



ECOLINGUISTIC APPROACHES TO WASTE MANAGEMENT COMMUNICATION: CONCEPTUAL METAPHORS IN COMMUNITY TRAINING PROGRAMS

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ABSTRACT

This study explores an ecolinguistic approach to environmental communication in a community-based waste management training program in Kelurahan Bahagia, Bekasi, Indonesia. The program aimed to strengthen neighborhood leaders' capacity to formulate persuasive environmental messages through conceptual metaphors and ecological framing. A community engagement design was employed through initial perception elicitation, interactive training, guided message production, and reflective discussion. Data comprised Mentimeter responses on participants' initial perceptions of waste and four environmental messages produced after the training. The analysis identified evaluative lexical patterns, conceptual framing, and shifts in environmental representation. Initial responses predominantly represented waste through sensory and problem-oriented expressions such as smell, dirtiness, disorder, and nuisance. Post-training messages, however, connected environmental management with health, collective well-being, environmental aesthetics, and intergenerational responsibility. The findings suggest a shift from consequence-oriented representations toward more relational, action-oriented, and future-oriented ecological framing. Conceptual metaphors functioned as communicative scaffolding rather than as fixed formulas, enabling participants to reconsider how environmental messages could invite collective responsibility. This study contributes to ecolinguistics and community-based environmental communication by demonstrating the pedagogical value of metaphorical reframing in grassroots sustainability communication.

Keywords: *ecolinguistics; conceptual metaphor; environmental communication; ecological framing; waste management*

INTRODUCTION

Waste management is not only a technical problem of collection, transportation, sorting, and processing. It is also a communicative problem. At the community level, environmental initiatives depend on how residents understand waste, how responsibility is distributed through everyday discourse, and how local leaders formulate messages that can be remembered and acted upon. Instructions such as “do not litter” or “dispose of

waste properly” are ubiquitous in Indonesian public spaces. Their familiarity, however, does not automatically make them persuasive. Repetition can turn environmental appeals into routine linguistic background, while strongly prohibitive forms may position residents merely as rule followers rather than ecological actors. For this reason, attention to language is essential in community-based environmental education.

Environmental communication research has long shown that the presentation of an issue influences how audiences interpret its urgency, causes, responsibilities, and possible solutions. Framing selects particular aspects of experience and makes them cognitively salient (Entman, 1993; Goffman, 1974). In environmental contexts, Lakoff argues that frames matter because facts are interpreted through existing conceptual structures (Lakoff, 2010). Environmental problems therefore cannot be communicated effectively by assuming that the transmission of information alone will produce ecological action. The words, images, metaphors, and causal relations embedded in messages contribute to the conceptual organization of environmental reality.

Ecolinguistics provides a productive framework for examining this relationship between language and ecological understanding. The field investigates how linguistic patterns contribute to the ways humans conceptualize relationships among people, other living beings, material environments, and ecological systems (A. F. Fill & Penz, 2018; A. Fill & Mühlhäusler, 2001; Stibbe, 2021). In Stibbe’s framework, language encodes “stories we live by”: cognitive and discursive patterns that shape everyday assumptions about the world. These stories can take the form of ideologies, framings, metaphors, evaluations, identities, convictions, erasure, and salience. An ecolinguistic analysis does not merely identify linguistic forms; it evaluates how particular patterns encourage or inhibit ecological relationships.

Metaphor is especially relevant to environmental communication because abstract, complex, or distant ecological issues are frequently understood through more familiar domains of experience. Conceptual Metaphor Theory proposes that metaphor is not simply an ornamental device but a cognitive process through which one conceptual domain is understood in terms of another (Lakoff & Johnson, 1980). Expressions such as “the environment is our home,” “the river is the breath of life,” or “waste is a burden” organize ecological experience through source domains that carry particular values and inferences. If the environment is conceptualized as a shared home, care, belonging, and responsibility become available as entailments. If waste is conceptualized only as dirt or nuisance, the dominant response may be removal: the objective becomes making waste disappear from immediate sight.

The consequences of metaphorical and message framing have been discussed across environmental communication studies. Lakoff emphasizes that environmental frames activate moral and conceptual structures (Lakoff, 2010). Flusberg, Matlock, and Thibodeau show that metaphor can guide reasoning about large-scale problems, although effects depend on context and the specific mapping activated (Flusberg et al., 2017). Experimental work by Thibodeau and Boroditsky likewise demonstrates that metaphorical framing can influence reasoning about social problems (Thibodeau & Boroditsky, 2011). Reijnierse et al. similarly report that metaphor can support the comprehensibility and appreciation of environmental concepts, while cautioning against treating metaphor as a universally powerful device (Reijnierse et al., 2025). In waste communication specifically, message framing has been associated with residents’ willingness and intention to separate waste (Li et al., 2022). These studies suggest that



the design of environmental messages deserves attention alongside infrastructure and regulation.

However, much framing research examines media messages, policy communication, or experimentally designed campaigns. Less attention is given to the linguistic capacity of grassroots communicators who routinely address residents in neighborhood WhatsApp groups, community meetings, local announcements, and banners. In Indonesia, neighborhood leaders, commonly called ketua RT, occupy an important communicative position. They circulate administrative information, coordinate collective activities, remind residents about local concerns, and often mediate between government programs and everyday community practices. Their language is therefore a small-scale but recurrent form of public communication.

The community engagement program examined in this study was conducted in Kelurahan Bahagia, Bekasi, Indonesia. The activity responded to a local need for waste management education while retaining a linguistic focus through persuasive language and environmental metaphor. Rather than training participants in waste-processing technology, the program focused on how neighborhood leaders could formulate environmental messages that were less purely instructive and more relational, contextual, and memorable. Participants were introduced to distinctions between instructive and persuasive expressions and to conceptual frames such as THE ENVIRONMENT IS A SHARED HOME, WASTE IS A SHARED RESPONSIBILITY, and THE RIVER IS THE BREATH OF LIFE. They then practiced constructing short messages for local communication.

This pedagogical orientation is consistent with community-based environmental communication, which treats local participants not simply as recipients of expert knowledge but as producers and circulators of meaning. Participatory communication emphasizes dialogue, contextual knowledge, and the active involvement of communities in shaping messages relevant to their social realities (Servaes, 2008). In the present program, conceptual metaphors were not presented as formulas to be copied mechanically. They were used as scaffolds for discussing how different linguistic choices highlight different ecological relations. The training, therefore, linked linguistic awareness with the practical communicative responsibilities of neighborhood leaders. In the Indonesian context, Yuniawan et al. have also demonstrated the relevance of ecolinguistic analysis for examining how environmental discourse constructs relationships between language and conservation, although their focus was mass-media conservation news rather than grassroots message production (Yuniawan et al., 2023).

This study asks two questions: (1) How did participants initially conceptualize waste before the training? and (2) What forms of ecological framing appeared in environmental messages produced after training that introduced persuasive language and conceptual metaphor? The study does not claim to measure long-term behavioral change. Instead, it examines short-term changes in linguistic representation and message construction. This distinction is important because an immediate training output can demonstrate changes in discourse without proving sustained changes in waste management behavior.

The study contributes to ecolinguistics in three ways. First, it extends ecolinguistic analysis from established media and institutional texts to community training and grassroots message production. Second, it treats metaphor as pedagogical and communicative scaffolding, allowing analysis of how exposure to ecological frames may support broader forms of reframing even when participants' final messages are not all

metaphors in a strict conceptual-metaphor sense. Third, it foregrounds local environmental communicators as agents who can participate in the production of alternative ecological stories. In doing so, the study connects ecolinguistic theory with practical community-based language education and the broader conference concern with language as a force for sustainable and socially resilient communities.

METHOD

This study used a qualitative community engagement design. The research context was a community service program entitled “Strengthening the Role of Neighborhood Leaders in Waste Management through Persuasive Language and Environmental Metaphors,” implemented in Kelurahan Bahagia, Bekasi, Indonesia. The principal participants were neighborhood leaders and community representatives involved in local communication and environmental coordination. The activity was designed as an educational intervention rather than a controlled experiment. Accordingly, the analysis focuses on discourse produced at two points in the activity: initial perception elicitation and guided post-training message production.

The program consisted of four interconnected stages. First, participants responded to interactive Mentimeter prompts intended to elicit spontaneous perceptions of waste. The first prompt asked, “Apa yang Bapak pikirkan tentang sampah?” [What do you think about waste?]. The second asked, “Apa penyebab masalah sampah di lingkungan?” [What causes waste problems in the environment?]. Responses were displayed as word clouds. The first word cloud included expressions such as bau [smell], kotor [dirty], berantakan [disorderly], penyakit [disease], menimbulkan masalah [causes problems], tidak berguna [useless], harus dikelola [must be managed], butuh solusi [needs a solution], bank sampah [waste bank], pupuk kompos [compost], tenaga listrik [electricity], and sesuatu berharga [something valuable]. The second word cloud prominently displayed menimbulkan masalah [causes problems], bau dan kotor [smelly and dirty], and kumuh [slum-like/unkept].

Second, participants received interactive instruction on persuasive environmental language. The facilitator contrasted direct or instructive expressions with messages that foregrounded shared interests, health, family, and collective responsibility. For example, a prohibition such as “Jangan buang sampah sembarangan” [Do not litter] was compared with “Lingkungan bersih dimulai dari kepedulian kita bersama” [A clean environment begins with our shared concern]. The objective was not to prohibit directive language but to expand participants’ communicative repertoire.

Third, the training introduced conceptual metaphor in accessible terms. Drawing conceptually on Lakoff and Johnson and ecolinguistic framing in Stibbe, the facilitator explained metaphor as a way of understanding one experience through another familiar experience (Lakoff & Johnson, 1980; Stibbe, 2021). Three main examples were used: THE ENVIRONMENT IS A SHARED HOME, WASTE IS A SHARED RESPONSIBILITY, and THE RIVER IS THE BREATH OF LIFE. Participants discussed the meanings and possible persuasive implications of these frames. Humor and informal language were also discussed as possible strategies for making environmental messages more socially approachable, provided that the environmental action remained clear.

Fourth, participants engaged in guided message production. The documented rough outputs included four short environmental messages: “Lingkungan Bersih, Hidup Lebih Sehat” [Clean Environment, Healthier Life]; “Sungai Bersih, Warga Bahagia”



[Clean River, Happy Community]; “Sampah Dipilah, Lingkungan Indah” [Sorted Waste, Beautiful Environment]; and “Jaga Lingkungan untuk Anak Cucu” [Protect the Environment for Future Generations]. The accompanying explanations linked the messages respectively to family health, collective river cleanliness, waste sorting for a beautiful and comfortable environment, and environmental inheritance for future generations.

The data for this paper therefore comprise two sets: (1) lexical and phrasal responses represented in the pre-training Mentimeter word clouds and (2) four documented environmental messages produced in the post-training practice. Because the available pre-training data were preserved as word clouds rather than a complete exported response spreadsheet, this study does not report exact frequencies or percentages. Visual prominence is treated only as an indicator of salience in the Mentimeter display, not as a statistical measure. This methodological limitation is explicitly acknowledged to avoid over-quantification.

Data were analyzed in three stages. First, the initial responses were grouped according to semantic-evaluative orientation: sensory/physical evaluation, problem or nuisance framing, management/solution orientation, and resource/value orientation. Second, the post-training messages were analyzed for the ecological relations made salient, including health, collective well-being, environmental aesthetics, action, and intergenerational responsibility. Third, the two data sets were compared interpretively to identify changes in the dominant direction of framing. Conceptual metaphor analysis was applied only when a cross-domain mapping was reasonably supported. Messages that expressed causal or relational associations without clear cross-domain mapping were categorized as ecological framing rather than forced into metaphor categories.

The analytical framework combines Conceptual Metaphor Theory (Lakoff & Johnson, 1980) with Stibbe’s (Stibbe, 2021) ecolinguistic account of framing, metaphor, and evaluation. Evaluation was examined through lexical items that presented waste positively or negatively. Framing was understood as a cognitive-discursive structure that foregrounds a particular area of life and activates a characteristic pattern of reasoning. Metaphor was treated as a form of framing in which one domain of life is structured through another. The ecological evaluation used in this study favors frames that make human dependence on environmental systems, collective responsibility, and long-term ecological care salient.

The study is exploratory and bounded by the immediate training context. It does not compare a treatment and control group, measure longitudinal behavioral outcomes, or claim that linguistic reframing directly caused changes in waste-management practices. The analytical goal is narrower: to document how initial representations of waste differed from the kinds of environmental relationships foregrounded in guided message production after an ecolinguistically informed training session.

RESULTS AND DISCUSSION

Initial Conceptualization of Waste: Sensory and Problem-Oriented Framing

The pre-training data reveal that participants’ initial conceptualization of waste was strongly organized around immediate sensory experience and visible environmental consequences. The lexical items *bau* [smell], *kotor* [dirty], *kotoran dan jorok* [filth and disgusting dirt], *berantakan* [disorderly], and *kumuh* [unkempt/slum-like] evaluate waste through embodied and perceptually accessible properties. Smell and dirt are encountered directly in everyday environments; consequently, they provide an immediate cognitive

basis for judging waste negatively. This pattern can be described as sensory-negative evaluation.

From an ecolinguistic perspective, evaluation matters because repeated patterns of appraisal contribute to the stories through which ecological entities and processes are understood (Stibbe, 2021). Negative evaluation of waste is not inherently ecologically destructive. Indeed, recognizing pollution, disease risk, and environmental degradation can motivate protective action. The critical question is what type of action is made conceptually available. When waste is salient primarily as smell, dirt, and disorder, the most immediate response is spatial removal: move it away, hide it, or make it disappear from the local sensory field. Such a frame may fail to foreground where waste goes after it leaves the household or neighborhood.

The responses *menimbulkan masalah* [causes problems], *butuh solusi* [needs a solution], *harus dikelola* [must be managed], and *solusi pengolahan* [processing solution] form a second pattern: WASTE AS A PROBLEM REQUIRING MANAGEMENT. This is not necessarily a conceptual metaphor in every lexical realization, but it is clearly a problem-solution frame. The frame gives waste an undesirable status and makes intervention salient. The word *solusi* was visually prominent in the first word cloud, suggesting that at least part of the participant discourse already oriented toward action rather than passive complaint.

A particularly revealing result emerged from the second Mentimeter prompt. Participants were asked about the causes of waste problems, yet the prominent responses were *menimbulkan masalah* [causes problems], *bau dan kotor* [smelly and dirty], and *kumuh* [unkempt]. Semantically, these expressions describe effects, evaluations, or characteristics rather than underlying causes. They do not identify household consumption, inadequate sorting, irregular disposal, limited infrastructure, collective coordination, or other causal factors. The mismatch between the causal form of the question and the consequence-oriented form of the answers indicates that the participants' spontaneous discourse was strongly attracted to visible outcomes.

This consequence orientation is important for environmental communication. Frames direct attention to some dimensions of an issue while backgrounding others (Entman, 1993; Lakoff, 2010). In the pre-training discourse, waste itself occupied the position of the salient problem entity. Human actors were largely absent. Expressions such as *bau* [smell] and *kotor* [dirty] do not grammatically or conceptually specify who produces, mixes, discards, or manages the waste. In Stibbe's terms, this can be related to patterns of salience and erasure: the material manifestation of waste is highly salient, whereas the human practices and relationships producing the waste problem are less explicit.

At the same time, the initial data were not uniformly problem-oriented. Several responses suggested a resource or transformation frame: *pupuk kompos* [compost], *bank sampah* [waste bank], *tenaga listrik* [electricity], *sesuatu berharga* [something valuable], *caranya menghasilkan* [how to make it productive], and *solusi pengolahan* [processing solution]. These expressions conceptualize waste not as an endpoint but as material with possible future trajectories. The presence of such responses indicates an existing ecological and practical repertoire among participants. The training therefore did not introduce the idea of waste management into a conceptual vacuum. Rather, it worked with a mixed initial discourse in which negative sensory framing was dominant but resource-oriented alternatives were already available.



This mixed pattern supports a nuanced interpretation of community environmental awareness. It would be inaccurate to characterize participants as environmentally unaware. They recognized waste as a problem, associated it with health and environmental quality, and mentioned management alternatives. The issue was the dominant organization of spontaneous responses. The initial discourse foregrounded consequences more readily than relationships and responsibilities. This distinction became the pedagogical entry point for the training.

Table 1. Analytical grouping of initial waste perceptions

Initial lexical pattern	Analytical category	Ecolinguistic implication
bau; kotor; jorok; berantakan; kumuh	Sensory-negative evaluation	Waste is foregrounded through immediate unpleasant effects.
menimbulkan masalah; butuh solusi; harus dikelola	Problem–solution framing	Waste becomes an object requiring intervention and management.
pupuk kompos; bank sampah; tenaga listrik; sesuatu berharga	Resource/transformation orientation	Waste is represented as material with possible ecological or economic trajectories.
Responses to a cause question describe effects	Consequence-oriented framing	Visible outcomes are more salient than human practices and causal responsibility.

Conceptual Metaphors as Ecolinguistic Scaffolding

The training intervention responded to the pre-training pattern by shifting attention from the material unpleasantness of waste toward relationships among residents, place, health, waterways, and future generations. Conceptual metaphors were used as ecolinguistic scaffolding. The term scaffolding is important here because the metaphors were pedagogical supports for generating alternative perspectives, not predetermined categories into which every participant message had to fit.

The first frame, THE ENVIRONMENT IS A SHARED HOME, maps knowledge about home onto the environment. A home is conventionally associated with belonging, care, maintenance, comfort, and shared use. The modifier shared is particularly important because it resists an individualized model in which cleanliness ends at the household gate. During the training, participants were encouraged to consider the implication that “a comfortable home is not only inside the fence but also the surrounding environment.” This frame expands the spatial boundary of domestic responsibility.

From an ecolinguistic standpoint, the home metaphor can be beneficial when it increases care and belonging. Stibbe (2021) emphasizes that metaphors can encode ecological stories by imposing structures from one domain onto another. The ecological value of a metaphor depends on the ecosophy used to evaluate it. In the present program, the working ecosophy prioritized collective care, human dependence on healthy environments, and responsibility across spatial and temporal boundaries. THE ENVIRONMENT IS A SHARED HOME was therefore used to challenge the implicit “out of sight, out of mind” logic that can accompany sensory-negative waste framing.

The second frame, WASTE IS A SHARED RESPONSIBILITY, foregrounds social agency. Strictly speaking, the expression may function more as an ontological and moral framing than a highly elaborated metaphorical mapping. Its pedagogical value lies in relocating responsibility from an unspecified authority to the community. The pre-training responses made waste and its effects highly salient but rarely named human

actors. The responsibility frame restores agency by asking who sorts, discards, reminds, coordinates, and communicates.

The third metaphor, *THE RIVER IS THE BREATH OF LIFE*, uses the embodied source domain of breathing to conceptualize the ecological significance of a river. Breath is continuous, vital, and indispensable. Mapping breath onto a river increases the salience of dependence and vitality. It contrasts with a frame of the river as an empty channel or disposal space. This type of metaphor illustrates Lakoff and Johnson's argument that metaphor structures reasoning: if a river is understood as breath, contamination becomes conceptually associated with impaired life rather than merely an aesthetic inconvenience.

The use of metaphor in the training also aligns with research suggesting that metaphor can support environmental comprehension and engagement, although its effects should not be overstated. Flusberg et al. (Flusberg et al., 2017) demonstrate that metaphoric frames can shape reasoning about complex issues, while Reijnierse et al. (Reijnierse et al., 2025) show modest but meaningful benefits of metaphor in environmental science communication. The present study adds a pedagogical dimension: discussing metaphors explicitly may help community communicators notice that environmental messages always select a perspective, even when the wording seems ordinary.

Importantly, the intervention did not require participants to produce overtly poetic language. A common misunderstanding in community training is that metaphor means decorative or literary expression. Conceptual Metaphor Theory instead directs attention to mappings that can appear in everyday language. The facilitator therefore moved from familiar examples to practical message construction. Participants were asked what kind of relationship a message creates: Does it command? Does it invite? Does it make a consequence visible? Does it connect waste with family, health, place, or future generations? This question-based process positioned linguistic choice as part of environmental action.

The training also contrasted instructive and persuasive language. Directives remain necessary in some regulatory contexts, but local communication often depends on repeated interpersonal contact. A neighborhood leader who communicates through WhatsApp groups and community meetings must manage both information and social relations. Persuasive formulations can foreground common interests and shared identity. This is consistent with environmental framing research showing that message design influences responses to waste separation communication (Li et al., 2022). The present program translated this insight into a grassroots linguistic practice.

From Waste Problems to Ecological Relations: Post-Training Message Framing

The four documented post-training messages show a different dominant direction of representation from the initial Mentimeter responses. The messages do not focus on smell, dirt, or disorder. Instead, they connect environmental conditions and waste-management actions to desirable social and ecological outcomes. The shift is therefore not simply from negative words to positive words. More importantly, the post-training messages construct relations: environment–health, river–community well-being, sorting–environmental aesthetics, and present action–future generations.

The first message, “*Lingkungan Bersih, Hidup Lebih Sehat*” [Clean Environment, Healthier Life], foregrounds a causal or enabling relationship between environmental cleanliness and human health. This is not a clear conceptual metaphor because one domain is not explicitly understood through another. It is better categorized as health-



oriented ecological framing. The message makes human dependence on environmental conditions salient. Compared with the initial word *penyakit* [disease], which evaluates waste through a negative consequence, the post-training message reorganizes the same broad health concern into a positive goal. The desired state—healthier life—becomes the reason for environmental care.

The second message, “Sungai Bersih, Warga Bahagia” [Clean River, Happy Community], links river condition with collective well-being. Again, the phrase is not necessarily metaphorical. Its ecolinguistic significance lies in relational framing. The river is not represented as an isolated natural object. Its condition is discursively connected to the emotional and social condition of residents. This relation resonates with the training metaphor *THE RIVER IS THE BREATH OF LIFE*, but the participant output simplifies the mapping into a memorable parallel construction.

The parallel syntax of “Sungai Bersih, Warga Bahagia” also contributes to memorability. Two short noun-adjective units are placed in sequence, allowing the reader to infer a causal or associative connection without an explicit conjunction. The compression is useful for banners, WhatsApp graphics, and local announcements. Environmental communication at the neighborhood level often requires short forms that can circulate across media. Thus, linguistic economy becomes part of communicative accessibility.

The third message, “Sampah Dipilah, Lingkungan Indah” [Sorted Waste, Beautiful Environment], is the most clearly action-oriented output. Unlike the pre-training evaluations *bau* and *kotor*, this message includes an ecological practice: sorting. The passive form *dipilah* foregrounds the action and the waste object rather than a specific actor, but the message's structure implies that sorting is a pathway toward a desirable environmental condition. The rhyme-like repetition of the final /ah/ and /ah/ pattern in *sampah–dipilah* and the semantic contrast between waste and beauty contribute to slogan-like memorability.

The message also reframes waste management from removal to differentiation. To “throw away” waste conceptualizes waste as a homogeneous unwanted object moving out of the immediate space. To “sort” waste presupposes categories, material differences, and possible subsequent trajectories. In this sense, the lexical choice *dipilah* is ecolinguistically significant. It increases the salience of waste as differentiated material and aligns with the resource-oriented responses already present in the pretest, such as *compost* and *waste banks*.

The fourth message, “Jaga Lingkungan untuk Anak Cucu” [Protect the Environment for Future Generations], introduces an intergenerational frame. The expression *anak cucu* literally refers to children and grandchildren but conventionally extends to future descendants. The message expands the temporal horizon of environmental responsibility. Initial perceptions were dominated by present and immediate consequences—current smell, dirt, and disorder. The post-training message makes future beneficiaries salient. This is consistent with sustainability discourse that emphasizes meeting present needs while maintaining conditions for future generations (World Commission on Environment and Development, 1987).

Intergenerational framing can be persuasive because it draws on family relations that are socially and emotionally familiar. In the Indonesian community context, *anak cucu* carries affective force and can translate abstract sustainability into a concrete relational concern. The phrase does not require technical terminology such as “intergenerational equity.” It communicates a comparable ethical orientation through

everyday language. This illustrates why grassroots environmental communication should not be judged by the density of environmental terminology but by the ecological relationships it makes salient.

Taken together, the post-training messages demonstrate a movement from waste as an unpleasant object toward environmental care as a network of valued relations. Table 2 summarizes the dominant framing of each message. The term “shift” in this paper refers to the contrast between the dominant representational patterns in the two documented data sets. It does not imply that every individual participant changed in the same way or that the change persisted after the program.

Table 2. Ecological framing in documented post-training messages

Post-training message	Dominant framing	Ecolinguistic interpretation
Lingkungan Bersih, Hidup Lebih Sehat	Health-oriented causal framing	Environmental quality is connected to human well-being.
Sungai Bersih, Warga Bahagia	Collective well-being / relational framing	River condition is connected to community life.
Sampah Dipilah, Lingkungan Indah	Action-oriented framing	Sorting is foregrounded as an ecological practice producing a valued condition.
Jaga Lingkungan untuk Anak Cucu	Intergenerational framing	Present environmental care is connected to future generations.

The contrast between the two data sets can be represented as a movement from CONSEQUENCE to RELATION and ACTION. In the pre-training responses, waste was commonly understood through what it looks like, smells like, and causes in the immediate environment. In the post-training messages, environmental communication foregrounded what residents can do and why ecological conditions matter to valued aspects of community life. This pattern supports Lakoff’s argument that framing determines which inferences become natural within a discourse. When waste is framed primarily as dirt, removal is a natural response. When waste management is connected with health, shared happiness, beauty, and descendants, care and participation become more conceptually available.

The findings also support Stibbe’s emphasis on the search for beneficial stories to live by (Stibbe, 2021). The training did not attempt to erase negative environmental realities. Smell, dirt, and disorder are genuine dimensions of waste problems. An ecolinguistic intervention should not replace accurate negative evaluation with superficial positivity. Instead, the pedagogical task was to supplement consequence-focused stories with frames that restore agency, ecological interdependence, and temporal continuity. The post-training messages still concern cleanliness, but cleanliness is embedded in wider relationships.

This distinction is relevant to environmental campaigns that rely heavily on fear, disgust, or prohibition. Negative appeals can draw attention, but repeated emphasis on threat may not always provide an actionable sense of agency. Environmental communication scholarship has increasingly examined how framing, efficacy, values, and emotional orientation interact (Cox & Pezzullo, 2018; Nisbet, 2009). At the neighborhood level, a message must often function within an ongoing social relationship. The communicator is not an anonymous institution but a known community leader. A persuasive ecological message, therefore, needs to balance urgency with social proximity.

The participants’ outputs show the usefulness of familiar value domains. Health, happiness, beauty, and family are not technical waste-management categories, yet they



provide motivational bridges between ecological practices and everyday priorities. Conceptual metaphor and framing are useful precisely because they allow environmental communication to connect unfamiliar, abstract, or routinely ignored issues with familiar structures of value. In this program, the most successful outputs were not those containing the term “ecology” but those making ecological dependence understandable through ordinary community concerns.

The findings further suggest that conceptual metaphor instruction can function as a form of critical language awareness. Participants were invited to compare “Buang sampah!” [Throw away the waste!] with more relational formulations. The point was not that imperative grammar is linguistically wrong. Rather, the comparison revealed that grammatical mood, lexical selection, and framing position affect audiences differently. A command constructs an authority–recipient relation; an inclusive phrase such as “kepedulian kita bersama” [our shared concern] constructs a collective identity. This awareness can help neighborhood leaders choose forms according to communicative purpose.

Such language awareness is compatible with community-based language education. Language education need not be restricted to formal classrooms or literary literacy. Community leaders regularly perform genre-based communication: announcements, reminders, invitations, slogans, captions, and meeting speeches. Training these genres through an ecolinguistic lens can make language education socially situated and environmentally relevant. The present activity, therefore, intersects ecolinguistics, environmental communication, and community literacy.

The local digital context is also significant. WhatsApp groups are routine channels for neighborhood communication in Indonesia. Short environmental messages can be copied, adapted, repeated, and combined with digital announcement templates. This circulation potential makes concise framing particularly important. A long technical explanation may be appropriate in a workshop, but the message that travels afterward often takes the form of a short sentence. “Sampah Dipilah, Lingkungan Indah” condenses an action and a valued outcome into four words. Its ecological potential lies partly in this portability.

Nevertheless, portability creates risks of oversimplification. A slogan cannot replace infrastructure, reliable waste collection, access to sorting facilities, or policy support. Ecolinguistic framing should therefore be understood as one component of waste-management intervention. The language-centered approach in this study does not claim that better wording solves material waste problems. Rather, it addresses a communicative layer of environmental action: how community actors make practices meaningful, assign responsibility, and sustain attention.

The pre-training response *solusi* [solution], which was visually prominent, is useful in this regard. Participants were already seeking solutions. The training's contribution was to broaden what counts as a communicative solution. Instead of viewing environmental messages as neutral containers for instructions, participants considered how wording could connect waste practices with shared values. This represents a shift in metalinguistic awareness: language itself became visible as a tool of environmental coordination.

The role of humor, discussed during the training, also deserves brief consideration. Examples such as “Cinta boleh kandas, buang sampah jangan sembarangan” [Love may fail, but do not dispose of waste carelessly] were used to demonstrate how familiar social humor can attract attention. Humor was not part of the

four documented final outputs and is therefore not analyzed as a finding. However, its pedagogical use helped illustrate audience design. Environmental communicators must consider not only semantic accuracy but also tone, memorability, and local communicative culture. Future research could examine whether humorous environmental framing increases message sharing or recall in neighborhood digital groups.

A further contribution of this study is methodological caution regarding metaphor. Environmental discourse research sometimes labels any figurative-sounding or positive ecological phrase a metaphor. The present analysis distinguishes metaphor from broader framing. “The river is the breath of life” involves a cross-domain mapping from bodily respiration to river vitality and can reasonably be analyzed metaphorically. “Clean Environment, Healthier Life,” by contrast, states an ecological relationship without a clear cross-domain mapping. Treating both as metaphors would weaken analytical precision. By positioning conceptual metaphors as scaffolding, the study can recognize that metaphor instruction may stimulate non-metaphorical but ecologically richer framing.

This distinction also clarifies the nature of the observed change. Participants did not simply reproduce the training metaphors. None of the four documented messages directly repeats THE ENVIRONMENT IS A SHARED HOME or THE RIVER IS THE BREATH OF LIFE. Instead, the outputs recontextualize the broader relational logic introduced in the training. The river becomes linked to community happiness; environmental care becomes linked to descendants. This suggests that pedagogical exposure to metaphor may encourage reframing beyond lexical imitation.

The results should be interpreted within the limitations of the data. First, the Mentimeter responses were available as word-cloud images rather than a complete raw-data export. Exact response frequencies and participant-level trajectories could not be reconstructed. Second, the four post-training messages represent documented group outputs and do not provide a one-to-one pre/post comparison for individual participants. Third, the study examines immediate linguistic production and not longitudinal behavior. Future programs should preserve raw Mentimeter exports, collect individually coded pre- and post-training texts, conduct delayed follow-up, and examine whether messages are actually circulated in community channels.

Despite these limitations, the data are sufficient to identify a meaningful discursive contrast. The initial discourse foregrounded sensory negativity and visible consequences; the guided outputs foregrounded relations, actions, and future beneficiaries. For ecolinguistics, this small-scale community context demonstrates that the analysis and redesign of environmental stories can occur outside media institutions and formal policy discourse. Neighborhood leaders are everyday environmental communicators, and their linguistic choices can participate in the local circulation of ecological values.

The community training model can be adapted in future programs through a five-step cycle: eliciting existing environmental frames, identifying what those frames make salient or erase, introducing alternative conceptual metaphors, producing messages for real community genres, and evaluating message circulation and reception. Such a cycle would preserve the critical dimension of ecolinguistics while giving participants a practical communicative product. It also aligns with participatory communication by treating local discourse as the starting point rather than imposing a fully predetermined campaign vocabulary.



More broadly, the findings point to the role of language in sustainable humanity. Sustainability is often discussed through global goals, institutional policies, and scientific indicators, but it is also negotiated in mundane acts of communication. A reminder in a WhatsApp group, a banner near a drainage channel, or a short message before a neighborhood clean-up can reproduce an old story of prohibition or introduce a more relational story of shared ecological life. The scale is small, but the repetition of everyday frames is precisely what makes them culturally significant.

CONCLUSION

This study examined initial waste perceptions and post-training environmental messages in an ecolinguistically informed community engagement program for neighborhood leaders in Kelurahan Bahagia, Bekasi. The pre-training Mentimeter data showed that participants predominantly represented waste through sensory-negative and problem-oriented expressions, especially smell, dirtiness, disorder, and nuisance. Even when asked about causes, participants tended to describe visible consequences. At the same time, resource-oriented expressions such as compost, waste banks, electricity, and valuable material indicated the presence of alternative understandings.

The training used persuasive language and conceptual metaphors as communicative scaffolding. Frames such as THE ENVIRONMENT IS A SHARED HOME, WASTE IS A SHARED RESPONSIBILITY, and THE RIVER IS THE BREATH OF LIFE were introduced to expand the ecological relations available for message construction. The four documented post-training messages did not simply reproduce these metaphors. Instead, they linked environmental management with health, collective well-being, environmental beauty, action, and future generations. The central finding is therefore a discursive shift from consequence-oriented representation toward relational, action-oriented, and future-oriented ecological framing.

The study does not claim that a single training session changed participants' long-term environmental behavior. Its contribution is to show that ecolinguistic concepts can be translated into practical community language education and can support the redesign of grassroots environmental messages. Conceptual metaphor is particularly valuable when used not as a decorative formula but as a scaffold for critical reflection on what a message foregrounds, what it backgrounds, and what kind of ecological relationship it invites audiences to imagine.

Future studies should use complete pre- and post-training textual datasets, participant-level coding, delayed follow-up, and analysis of actual message circulation in neighborhood digital channels. Such research could test whether ecological reframing affects message recall, sharing, perceived persuasiveness, and waste-management participation. For community programs, the immediate implication is clear: environmental education can include linguistic capacity building. Helping local leaders communicate ecological responsibility in contextual and memorable ways is a modest but meaningful component of sustainable community engagement.

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