentioned not as objects, but as living entities. This signals a worldview where the earth is not just a resource, but a living system that must be respected. Through this lens, farming becomes a form of ecological engagement, where knowledge about life, growth, and sustainability is learned through interaction with soil, seed, season, and speech.

Overall, the function of these mantras as a cultural discourse reveals a system of learning that is oral, participatory, and deeply rooted in ecological relationships. The findings suggest that such mantras can serve as a model for environmental education that is community-based, spiritually grounded, and oriented toward sustainable living. Rather than separating knowledge from daily life, these mantras embed values directly into agricultural practice, allowing them to be remembered, repeated, and passed on not just as tradition but as living pedagogy.

Conclusions

This study reveals that the agrarian mantras of the Makassar community function not only as ritualistic utterances but as educational texts embedded with ecological, moral, and spiritual meanings. Through poetic language, metaphor, and structured repetition, the mantras transmit knowledge that connects humans with nature, encourages gratitude, and reinforces cultural values about the land and livelihood.

Each mantra observed in this study demonstrates a unique pedagogical function. Expressions of abundance cultivate hope and trust in natural processes. Spatial orientation mantras develop ecological awareness and harmony with the environment. Invocations of the divine instill a sense of moral duty and sacredness in agricultural work. Meanwhile, references to seeds as living entities teach respect for life and sustainability. The findings of this study underscore that indigenous oral traditions, such as rice mantras, hold strong potential for educational application. They reflect a local curriculum that fosters ecological literacy, character formation, and intergenerational learning. When integrated into formal and informal educational settings, these mantras can strengthen students' connection to the environment, enhance cultural identity, and promote sustainable practices rooted in local wisdom.

Declaration of Conflicting Interest

The authors declare that there is no conflict of interest concerning the publication of this paper.

Acknowledgments

The author sincerely thanks the promotor and co-promotor for their invaluable research methodology guidance and the insightful feedback provided throughout the revision process. Although the Indonesian Education Scholarship (BPI), the Center for Higher Education Funding and Assessment (PPAPT), and the Indonesian Endowment Fund for Education (LPDP) under the Ministry of Higher Education, Science, and Technology of the Republic of Indonesia (Kemendikti) do not fund SINTA journal publications except for Scopus-indexed Q1 and Q2 articles the author wishes to express deep appreciation to these institutions. Their support has made it possible to pursue doctoral studies with full academic funding. Special thanks are also extended to the key informants, particularly community members from rural Makassar ethnic groups, whose contributions provided essential data for this research. Without their participation, this article would not have reached the readers of JPDR.

References

Adnyana, P. E. S. (2021). Sosiologi Lingkungan dalam Lontar Taru Pramana: Manusia, Lingkungan, dan Pengobatan Tradisional Bali. *Jurnal Yoga dan Kesehatan*, 4(1), 49. <https://doi.org/10.25078/jyk.v>

- Ande, A., Utomo, S. S., Lehan, A. A. D., & Saefudin, A. (2025). Ritual Language in Korolele Ceremony: Local Wisdom, Cultural Identity, and Moral Education. *International Journal of Society, Culture and Language*, 13(1), 173–184. <https://doi.org/10.22034/ijsc.2024.2045762.3790>
- Anjani, A., & Suparta, I. M. (2019). Handling ecological problems in gaga rice cultivating through mantra darmawarsa of Merapi-Merbabu. *IOP Conference Series: Earth and Environmental Science*, 325(1). <https://doi.org/10.1088/1755-1315/325/1/012001>
- Ayu Safitri, I., Nurlela, & st junaeda. (2022). Makna Tradisi Pesta Lammang bagi Masyarakat Lantang Kecamatan Polongbangkeng Selatan Kabupaten Takalar. *Jurnal Kajian Sosial dan Budaya*, 6(2), 36–45. <http://www.ejournal.tebarscience.com/index.php/JKSB/article/view/108/104>
- Barus, F. L., Harahap, S. H., Naelofaria, S., & Simanjuntak, E. E. (2024). Discourse Analysis in Developing Multimodal E-Book Teaching Materials using Book Creators in Psycholinguistics Lessons. *Journal of Pragmatics and Discourse Research*, 4(1), 101–110. <https://doi.org/10.51817/jpdr.v4i1.804>
- DIJK, T. A. VAN. (2018). Critical discourse analysis. *Methods in Pragmatics*, 425–451. <https://doi.org/10.1515/9783110424928-017>
- Fairclough, N. (1992). *Discourse and Social Change*.
- Fairclough, N. (2003). Analysing discourse. In *Researching society and culture*. London:
- Gaduh, A. W., & Harsananda, H. (2021). Teo-Ekologi Hindu dalam Teks Lontar Sri Purana Tatwa. *Kamaya: Jurnal Ilmu Agama*, 4(3), 426–441. <https://doi.org/10.37329/kamaya.v4i3.1408>
- Gaduh, A. Wayan dan anak agung ayu alit widyawanti. (2024). *NGURIT: RITUAL AWAL DALAM TRADISI PERTANIAN BALI UNTUK*. 15(2), 157–167.
- Geria, A. A. G. A. (2021). Lontar Usada Sawah : *Lontar Usada Sawah: Kearifan Lokal dan Ketahanan Pangan di Bali*, 1(1), 204–211.
- Hardin, H., Hadirman, H., Musafar, M., Hadirman, H., & Setiawati, I. R. (2022). Mantras in The Kapontasu Ritual as An Oral Tradition in Rice Field Farming and Rice Agribusiness Performance in Maintaining Family Food Availability in West Muna Regency. *International Journal of Management and Education in Human Development*, 2(2), 650–660.
- Hashemi, M. R., & Ghanizadeh, A. (2012). Critical discourse analysis and critical thinking: An experimental study in an EFL context. *System*, 40(1), 37–47. <https://doi.org/10.1016/j.system.2012.01.009>
- Ida Ayu Putu Aridawati. (2020). Makna Ritual Budaya Pertanian yang Berkaitan dengan Leksikon Bidang Persawahan pada Masyarakat Bali. *Kamaya: Jurnal Ilmu Agama*, 3(3), 384–402. <https://jayapanguspress.penerbit.org/index.php/kamaya/article/view/520>
- Irianingsih, E. T., Sudardi, B., & Rais, W. A. (2018). *Mantra in the Javanese Tradition as a Manifestation of Approach to God*. 1(Icse 2017), 432–440. <https://doi.org/10.5220/0007099704320440>
- Iswiranda, A., Nensilanti, A., & Syam Saguni, S. (2022). Nilai Edukasi Dalam “I La Galigo” Ditulis R.a Kern. 43 *Indonesian Journal of Pedagogical and Social Sciences*, 2(1), 44–59.
- Jumadi, E. W. A., Rajiani, I., & Zulkifli, R. N. (2019). Role of Mantra in the Lives of Dayak Maanyan. *Ocerints.Org, October*, 279–280. https://www.ocerints.org/adved19_e-publication/papers/127.pdf
- Kulapupin, E. S. (2021). Ritual Adat Antar Padi: Konstruksi Teologi Kontekstual. *ARUMBAAE: Jurnal Ilmiah Teologi Dan Studi Agama*, 3(1), 63–87. <https://doi.org/10.37429/arumbae.v3i1.417>
- Miharja, D., Kusnawan, A., & Mustopa, S. (2022). Rediscovering the way of Islamic propagation by continuing the tradition of religion-based agriculture. *HTS Theologiese Studies / Theological Studies*, 78(4), 1–10. <https://doi.org/10.4102/hts.v78i4.7203>
- Paino, N. P., Adisaputera, A., Lubis, M., Lubis, M. J., & Dalimunte, S. F. (2025). *RESEARCH ARTICLE FRAMING DELI MALAY CULTURE THROUGH LANGUAGE : DISCOURSE ANALYSIS*.
- Puji Hastuti, K., & Sumarmi, M. (2018). *Traditional Rice Farming Ritual Practices of the Banjar Tribe Farmers in South Kalimantan*. 147(Icsse 2017), 170–174. <https://doi.org/10.2991/icsse-17.2018.39>
- Pujié, C., & Enre, F. A. (2017). I La Galigo. In *Theatre Journal* (Vol. 58, Issue 2). http://search.proquest.com/docview/216063962?accountid=14732%5Cnhttp://bd9jx6as9l.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rft_id=info:sid/ProQ%3Aproq%3A&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&rft.genre=unknown&rft.jtitle

- Rahayu, N. W. S. (2020). BHATARA GURU DALAM TRADISI BUGIS KUNO (Perspektif Lontara I La Galigo). *Widya Genitri: Jurnal Ilmiah Pendidikan, Agama Dan Kebudayaan Hindu*, 11(2), 71–82. <https://doi.org/10.36417/widyagenitri.v11i2.373>
- Rahmadani, N., Septiani, K. S., Yulianti, R., Handayani, I. S., Haitomi, A., Al-Ghani, M. G., Febrinatasia, W., Murdiyanti, R., Febrinatasia, W., Sulistiyo, R. B., Uthami, M., Rahmi, F., Archi, M., Parura, N. L., Ngenda, F. V., Annida, S. F., Dewi, R. S., Fauzia, S., Ninawati, ... Haekal, A. F. (2022). *Tentang Etnobiologi Di Kalimantan Selatan* (Issue March).
- Riana, D. R., Kurnianto, E. A., Yayuk, R., Jahdiah, J., Suryatin, E., Hidayatullah, D., & Endraswara, S. (2024). *The Besoyong Mantra in Ngumo Activity of The Paser Indigenous People from The Perspective of Literary Archaeomythology* (Issue Icollite 2023). Atlantis Press International BV. https://doi.org/10.2991/978-94-6463-376-4_13
- Rogers, R. (2004). An introduction to critical discourse analysis in education. In *An Introduction to Critical Discourse Analysis in Education*. <https://doi.org/10.4324/9780203836149>
- Sagala, R. E., Adisaputera, A., & Dalimunthe, S. F. (2024). Analyzing Discourse in The Digital Literacy Contains Pakpak Local Wisdom in Procedure Text in Class. *Journal of Pragmatics and Discourse Research*, 4(1), 111–118. <https://doi.org/10.51817/jpdr.v4i1.856>
- Saharudin, S. (2021). Ritual Domestikasi Padi Lokal dalam Budaya Sasak-Lombok. *Jurnal SMART (Studi Masyarakat, Religi, Dan Tradisi)*, 7(01), 85–102. <https://doi.org/10.18784/smart.v7i01.1098>
- Salam, A. (2008). Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures. *Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures*, 2–10. <https://doi.org/10.1007/978-94-007-3934-5>
- Sawitri, M., Agil, M. F., Azhari, E., & ... (2024). A'pare-pare: Tradisi Ngasak Padi di Polombangkeng Selatan, Kabupaten Takalar Sulawesi Selatan. ... *of Education and ...*, 4(2), 15–22. <https://ejournal.indrainstitute.id/index.php/jec/article/view/820%0Ahttps://ejournal.indrainstitute.id/index.php/jec/article/download/820/359>
- Setiawan, I. (2012). *Upacara seren taun pada masyarakat Kasepuhan Ciptagelar di Sukabumi*. <https://books.google.co.id/books?id=v-sBngEACAAJ>
- Somba, N., Mansyur, S., & Nur, M. (2019). Mistifikasi Ritual Sistem Pertanian Tradisional Masyarakat Ajatappareng, Sulawesi Selatan. *Jurnal Walennae*, 17(1), 19. <https://doi.org/10.24832/wln.v17i1.365>
- St Aisyah, B. M. (2023). Tinjauan Manajemen Dakwah Terhadap Tradisi Pesta Adat a'Dodoro (Dodol) Di Kabupaten Takalar. *Al-Idarah: Journal of Da'wah Management*, 11(2), 162–176.
- Suastini, N. N. (2021). Upacara Biyukukung (Kearifan Lokal Masyarakat Bali dalam Menjaga Teo-Agrikultur). *Widya Duta: Jurnal Ilmiah Ilmu Agama dan Ilmu Sosial Budaya*, 16(2), 174. <https://doi.org/10.25078/wd.v16i2.2887>
- Suhardi, I., & Huda, U. (2023). Mantra as Local Wisdom in the Ritual of Bonokeling Community, Pekuncen Village, Jatilawang District, Banyumas Regency. *Jurnal Lingua Idea*, 14(2), 174. <https://doi.org/10.20884/1.jli.2023.14.2.9316>
- Syahrani, I., Supriadi, S., Mustafa, M., Saifullah, A. R., Riski, H., & Mubarak, Y. (2024). Power Dynamics in a Classroom Interactions Context: Critical Discourse Analysis. *International Journal of Society, Culture and Language*, 12(3), 65–79. <https://doi.org/10.22034/ijsc.2024.2037993.3632>
- Yani, N. F. (2022). Tradisi Pesta Pembuatan Dodol (Akkaleo'Dodoro) Desa Lantang, Kecamatan Polombangkeng Selatan, Kabupaten Takalar. *Jurnal Onoma: Pendidikan, Bahasa, Dan Sastra*, 8(1), 248–255. <https://www.e-journal.my.id/onoma/article/view/1710%0Ahttps://www.e-journal.my.id/onoma/article/download/1710/1381>
- Zulfikar, A. (2017). *Internalisasi Nilai-Nilai Sastra I La Galigo dalam Forum Internasional*. 1–12. <https://doi.org/10.31227/OSF.IO/P6SH7>

About the Authors

Supriadi is a lecturer at the School of Economics AMKOP Makassar and a part-time lecturer at the State Polytechnic of Ujung Pandang and Universitas Terbuka, Indonesia. He is pursuing a doctoral degree at the Indonesia University of Education (*Universitas Pendidikan Indonesia*). His research interests include semiotics, ecolinguistics, ecopedagogy, and ecolexicography. Email: daengrhpu259@gmail.com

Eri Kurniawan is a faculty member in the English Language and Literature Program and Linguistics Program at Universitas Pendidikan Indonesia, Bandung, Indonesia. He serves as the inaugural President of the Indonesian Association of Applied Linguistics (ALTI). After completing his MA and PhD in Linguistics at the University of Iowa, USA, Eri has conducted extensive research focusing on grammatical descriptions of Sundanese, critical discourse/text analysis, and academic writing. His research contributions are widely published in esteemed international journals such as the *International Journal of Multilingualism* and the *International Journal of Communication*. Email: eri_kurniawan@upi.edu

Aceng Ruhendi Saifullah is a Professor of Forensic Linguistics at the Indonesia University of Education, Bandung, Indonesia. His research interests are focused on forensic linguistics, semiotics, and pragmatics. Email: acengruhendisafullah@upi.edu

Fadly Akbar is a lecturer at Universitas Sawerigading Makassar, currently the Head of the Study Program in Indonesian Language and Literature Education. In addition to his active roles in teaching, community service, and research, he also serves as the Editor-in-Chief of *Aksara Journal*, published by Universitas Sawerigading Makassar. Email: fadlyakbartalas12@gmail.com