Language and Ecology in Prophet Muhammad's Hadiths

By

Dr. Abeer Abd El-Aal El-Sayed Sultan

Department of English Language, Literature, and Simultaneous Interpretation, Faculty of Humanities, Al-Azhar University, Cairo, Egypt.

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Department of English Language, Literature and Simultaneous Interpretation, Faculty of Humanities, Al-Azhar University, Cairo, Egypt.
E-mail: Abeersultan.el20@azhar.edu.eg

ABSTRACT:

Ecolinguistics is the study of the relationship between language and ecology. Environment related concepts like *ecology*, *green*, and *environmental awareness* have been formulated in the modern world to highlight problems pertaining to the state of the environment surrounding us. However, a closer analysis of some Hadiths of Prophet Muhammad on environmental issues which were said hundreds of years ago reveals that he was an advocate of environmental protection and addressed current environmental issues wisely. The study adopts an eclectic ecolinguistic approach using Stibbe's (2015) model of ecolinguistics and Halliday's (1994, 2004) Systemic Functional Grammar to highlight the Prophet's beneficial approach to the ecosystem and, hence, contribute to the communication of "Eco-Islam" (i.e., Islamic environmental ethics). Analysis of some of the Prophet's Hadiths on the environment shows a dominant ecological ideology based on sustaining nature's growth and preserving natural resources. Accordingly, Prophet Muhammad is a pioneer when it comes to preserving the environment. The present study is but an attempt against those who are pushed to insult Prophet Muhammad and claim freedom of expression.

Keywords*:* Ecolinguistics, Eco-Islam, Hadiths of Prophet Muhammad, Stibbe's ecolinguistic model, Halliday's Systemic Functional Grammar.

اللغة والبيئة فى أحاديث النبى محمد

عبير عبد العال السيد سلطان.

قسم اللغة الإنجليزية وآدابها والترجمة الفورية، كلية الدراسات الإنسانية، جامعة الأزهر، القاهرة، مصر.

البريد الإلكتروني: Abeersultan.el20@azhar.edu.eg

ملخص:

علم اللغة البيئى هو دراسة العلاقة بين اللغة والبيئة. صيغت المفاهيم المتعلقة بالبيئة مثل *علم البيئة والتوعية بقضايا البيئة والوعى البيئى* في العالم الحديث لتسليط الضوء على المشكلات المتعلقة بالبيئة المحيطة بنا. ومع ذلك، فإن التحليل الدقيق لبعض أحاديث النبي محمد حول قضايا البيئة التي قيلت منذ مئات السنين يكشف أنه كان من دعاة حماية البيئة وتناول القضايا البيئية الحالية بحكمة. تتبنى الدراسة منهجًا لغويًا بيئيا انتقائيًا باستخدام نموذج ستايب (٢٠١٥) لعلم اللغة البيئى والقواعد الوظيفية النظامية لهالاداى (2004،١٩٩٤) لتسليط الضوء على نهج النبي المفيد للنظام البيئي، وبالتالي المساهمة في نشر"آداب الإسلام فى التعامل مع البيئة" (الأخلاق المتعلقة بالبيئة فى الإسلام). يُظهر تحليل بعض الأحاديث النبوية عن البيئة أيديولوجية بيئية سائدة تقوم على الحفاظ على نمو الطبيعة والموارد الطبيعية. وبناءً على ذلك ، يعتبر النبي محمد رائدًا عندما يتعلق الأمر بالحفاظ على البيئة. الدراسة الحالية ليست سوى محاولة ضد أولئك الذين يتم دفعهم لإهانة النبي محمد والمطالبة بحرية التعبير.

الكلمات المفتاحية: علم اللغة البيئى، آداب الإسلام فى التعامل مع البيئة، أحاديث النبى محمد، نموذج ستايب اللغوى البيئى، القواعد الوظيفية النظامية لهالاداى

1. Introduction

Although we are living in an era that is witnessing a lot of efforts exerted for establishing global standardization of environmental regulations, the outcomes are still unsatisfactory in this respect. Implying that no tangible effects can be achieved by formal regulations whose enforcement mostly pose great challenges, Abdelzaher and Abdelzaher (2017) elicit a new alternative. They are of the view that the reliance in Arab countries on formal regulations solely to improve the ecological awareness situation is not enough; rather it should be complemented by informal ones. In this respect, they suggest "developing environmental ethics of individuals" (p. 357) since they are the agents who will implement any environmental policy. The mechanism they suggest for such ethics is what they call "Eco-Islam" phenomenon (p. 357). They believe that the suggested 'environmental ethics of individuals' can be built and solidified via the spread of norms embedded in the religious teachings.

The present study is but an attempt to contribute to further spread of that "Eco-Islam" phenomenon, *linguistically* speaking. Indeed, the body of research that has been conducted on that issue from a theological perspective in Arabic studies is more extensive than that which tackles it from a linguistic perspective. To achieve the desired impact in our modern world, there is a need for the two perspectives to go hand in hand. There is a need for stimulating further linguistic research body that is compatible to the great efforts of Muslim religious scholars in this respect of preserving our natural resources. As far as ecolinguistics is concerned, analysis has been conducted to the Prophet's Hadiths with the aim of investigating the problems of translation (Halima, 2018), not to highlight the distinctive linguistic aspects of the Prophetic texts themselves (the main concern of the present study).

In our modern world, we are in need for beneficial stories from different languages to raise the people's awareness of ecology and to encourage them to develop more environment friendly attitudes. One of the miracles of Islam as a religion is that it is complete and perfect for all times. Whatever issue or phenomenon existing in our modern world is discussed in the two sources of Islamic Shariaa: the holy Qur'an and the Prophet's Hadiths. Being one of the main sources of Shariaa alongside the holy Qur'an, Prophet Muhammad's Hadiths have strong influence on Muslims' behavior.

Although the call for protecting the environment from all kinds of pollution is common in our modern world, it has been suggested by Prophet Muhammad

hundreds of years ago. In his Hadiths related to environmental issues, Prophet Muhammad sets a general rule for all humans living on earth; that is, not to cause harms of any kind to the universe. His words seem to seek to mitigate environmental problems and increase awareness of the importance of sustaining nature development. In other words, the Prophet's discourse is a defense of nature and its elements.

Focus of discourse analysts should be discourse that inspires and effects social change (Martin, 1999). Prophet Muhammad's Hadiths on environmental issues represent this typical discourse. His discourse underlies stories that aim to support ecological protection. It calls for the people to go green and promote green practices. The present study is an attempt to show that the instructions given by Prophet Muhammad in his discourse on environmental issues definitely aim at building "sustainable societies, which protect their ecological foundations" (Stibbe, 2017, p. 497).

Analyzing language of Prophet Muhammad's discourse from an ecolinguistic perspective is an attempt to remind the people of the values of the Prophet's discourse that every Muslim should keep in mind. Ecolinguistics is a sub-discipline of modern applied linguistics. It implies a relationship between the physical environment and language and takes into account the ecological contexts in which societies are embedded (Nash, 2016). The study adopts the ecolinguistic model of Stibbe (2015) who believes that the aim of ecolinguistic analysis of language is to reveal stories we live by and judge those stories according to a certain ecolinguistic philosophy; i.e., "ecosophy" (p.183). Depending on the ecosophy underlying any piece of communication, it can be considered as being eco-friendly or not. These stories include ideological frames that reveal evaluation, metaphor, and identities. Complementary to Stibbe's model in judging discourse as either ecologically beneficial or harmful is Halliday's Systemic Functional Grammar (1994, 2004).

2. Aim of the study

The study aims at reinforcing the modern concept of "Eco-Islam" (Abdelzaher & Abdelzaher, 2017) by linguistically analyzing Prophet Muhammad's Hadiths on the environment that are but a positive call for positive environmental ethics, in addition to the holy Qur'an. The researcher aims at highlighting the discursive characteristics of some of Prophet Muhammad's Hadiths on the environment from a linguistic perspective to reveal the underlying ideological stories and disseminate

their ecological stance. Therefore, the analysis attempts to answer the following research questions:

1. What are the distinctive linguistic devices employed in Prophet Muhammad's discourse on environmental issues?
2. To what extent is the discourse of Prophet Muhammad on the environment ecologically beneficial and what is the ecosophy/logic underlying it?
3. What could be the implications of such ecosophy in our modern world?

3. Data collection

In Islam, the authority of Hadith as a source for religious law and moral guidance ranks second to that of the Qur'an. The data selected for analysis consists of nineteen of Prophet Muhammad's Hadiths on environmental issues taken from the most reliable sources of Hadith collection compiled by reliable Hadith scholars: Sunans and Sahihs of Al-Bukhari, Muslim, Al-Albani, Ahmad, Abu Dawud, Al-Suyuti, Ibn Majah, Al-Tabrani, and An-Nasa'i. All the selected Hadiths are sound or hasan (i.e., accepted ones) that are transmitted through reliable chains of narrators. Translation into English is provided for the selected Hadiths (my translation).

4. Methodology

In the present study, Prophet Muhammad's Hadiths are analyzed in terms of the theoretical framework of Stibbe's (2015) standards and in the light of Halliday's Systemic Functional Grammar (1994, 2004). Stibbe (p. 34) is of the view that ecological ideologies can be unlocked by conducting an analysis in terms of the following linguistic features:

- The stories that are framed and their ecological ideological significance.
- Vocabulary and connotation of words.
- The relation between words, i.e., lexical relations as synonymy, antonymy and hyponymy.
- The relation between clauses as reasoning and consequences.
- Grammatical features as active/passive choices.
- Halliday's Systematic Functional Grammar

4.1. Stibbe's ecolinguistic framework

Stibbe (2015) has provided an important ecological framework in terms of which ecological discourse can be identified as either *beneficial* or *destructive*. He

is of the view that ecolinguistics helps to uncover destructive discourses and, hence, to raise critical language awareness that such discourses have negative impact on our environment. He has introduced an ecolinguistic framework based on the idea that the ecological stance of a discourse is established through language and can be revealed by analyzing the linguistic features of the text.

Stibbe (2015) suggests that all texts underlie certain stories (mental models or structures) and that we experience them without consciously selecting them or becoming aware of the fact that they are stories. We experience these stories in our daily lives so that they can be rightly regarded as "stories-we-live-by" (p. 60). Stibbe's stories are not traditional narratives but mental models which exist in between the lines of discourses and are cognitive in nature. These stories affect people's behavior and the choices they make in their lives. Stibbe identifies eight different forms of stories which are *framing*, *evaluation*, *metaphor*, *ideology*, *identity*, *conviction*, *erasure*, and *salience*; among which the present study is interested in stories of *framing*, *ideology*, *evaluation*, *metaphor*, and *salience*.

First, according to Stibbe (2015), *framing* is the use of a story from one area of life to explain how another area is conceptualized. A frame is a story about an area of life that is cognitively received through particular "trigger words" (p.17) which Stibbe identifies as words that bring to the recipients' minds a specific idea. Every frame involves a *source frame* and a *target domain*. For example, the sentence "Climate change is a time bomb" underlies a source frame which is 'a time bomb' and a target domain which is 'climate change' (p. 67). Furthermore, framing can take the structure of a problem-solution, a predicament-response, or any other forms, with different interpretation associated with each frame.

Second, the story of *ideology* is identified by Stibbe as that one which is shared by a certain group of people about how the world was, is and should be. Third, the story of *evaluation* has to do with using appraisal patterns to represent positive or negative attitudes towards an area of life as being good or bad. Stibbe is of the view that appraisal items can be explicitly stated or implicitly revealed by employing words of positive or negative connotations or by using metaphor, respectively. Fourth, Stibbe identifies the story of *metaphor* as a type of framing where the source frame and target domain distinctively differ from each other. It is the use of a specific concrete frame to think about a specific area of life, as in the case of the example "Climate change is a time bomb" where the source and target domains are totally distinctive from each other.

Fifth, the last story to be employed in the analytical framework of the present study is that of *salience* which is identified by Stibbe as a story which instills in the recipients' minds that something is important or worthy of consideration. Stibbe identifies the technique of *foregrounding* an area of life as a pattern of salience. *Abstraction*, *hyponymy*, and *transitivity* are some other patterns of salience identified by Fowler (1991) and are also adopted by the present study.

Abstraction is a lexical strategy based on constructing discourse by general rather than specific lexical items in order to divert the attention from the concrete to the abstract. This device is also known as *generalization* because individual entities are represented as indistinguishable parts of a larger group. *Hyponymy* is a lexical relationship between a generic superordinate term and a specific instance of it (cohyponym), just as the relation between the superordinate term 'flower' and the cohyponyms 'rose', 'tulip', etc. (Palmer,1981). As for transitivity, it has to do with analyzing texts in terms of grammatical interrelations within sentences to reveal hidden ideologies inherent in the choices made.

Indeed, Stibbe's framework is a cognitive one that integrates the idea of the stories we live by from human ecology with Critical Discourse Analysis (CDA) that has been introduced by Halliday (1994). As pointed out by Stibbe (2015), Halliday's CDA can be used in the field of ecolinguistics to interpret ecological discourse. This integration goes in harmony with the view of Li et. al (2020) that ecolinguistics research can be done from three perspectives: discourse analysis, applied linguistics, and theoretical linguistics.

4.2. Halliday's Systemic Functional Grammar

Halliday (1994) believes that the descriptive framework of language involves three levels of meaning which he calls "metafunctions": ideational/ experiential, interpersonal and textual. Each meaning is realized through choices from major systems of grammar. The ideational/ experiential meaning is realized through *transitivity* and *clause Complex* choices, the interpersonal is realized through the *mood* and *modality* choices, and the textual is realized through the *theme* and *cohesion/coherence* choices. Of the three metafunctions identified by Halliday, the present research focuses on the ideational/experiential and the interpersonal ones to interpret the Prophet's ecological discourse. One of the important realizations of the ideational/experiential meaning on which the present study focuses is that of transitivity. Halliday (1994) believes that language analysis in terms of transitivity can reveal hidden attitudes and ideologies.

4.2.1. System of Transitivity

Ideational/experiential metafunction is concerned with how language users represent reality of the world around them. It can be realized via the system of transitivity which analyzes texts in terms of processes (verbs) and their associated participants (Halliday & Matthiessen, 2004). Processes are divided into six types by Halliday and Matthiessen. First, "Material processes" (p.180) are processes of doing and are associated with an *Actor/Agent* (who does the action or causes something to someone, respectively), a *Goal* (the participant to whom the process is directed) or a *Beneficiary* (that benefits from the action). For example, "The lion caught the tourist" where 'the lion' is the actor and 'the tourist' is the goal. Second, "Mental processes" (p.197) are processes of sensing that include perception, thinking (cognition), or feeling. They require a *Senser* and a *Phenomenon*.

Third, "Behavioral processes" (p.248) are those concerned with psychological and physiological behavior like smiling, crying, dreaming, breathing, etc. They require a *Behaver* and sometimes a *Phenomenon*. For example, "The little girl smiled". Fourth, "Relational processes" (p.211) require two participants called *Token/Carrier* (the identified) and *Value/Attribute* (the identifier), just as the case with "I am the villain" where "I" is the *Token* and "the villain" is the *Value* (p.231). Fifth, "Verbal processes" (p.252) require a *Sayer* and a *Receiver* (the one to whom the saying is directed). Sixth, "Existential processes" (p.256) denote that something exists, and they require one participant assigned the role of an *Existent*.

4.2.2. Interpersonal metafunction

The interpersonal metafunction is concerned with language users' attitude, evaluation and commitment towards a certain phenomenon. One of the important realizations of interpersonal meaning is that of *mood* which has to do with the structure of the speech situation. The mood structure of any sentence is either *declarative*, *interrogative* or *imperative*. The speaker's choice between delivering the intended message through informing, questioning or commanding might be of ideological significance (Halliday & Matthiessen, 2004).

5. Literature Review
5.1. Ecology and Language

'Ecology' is broadly identified as the study of the relationship between living organisms, including humans, and their physical environment to understand the connection between plants and animals and the world around them (Dash, 2019).

On the basis of the idea that language should be studied in its social situation which determines the appropriacy of the language used, a relation is believed to exist between language and social context. This relation has led to a wide range of interdisciplinary fields as psycholinguistics, sociolinguistics, as examples. One of those areas of correlation between linguistics and social context is that which covers the relation between language and ecology. Haugen (2001, p.57) coined the term *language ecology* to cover the study of the interactions between any given language and its environment.

Within the framework of the relation between language and ecology, Naess (1973) has criticized what he calls "shallow ecology" that is concerned only with the issues of pollution and resource depletion, and the "man-in-environment image" (p. 95). By so doing, ecologists "deliberately ignore the wider perspectives" (p. 97). Therefore, he has introduced the term "deep ecology" to stand in contrast to "shallow ecology" (p. 95). "Deep ecology" rejects the then widely spread concentration on the "man-in-environment image" in favor of a "total field image" where more concern is attached to other organisms in the environment and to the relation and interaction between man "*and"*, rather than "*in"*, the environment. Consequently, he has introduced the term "ecosophy" (p. 99) to refer to the philosophy of ecological harmony or equilibrium.

Naess suggests also that ecosophy may vary and have various value priorities among ecologists. In a similar vein, Stibbe (2015) suggests that each ecolinguist may have a specific ecosophy (his personal philosophical principles) that reflects his values and priorities. When language is used as a tool to promote in the minds the importance of protecting the future by protecting the environment, this is an "ecoliterary style" (Uyanne et al., 2014, p. 164).

Building upon the effort of Naess to widen the scope of 'ecology', an attempt to integrate linguistics and ecology to pay more attention to the interaction between man and his environment has been made by Døør and Bang (2000). They believe that linguistics is a "life-science" that should be concerned with "human linguistic communication" (p. 54) and be inspired by ideas of Biology. More specifically, it should be concerned with those sciences of *medicine* and *biology*. On the one hand, Døør and Bang include modern biology as belonging to the science of ecology because it is oriented towards living systems and their relationships *with* and *in* the surrounding environment. On the other hand, they include medicine because it is oriented towards the development of healthy life forms of human beings in their environment.

One of the attempts to practice linguistics as a life-science, as outlined by Døør and Bang, is the emergence in modern 21st Century linguistics of that branch of *ecolinguistics* as a reaction to a shift in the relation between language and ecology. Contributing to the new approach, Bang and Døør, since the 1970s, developed *The Odense School of Ecolinguistics* that propagated the consideration of language as a constitutive part of human activities and, consequently, part of social practices (Bundsgaard & Steffensen, 2000, p. 9).

5.2. Ecolinguistics: roots, definition and basic models

The word "ecolinguistics" consists of the two words 'eco' (from ecology) and 'linguistics'. The word ecology is originally derived from the Greek word OIKOS" which means situating the individual as a participant within an environmental context (Bowers, 2008, p. 2). 'Ecolinguistics' as a term covers a rich variety of similar theoretical approaches concerned with the interactions between language and the environment in which it occurs. Echoing the aforementioned view that linguistics should account on human social practices, Bundsgaard and Steffensen (2000) define ecolinguistics as being "the study of the interrelations of bio-, socio and ideo-logical dimensions of language" (p. 11).

As pointed out by Steffensen (2007, p.5), the term 'ecolinguistics' was originally coined by the German biologist Ernst Haeckel in (1866) without having language in mind. Haeckel has restricted the definition of 'ecolinguistics' to the study of the relation between organisms and their surrounding environment in terms of conditions of existence. However, an extension of that limitation took place at the hand of the Norwegian-American linguist Haugen (1972) who has widened Haeckel's concept to include language in the overall landscape of ecolinguistics. In this respect, Haugen was influenced by the Norwegian philosopher Naess and his previously referred to views about "shallow" and "deep" ecology.

Interestingly, though the definition of ecolinguistics has taken its starting point in Haeckel's biological examination of the conditions of existence and Naess' philosophical one of the scope of the word 'ecology', it later became the interest of pure linguistics. The beginning of the change came at the hand of Haugen, yet the evolution of ecolinguistics within the linguistic community goes back to Halliday's (1990) seminal speech to the ninth world congress of AILA in Greece that was reprinted under the title "*New ways of meaning: The challenge to applied linguistics*" in Halliday (2001) (Fill, 2017, p. 4).

Despite the fact that Halliday did not explicitly refer to the term 'ecolinguistics' in his seminal work, he has discussed many important issues related to language and environmental issues that inspired other linguists. Halliday has attempted to make linguistics more relevant to concerns of the twentieth century by giving much consideration to its role in addressing ecological issues. He has been particularly concerned with the widespread destruction of ecosystems. He purports the view that grammatical and lexical constructions of texts reflect human impact on the environment which should be the problem of applied linguists also, not just biologists and physicists.

Following Halliday, subsequent studies of linguists have paid attention to ecolinguistics and to ecological contexts of language. Thus, Bang and Døør (1993) adopt the view that ecolinguistics is a part of critical applied linguistics concerned with revealing the ways in which language and linguistics are involved in the environmental problems. Relatedly, Harré et al. (1998) suggest that eco-critical discourse analysis is based on applying critical discourse analysis to texts about the environment to reveal underlying ideologies.

Having the aim of revealing individual inclinations towards the environment, Bundsgaard and Steffensen (2000) represent ecolinguistics as a science "about language as a whole" (p. 33) that takes as its yardstick pragmatic, semantic, syntactic, morphologic, and phonetic dimensions (or even any other dimension) that enable ecolinguistics to provide a "healthy basis for thinking and communicating about language" (p.33). They have developed a model based on critically investigating a text in the light of deictic, modal, metaphoric and relational dimensions of morphemes which they identify as being intra-, inter-, and extra-textual relations. They believe that such an investigation can depict ideological aspects of meaning and sense.

In line with these views, Derni (2008) further reiterates that ecolinguistics is concerned with revealing the interest of language users in the physical environment and their ideological environmental stance as members of a particular speech community. In addition, Stibbe (2015) defines ecolinguistics as being a branch of linguistics concerned with exploring patterns of language that influence how people think about the world and how they deal with it. It examines the linguistic devices through which the world is constructed. These linguistic devices are ecological frameworks that aim at considering the role of texts in preserving or undermining the conditions of life. He believes that such textual analysis helps to unravel the text producers' ecosophy.

In agreement with Stibbe's views, Fill (2017) believes that ecolinguistics has to do with criticizing forms of language that destroy ecology in order to motivate the people to protect the environment. Reflecting the same view of Halliday, Goatly (2017) believes that lexicogrammar of texts affects our perception of the environment and the way we deal with it. Consequently, "lexicogrammar and the environment are in a dynamic relationship mutually affecting each other as interdependent systems" (p.227). In like manner, Hughes (2018) believes that ecolinguistics aims at examining environmental discourses to explore whether they call for sustaining and protecting the environment or not.

The same assumption is echoed in Dash's (2019) statement that ecolinguistics meets the need of a linguistics that can protect ecology through language. Environmental discourse that calls for sustaining nature and protecting the environment (oral text, written text, and images) is called *green* discourse (Mühlhäusler, 2019).

To sum up, the term ecoloinguistics underwent a birth cycle that has started from biology, philosophy and ended up with language. Within ecolinguistic research field, various theoretical models emerged (Steffensen, Stibbe, etc.). Haugen and Halliday are the instigators of the emergence of "linguistic ecology" (Steffensen, 2007, p. 8).

5.3. Ecological studies in Arabic linguistics

In Arabic linguistics, 'ecological' studies and studies on 'ecolinguistics' have different implications in researches on Arabic from that in English. They are exchangeably conducted either to indicate sociolinguistic changes or problems of translation. In terms of the former, on the one hand, they are confined to the study of all language variation related phenomena and the social parameters that determined that variation. As acknowledged by Cadora (1992, p.1), the notion of "ecolinguistics" is understood as equivalent to "compatibility" and "lexical diffusion" in studies on Arabic. Thus, attention of some of the studies that call themselves 'ecological' in nature is paid to the phenomenon of language variation from one dialect area to another in the Middle East (e.g., Suleiman, 2008), to the transitional stages in Arabic dialects (e.g., Cadora, 1992; Al-Sharkawi, 2010), or to how the relationship between people and their natural environment is reflected in indigenous languages in the Middle East (e.g., Watson et al, 2022).

On the other hand, other studies conducted 'ecological' analyses in relation to problems of translation from Arabic language and culture into English language and culture (e.g., Halimah, 2018; Shousha, 2021; El-Wakil, 2021). In these studies, attention is paid to the problems associated with translating Arabic ecological terms of literary and religious texts (translations of the Holy Quran and the Prophetic Hadiths). In their analyses, they all made use of western models. By focusing on problems of translation, such studies restrict their use of the term to the western biological definition that sees ecolinguistics in the light of an interaction of organisms to their physical environment and to one another.

Nevertheless, some other studies adopt an education-based approach by focusing on integrating EE (environmental education) in some specific Arab states. For example, Mliless and Larouz (2018) cover that issue of the absence of environmental education in Morocco in particular, calling for dissemination of the integration all over the Arab world.

As for theology, it was only in the 1960s that academic scholars began to adopt the topic of Islamic environmental theology (Zbidi, 2013). Within the framework of theology, profuse studies are conducted on the relation between language and ecology in Arabic, prioritizing climate change issue on humanitarian and societal levels. Their main focal point is highlighting the Islamic teachings and perspectives on environmental sustainability.

6. Analysis and discussion
The analysis is conducted first in terms of Stibbe's (2015) ecolinguistic framework and then in terms of that of Halliday (1994, 2004).

6.1. Type of stories underlying the Hadiths
6.1.1. Framing
The most dominant story underlying the selected Hadiths is that of *framing* which is based on the use of a source frame (stated knowledge) to structure a target domain based on trigger words that model a certain source frame to the mind. Target domains in the Hadiths are implicit. They are identified on contextual bases, whether linguistic (i.e., trigger words) or non-linguistics (i.e., the illocutionary force behind them). The domains of the underlying frames are highlighted as follows:

Hadith 1:

عن أبى سعيد الخدرى– رضى الله عنه– عن النبى صلى الله عليه وسلم أنه قال: "إياكم والجلوس على الطرقات"، فقالوا: "ما لنا بُدٌّ، إنما هي مجالسنا نتحدث فيها"، فقال لهم: "فإذا أبيتم إلا الجلوس في الطريق فأعطوا الطريق حقه"، قالوا: "وما حق الطريق يا رسول الله؟" قال "غض البصر، ورد السلام ، وإماطة الأذى عن الطريق". **(رواه البخارى ومسلم– حديث صحيح).**

Translation: Abi Said Al-Khudari (may Allah be pleased with him) reported that the Prophet (may Allah's peace and blessings be upon him) said: **"Beware! Avoid sitting on the roads."** They said, "There is no way out of it as these are our sitting places where we have talks." The Prophet said, "If you must sit on the road, then give the road its rights." They asked, "What are the rights of the road?" He said, "They are the lowering of (your) gaze (on seeing what is illegal to look at), returning greetings, and removing harms from the road". (Narrated by Al-Bukhari and Muslim- sound hadith).
Source frame: Problem-solution frame.
Target domain (the conceptualized area of life): Preserving the environment.

Trigger words: إياكم "avoid", اعطوا الطريق حقه "give the road its rights", حق الطريق "rights of the road", إماطة الأذى "removing harms".

Hadith 2:

عن أنس ابن مالك رضى الله عنه قال: قال رسول الله صلى الله عليه وسلم: "ما من مسلم يغرس غرسًا ، أو يزرع زرعا ، فيأكل منه طير أو إنسان أو بهيمة، إلا كان له به صدقة" **(رواه البخارى ومسلم– حديث صحيح).**

Translation: Anas Ibn Malik (may Allah be pleased with him) reported that the Messenger (may Allah's peace and blessings be upon him) said: "Never does a Muslim implant land or cultivate plants from which a bird, a man or a beast (sheep) eats, but for so doing he will have a reward". (Narrated by Al-Bukhari and Muslim-sound hadith).
Source domain: Condition and result.
Target domain: Sustaining nature's growth.

Trigger words: يغرس "implant", يزرع "cultivate", له به صدقة "have a reward".

Hadith 3:

عن جابر بن عبد الله أن رسول الله صلى الله عليه وسلم قال: "من أحيا أرضا ميتة فله فيها أجر"(رواه البخارى ومسلم– حديث صحيح).

Translation: Gaber Ibn Abdullah (may Allah be pleased with him) reported that the Messenger (may Allah's peace and blessings be upon him) said: "Whoever brings a dead land to life (that is, cultivates wasteland), for him is a reward therein."

(Narrated by Al-Bukhari and Muslim- sound hadith).
Source domain: Condition and result.
Target domain: Sustaining nature's growth.

Trigger words: أحيا "brings to life", أجر "reward".

Hadith 4:

عن معقل المزنى أنه قال سمعت رسول الله صلى الله عليه وسلم يقول: "من أماط أذى عن طريق المسلمين، كُتِبَ له حسنة، ومن تُقُبِّلَتْ له حسنة دخل الجنة" (رواه البخارى– حديث حسن)

Translation: Maaqal Al-Mazni reported that he heard the Prophet (may Allah's peace and blessings be upon him) say: "Whoever removes harms from the roads of Muslims, a reward will be prescribed to him; and whose reward is accepted will enter the Paradise." (Narrated by Al-Bukhari- hasan hadith).
Source domain: Condition and result.
Target domain: Preserving the environment.

Trigger words: أماط أذى عن طريق "removes harms from the roads",

حسنة "reward", دخل الجنة "enter the Paradise".

Hadith 5:

عن معاذ بن جبل رضى الله عنه قال: قال رسول الله صلى الله عليه وسلم: من رفع حجرا عن الطريق، كُتِبَ له حسنة، ومن كانت له حسنة، دخل الجنة" (الألبانى– حديث حسن).

Translation: Muadh Ibn Jabal (may Allah be pleased with him) reported that the Messenger (may Allah's peace and blessings be upon him) said: "Who lifts

(removes) a stone from the road, a reward will be prescribed for him; and who has a reward, will enter the Paradise." (Narrated by Al-Albani- hasan hadith).

Source domain: Condition and result.

Target domain: Preserving the environment.

Trigger words: دخل الجنة "enter the Paradise", حسنة "reward", رفع حجرا "lifts a stone".

Hadith 6:

عن حذيفة بن أسيد أنه قال: قال رسول الله صلى الله عليه وسلم: "من آذى المسلمين فى طرقهم أصابته لعنتهم" (رواه السيوطى والطبرانى– حديث حسن).

Translation: Hudhayfah Ibn Ausaid reported that the Messenger (may Allah's peace and blessings be upon him) said: "Whoever harms Muslims in their roads will be afflicted with their curse". (Narrated by Al-Suyuti and Al-Tabarani).

Source domain: Condition and result.

Target domain: Preserving the environment.

Trigger words: آذى المسلمين فى طرقهم "harms Muslims in roads", أصابته "afflicted", لعنة "curse".

Hadith 7:

عن أنس بن مالك رضى الله عنه قال: قال رسول الله صلى الله عليه وسلم: "إن قامت الساعة وفي يد أحدكم فسيلة، فإن استطاع ألا يقوم حتى يغرسها، فليفعل" (رواه أحمد– حديث صحيح).

Translation: Anas Ibn Malik (may Allah be pleased with him) reported that the Messenger (may Allah's peace and blessings be upon him) said: "If the Final Hour comes while one of you has a shoot of a plant in his hand and it is possible to plant it, he should do so". (Narrated by Ahmad- sound hadith).

Source domain: Encouragement and inducement.

Target domain: Sustaining nature's growth.

Trigger words: فسيلة "a shoot of a plant", ألا يقوم حتى يغرسها "should plant it".

Hadith 8:

عن أبى هريرة رضى الله عنه قال: قال رسول الله صلى الله عليه وسلم "الإيمان بضع وسبعون
أو بضع وستون شعبة، فأفضلها قول لا إله إلا الله وأدناها إماطة الأذى عن الطريق" (رواه
البخارى ومسلم – حديث صحيح).

Translation: Abu Hurairah (may Allah be pleased with him) reported that the Messenger (may Allah's peace and blessings be upon him) said: "Faith has over seventy branches or over sixty branches, the best of which is the declaration that there is no god but Allah, and the humblest of which is the removal of harms from the road". (Narrated by Al-Bukhari and Muslim- sound hadith).
Source domain: Encouragement and inducement.
Target domain: Preserving the environment.

Trigger words: الإيمان "faith", إماطة الأذى عن الطريق "removal of harms from the road".

Hadith 9:

عن أبي مالك الحارث بن عاصم الأشعري رضي الله عنه قال : قال رسول الله صلى الله عليه
وسلم "الطهور شطر الإيمان" (رواه مسلم– حديث صحيح).

Translation: Abi Malik Al-Harith Ibn Āsim Al-Ashaari (may Allah be pleased with him) reported that the Messenger (may Allah's peace and blessings be upon him) said: "Purity is half of faith." (Narrated by Muslim- sound hadith).
Source domain: Encouragement and inducement.
Target domain: Preserving the environment.

Trigger words: الإيمان "purity", الطهور "faith".

Hadith 10:

عن أبى هريرة رضى الله عنه قال: قال رسول الله صلى الله عليه وسلم "لا يبولنَّ أحدكم في
الماء الدائم ثم يتوضأ منه" (رواه البخارى– حديث صحيح).

Translation: Abu Hurairah (may Allah be pleased with him) reported that the Messenger (may Allah's peace and blessings be upon him) said: "No one of you urinates in stagnant water and then performs ablution from it". (Narrated by Al-Bukhari- sound hadith).

Source domain: Advisory command.

Target domain: Preserving the environment.

Trigger words: لا يبولن أحدكم "No one of you urinates", الماء "water".

Hadith 11:

عن معاذ بن جبل رضى الله عنه قال: قال رسول الله صلى الله عليه وسلم "اتقوا الملاعن الثلاث: البراز في الموارد، وقارعة الطريق، وفي الظل" (صحيح أبى داود – حديث حسن).

Translation: Muadh Ibn Jabal (may Allah be pleased with him) reported that the Messenger (may Allah's peace and blessings be upon him) said: "Avoid the three damned (habits): defecating (stool) in (water) resources, in the roads, and in the shadow (wherever people shade)". (Narrated by Abu Dawud- hasan hadith).

Source domain: Advisory command.

Target domain: Preserving the environment.

Trigger words: اتقوا "avoid", الملاعن "damned (habits)", الموارد "(water) resources", الطريق "the roads", الظل "the shadow".

Hadith 12:

عن سعد بن أبى وقاص قال: قال رسول الله صلى الله عليه وسلم "طهروا أفنيتكم فإن اليهود لا تطهر أفنيتها "(صحيح الألبانى– حديث حسن).

Translation: Saad Ibn Abi Waqqas (may Allah be pleased with him) reported that the Messenger (may Allah's peace and blessings be upon him) said: "Clean your yards as Jews do not clean their yards." (Narrated by Al-Albani- hasan hadith).

Source domain: Advisory command.

Target domain: Preserving the environment.

Trigger words: طهروا "clean".

Hadith 13:

عن عبد الله بن عمرو رضى الله عنهما أن النبى صلى الله عليه وسلم مر بسعد وهو يتوضأ، فقال:"ما هذا السرف يا سعد؟"، فقال:"أفي الوضوء سرف؟"، قال صلى الله عليه وسلم: "نعم، وإن كنت على نهر جار". (رواه أحمد وابن ماجة– حديث صحيح).

Translation: Abdulah Ibn Āmr (may Allah be pleased with both of them) reported that the Prophet (may Allah's peace and blessings be upon him) passed by Saad while he was performing ablution and said, "What is this wasting, Saad?" He (Saad) asked, "Does ablution involve wasting?" The Prophet said, "Yes, even if you were on a running river". (Narrated by Ahmad and Ibn Majah- sound hadith).

Source domain: Prohibition and forbiddance.

Target domain: Preserving the environment.

Trigger words: سرف "wasting", نهر جار "running river".

Hadith 14:

عن عبد الله بن عمرو قال: جاء أعرابي إلى النبي . صلى الله عليه وسلم . يسأله عن الوضوء ، فأراه ثلاثا ، ثلاثا ، ثلاثا ، قال : "هذا الوضوء ، فمن زاد على هذا فقد أساء وتعدى وظلم". (رواه أبو دادود والنسائى وابن ماجه وأحمد- حديث صحيح).

Translation: Abdulah Ibn Āmr reported that a Bedouin came to the Prophet (may Allah's peace and blessings be upon him) asking him about Wudu (performing ablution). He (the prophet) showed him (how to wash his organs) three by three (times). He (the Prophet) said, "This is Wudu and whoever exceeds that (three times), he abuses (water), exceeds (limits), and does a wrong". (Narrated by Abu Dawud, An-Nasa'i, Ibn Majah, and Ahmad- sound hadith).

Source domain: Advice and confirmation.

Target domain: Preserving the environment.

Trigger words: تعدى "exceed", أساء "abuses", ظلم "does a wrong".

Hadith 15:

عن حذيفة بن اليمان قال: قال رسول الله صلى الله عليه وسلم "من تفل تجاه القبلة جاء يوم القيامة وتفلته بين عينيه" (الألبانى- حديث صحيح).

Translation: Hudhayfah Ibn Al-Yamman (may Allah be pleased with him) reported that the Messenger (may Allah's peace and blessings be upon him) said: "The one who spits in the direction of Qibla will come on Doomsday with his spit between his eyes (on his face)." (Narrated by Al-Albani- sound hadith).

Source domain: Narration and confirmation.

Target domain: Preserving the environment.

Trigger words: تفل "spits", يوم القيامة "Doomsday".

Hadith 16:

عن السائب بن خلاد أن رجلًا أمَّ قومًا فبسق فى القبلة ورسول الله صلى الله عليه وسلم ينظر، فقال رسول الله صلى الله عليه وسلم حين فرغ "لا يصلى لكم هذا"، فأراد بعد ذلك أن يصلى بهم فمنعوه وأخبروه بقول رسول الله صلى الله عليه وسلم فذكر ذلك لرسول الله فقال: "نِعْمَ ما فعلوا" (صحيح أبى داود وأحمد– حديث حسن).

Translation: Al-Sa'eb Ibn Khallad reported that a man led (some) people in prayer and spitted (in the direction of) Qibla while the Prophet peace be upon him was looking. Then the Prophet peace be upon him said when he finished (his prayer), "This (man) cannot lead you in prayer (be your Imam)". He (the man) wanted later to lead the prayer but they banned him and told him about what the Prophet said. He told the Prophet about that (banning him) and he (the Prophet) said, "The best is what they did". (Narrated by Abu Dawud and Ahmad- hasan hadith).
Source domain: Narration and confirmation.
Target domain: Preserving the environment.

Trigger words: بسق "spitted", لا يصلى لكم " cannot lead you in prayer", منعوه"banned him", نِعْمَ "the best".

Hadith 17:

عن أبى ذر الغفارى رضى الله عنه قال: قال رسول الله صلى الله عليه وسلم :"عُرِضَتْ عَلَيَّ أعمال أُمَّتي حَسَنُها وسَيِّئُها، فوجدت في محاسن أعمالها الأذى يُماطُ عن الطريقِ، ووجدت فى مساوئ أعمالها النُّخاعَةَ تكون في المسجدِ، لا تُدْفَن" (رواه مسلم -حديث صحيح).

Translation: Abu Dharr (may Allah be pleased with him) reported that the Prophet (may Allah's peace and blessings be upon him) said: "The deeds of my Ummah were presented to me, the good and the bad thereof. I found that among the good deeds is the removal of harm from the road, and among the worst deeds is the sputum in the mosque, not buried (not removed)". (Narrated by Muslim- sound hadith).
Source domain: Narration and confirmation.
Target domain: Preserving the environment.

Trigger words: حَسَنُها ,الأذى يُماطُ عن الطريقِ "the best deed", "removing harms from the road", مساوئ أعمالها "the worst deed", النُّخاعَةَ "the sputum".

Hadith 18:

عن أبى خراش عن بعض أصحاب النبى صلى الله عليه وسلم أنه قال: "المسلمون شركاء في ثلاث: الماء والكلأ والنار" (رواه أبو داود وأحمد وابن ماجه – حديث صحيح).

Translation: On the authority of Abi-Khirash that some of the Prophet's companions reported that the Prophet (may Allah's peace and blessings be upon him) said: "Muslims are partners in three: water, herbage and fire." (Narrated by Abu Dawud, Ahmad, and Ibn Majah- sound hadith).
Source domain: Confirmation.
Target domain: Sharing the earth's natural resources.

Trigger words: شركاء "partners", الماء "water", الكلأ "herbage", النار "fire".

Hadith 19:

عن جابر بن عبد الله رضى الله عنه قال: قال رسول الله صلى الله عليه وسلم "وجعلت لى الأرض مسجدا وطهورا" (صحيح البخارى– حديث صحيح).

Translation: Gaber Ibn Abdullah (may Allah be pleased with him) reported that the Messenger (may Allah's peace and blessings be upon him) said: "And the earth has been made for me a mosque and as a means of purification." (Narrated by Al-Bukhari- sound hadith).
Source domain: Confirmation.
Target domain: Sanctifying the earth.

Tigger words: الأرض "the earth", طهورا "a means of purification".

The aforementioned constitutive domains structuring the Prophet's Hadiths initiate the following mental frames; each of which reflects a certain positive stance towards the environment:

(1) *Frame of problem solution* (Hadith no.1): Instructions that guarantee positive ecological practices are given by the Prophet within a problem-solution framework where he instructs Muslims not to remain on the roads (so as to

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protect them from pollution). When they told him that they had to do so, he stipulated observing rights of the road by removing harms from it as a condition for remaining thereon.

(2) *Frame of Condition and Result* (Haiths no.2-6): *An appeal to sense* is made by the Prophet (as a technique of persuasion) when reward is conditioned to good behavior (i.e., doing good acts) towards the environment: not throwing rubbish in the roads, cultivating plants from which humans, animals and birds eat, removing a stone from the road, and bringing dead land into life. By contrast, *an appeal to fear* is made when punishment is associated with bad behavior as harming the roads (by throwing wastes).

(3) *Frame of Encouragement and Inducement* (Hadiths no.7-٩): Muslims are encouraged by the Prophet to 1) sustain nature's growth by planting a palm shoot even when all hope is lost for mankind on the coming of Doomsday, and 2) to remove harms from the road (as this is part of one's faith). Encouragement to preserve the environment is optimized when making a strong connection between management of hygiene and one's faith through the Prophet's declaration that "Purity is half of faith". An important part of environmental health planning is the management of personal hygiene at community level as good hygiene prevents infection of communicable diseases and contaminating natural elements as water, for example. Believing in the importance of personal cleanliness and its impact on the environment implies an illocution of preserving it.

(4) *Frame of Advisory Command* (Hadiths no.١٠-١٢): These Hadiths include environment-related commands issued by the Prophet for the sake of advising. Thus, Muslims are advised to clean their houses, to avoid throwing rubbish in the road, and not to urinate or defecate in water. Following such advices will definitely lead to the perlocutionary impact of protecting the environment from pollution.

(5) *Frame of Prohibition and Forbiddance* (Hadith no.١٣): The Prophet forbids wasting water when making Wudu, even if a Muslim is making Wudu from a flowing river. The Prophet's rhetorical question to Saad "What is this wasting, Saad?" acts as a contextual clue for an illocutionary force of denial and forbiddance; which in turn implies the Prophet's appreciation of water (as it is the source of life on earth) and a policy of saving water and safeguarding its purity.

(6) *Frame of Advice and Confirmation* (Hadith no.١٤): It is significant that the same act of forbidding the waste of water resources when making Wudu is emphasized again by the Prophet but within a framework of advice and confirmation. Via the employment of a declarative sentence this time, the Prophet is confirming the same act of the vitality of rationalizing water resources.

(7) *Frame of Narration and Confirmation* (Hadith no.١٥-١٧): Environment-related instructions are sometimes structured by the Prophet within a framework of narration. The Prophet narrates two future incidents that will take place on Doomsday with the purpose of confirming a certain fact and advising his nation to do or to avoid certain practices. Thus, he predicts that the one who spits on the ground (an act of pollution) will come on Doomsday with his spit on his face (as shame on him in front of all the creatures). In addition, the best act to be presented to the Prophet on Doomsday will be that of removing harms from the road and the worst will be that of spitting on it. The third narrated incident is an actual one where the Prophet asked the people not to allow a man who spits on the ground in the direction of Qibla to lead them in prayer. Predictable or not, the three incidents, however, perform indirect speech acts of criticism and denial of the involved anti-environment acts.

(8) *Frame of Confirmation* (Hadiths no.١٨-١٩): Positive instructions and facts about the environment are confirmed by the prophet in the last two Hadiths where he asserts that all Muslims are partners and should share alike in water, fire, and herbage; the assertion which implies the principle of just distribution of natural resources which the modern world calls for practicing. Indeed, the positive ecological stance of the prophet all through is further enhanced when he expresses his attitude of sanctifying the earth by referring to it as being "a means of purification".

Thus, all the previous stories which underlie the Prophet's discourse are ecologically beneficial. They have significant implications that reveal a positive ecological ideology. The fact that all the stories involve an advice/command to preserve natural elements enhances the suggestion that Prophet Muhammad's ecosophy encourages people to see nature as something valuable that should be preserved. Given the trigger words which trigger in our minds images of Paradise for those who preserve the environment and punishment for those who do not, a

process of reframing the act of preserving the environment and maintaining natural elements as an important issue in Muslims lives is at stake. Combined together, the trigger words create images likely to be salient in the recipients' minds. The Prophet's instructions of not wasting water, not dirtying roads or putting harms in them are evidence that the he is an environmental campaigner who stresses altruism and concern for nature.

6.1.2. Evaluation

In addition to the story of *framing*, that of *evaluation* is also present in the Prophet's Hadiths. However few in number, words of appraisal (positive or negative) are significant. The positive and negative appraisal items used by the Prophet are represented in the following table:

Evaluative words	Referent	Number of Hadith
"أفضلها" *The best* part (of faith)	Removing harms from the roads.	8
"نعم ما فعلوا" *The best* is what they did	The act of denying a man who spat on the ground in the direction of Qibla the right to be the Imam behind whom Muslims pray.	16
"محاسن أعمالها" *The best* deed	Removing harms from the road.	17
"مساوئ أعمالها" *The worst* deed	The act of spitting	17
"الملاعن" *The damned* (habits)	Defecating (stool) in water sources, in the roads, and in the shadow (wherever people shade).	11

Table 1. The story of Evaluation in Prophet Muhammad's Hadiths

Actions that preserve the environment (removing harms from the roads and denouncing the act of spitting) are *directly* evaluated by the Prophet through positive evaluative terms as "محاسنها"/"the best" while those that do not (the act of spitting) are evaluated in negative terms as "مساوئها"/"the worst". In addition, evaluation is sometimes *indirectly* conveyed by the prophet as when terming the act

of "البراز فى الموارد، وقارعة الطريق، وفى الظل"/"defecating (stool)" in water sources, in the roads, and in the shadow (wherever people shade)" as being "ملاعن"/"damned (habits)"; the word which implicitly conveys an attitude of rejection. Another indirect way of evaluation employed in the Hadiths is that of metaphor.

6.1.2.1. Metaphor

An ideologically significant metaphorical use is made by the Prophet when saying "اعطوا الطريق حقه"/(give the road its rights). The road is metaphorically treated by the Prophet as a human being who has rights that must be given. Humanizing the road that way reflects the Prophet's attitude of respect and evaluation of the environment and, accordingly, a positive ecological stance.

This respect is further asserted when the same act of humanizing an element of nature is repeated in another Hadith when saying "من أحيا أرضا ميتة"/ (Whoever brings into life a dead land) where 'land' is personified as a living human and is given the characteristic of being "alive" and "dead" which are characteristics of human beings.

6.1.3. Salience

Another kind of story present in the Hadiths is that of *salience*. This kind of story has to do with foregrounding something as prominent and worthy of consideration. Salience is effected in the Prophet's Hadiths in different ways. *First*, it is achieved in a special way through *the technique of frequency and repetition*. The frequency in delivering the same ecologically beneficial message in nineteen Hadiths makes them one whole large ecological context. The fact that the semantic content (i.e., thematic similarity) of all the selected Hadiths is that of calling for respecting and preserving the environment in one way or another leads to the implicit meaning of the Prophet's concern about the surrounding environment. This is further supported by the frequency of related lexical items that belong to the same semantic field as "مساوئ الأعمال"/the worst deeds, and "الأذى"/harm, "ملاعن"/(damned (habits)) when it comes to abusing the environment, and "محاسن الأعمال"/(good deeds) and "أفضلها"/(the best deeds) when it comes to making good use of natural resources. This frequency gives prominence to the acts referred to.

Second, salience is also effected through *the technique of abstraction* or *generalization*. A notable persistent lexical strategy employed by the prophet in his environmental discourse is the usual construction of his messages in *general* rather than *specific* lexical items, which results in diverting the attention from the concrete to the abstract. Thus, the prophet refers to the inevitability of removing harms from the "الطريق"/roads, cultivating "زرعا–غرسا"/land-plants so that "إنسانا"/humans, "طيرا"/birds and "بهيمة"/beasts in general can eat from them, with no specific reference to types or entities. Attention is here diverted from concrete entities to the abstract idea of the inevitability of preserving natural resources. Individual entities of nature are thus perceived in the mind as indistinguishable parts of the larger context of the whole environment. The technique of generalization or abstraction is more obvious through the use of the generic term "الأرض"/(the earth) in Hadith no. (19): "وجعلت لى الأرض مسجدا وطهورا"/(The earth has been made for me as a mosque and as a means of purification) which implies an attitude of reverence towards the whole earth.

In contrast to this abstraction, concrete language is sometimes employed by Prophet Muhammad for the purpose of foregrounding and giving prominence. The Prophet has chosen the act of غرس فسيلة/*planting a shoot of a plant* as a metonymy for all beneficial acts when he sets an example for the people to encourage them to finish whatever minor beneficial act they are doing on the coming of Doomsday. This choice again reveals an ideology of belief in the importance of elements of nature surrounding us and a sense of respect and reverence.

6.1.4. Ideology

Given the fact that all the selected Hadiths underlie stories framed on target domains of preserving the environment/sustaining nature's resources and involve words that praise deeds which respect the environment and dispraise those that do not reveals an ideologically positive ecological stance. More important, the fact that the Prophet is the role model for Muslims whose sayings and deeds represent code of behavior/ethics for them leads to a situation where they (sayings and deeds of the Prophet) are an authority that has the power 1) to instill positive perceptions in the recipients' minds through the use of language, and 2) regulate abusive usage of the ecological resources. In linguistic terminology, they will result in a desired *perlocutionary effect*.

Out of all these stories, the Prophet's ecosophy emerges. The stories and their ideological significations in relation to the Prophet's ecosophy are subsumed in the following diagram:
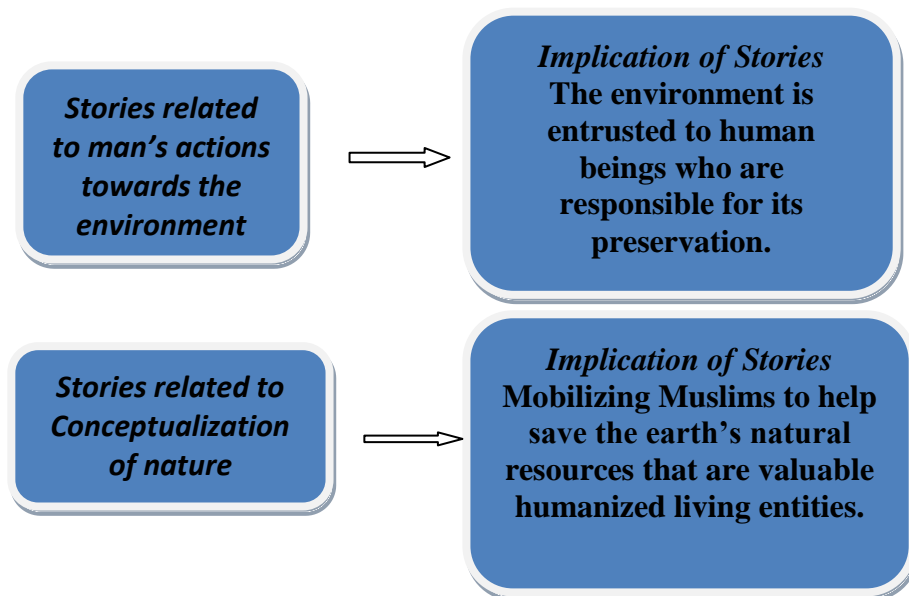

Diagram 2: The stories underlying the Prophet's Hadiths and their Implications

In addition to Stibbe's stories, analysis in terms of Halliday's metafunctions also helps highlight the ecological stance of Prophet Muhammad's discourse on the environment.

6.2. Ideational/Experiential metafunction

The selected Hadiths carry significant implications in the light of two dimensions of the ideational meaning: transitivity system and vocabulary or lexis.

6.2.1. Transitivity

Analyzing the Prophet's Hadiths in terms of transitivity further highlights his positive ecological stance. The following table shows the significant transitivity aspects in terms of Halliday and Matthiessen's (2004) standards:

The Process (verb)	Type of the process	Participants and their roles
١-إماطة الأذى عن الطريق (1) *Removing harms* from	Material (positive) N.B. (In Arabic, the infinitive form acts as a	Muslims: implied Agent The road: Goal

the roads.	verb (Al-Khatib, 2016). Thus, "إماطة" (removing) acts as the Arabic verb "يميط" (to remove).	
٢– *يزرع زرعا، يغرس غرسا* (2) *implants* land / *cultivates* plants.	Material (positive)	A Muslim: Agent Plants: Beneficiary
٣–*أحيا* أرضا بعد موتها (3) *Brings into life* a dead land (i.e., re-cultivates).	Material (positive)	A Muslim: Agent A dead land: Beneficiary
٤– رفع حجرا عن الطريق (4) *Lifts* (*removes*) *a stone* from the road.	Material (positive)	A Muslim: implied Agent A stone: Goal
٥– *يغرس فسيلة* (5) *Plants* a shoot of a plant.	Material (positive)	A Muslim: Agent A palm shoot: Beneficiary
٦– هذا الوضوء ، فمن *زاد* على هذا فقد *أساء وتعدى* *وظلم* (6) "This is Wudu and whoever *exceeds* that (three times), he *abuses* (water), *exceeds* (limits), and *does a wrong*".	Material (negative)	Whoever (any Muslim): Agent Water (implied object): Goal
٧– لا يبولن أحدكم فى الماء الدائم (7) No one of you *should urinate* in stagnant water.	Material (negative)	No one: Agent Water: Goal
٨– اعطوا الطريق حقه (8) *Give* the road its right.	Material (positive) (metaphorically speaking)	Muslims: Agent Road: Beneficiary
٩– وجدت فى محاسن أعمالها ... (9) I *found* the best deed...	Mental (positive)	The Prophet: Senser The act of removing harms from the roads: Phenomenon

. ١٠- وجدت فى مساوئ أعمالها... (10) I *found* the worst deed… .	Mental (negative)	The Prophet: Senser The act of spitting: Phenomenon
المسلمون *شركاء* فى ثلاث: الماء والكلأ والنار . (11) Muslims *are* partners in three: water, herbage and fire.	Relational (identification)	Muslims: Token/the identified Partners in..: Value/ the identifier
١٢- *وجعلت* لى الأرض مسجدا وطهورا. (12) The earth *has been created* for me a mosque and as a means of purification.	Relational (identification)	The earth: Token/the identified A mosque/a means of purification: Value/the identifier
١٣- الطهور شطر الإيمان. (13) Purity (cleanliness) *is* half of faith.	Relational (identification)	Purity: Token/the identified Half of faith: Value/the identifier

Table 3. Transitivity in Prophet Muhammad's Hadiths

Analysis in terms of agency shows that the Prophet has concerns about natural landscape and natural elements. Elements of the environment as "الماء"/"water", "فسيلة"/" a shoot of a plant", "زرعا"/"plants", "أرضا"/"land", "حجرا"/"a stone", "الطريق"/"the road" are sometimes the *Goal* to whom the material process is directed or the *Beneficiary* that benefits from the process. Muslims are the implicit or explicit *Agents* who are required or even obligated to do positive ecological acts of إماطة الأذى/removing harms (from roads), رفع حجر/ lifting a stone (from roads), زرع/ planting, غرس/cultivating, and إحياء أرضا ميتة/bringing into life a dead land, or not to do a negative one as البول فى الماء الدائم/ urinating in stagnant water.

More emphasis on an ecosophy based on preservation of resources of the environment is derived from Hadith no. (17) where the Prophet is the *Senser* of the experienced feeling/thinking "وجدت"/"found" (a mental verb of cognition and perception) that the act which positively affects the environment ("الأذى يُماطُ عن" / "removing harms form the roads") is ("محاسنها (الأعمال)") / "the best الطريقِ" deed") and the one which negatively affects it ("النُّخاعَةَ تكون في المسجد" / "spitting in the mosque") is ("مساوئها"/"the worst deed"). In a similar vein, in Hadith (14), the Prophet also perceives and identifies non-rationalization of water during making Wudu in terms of acts associated with bad connotations: ("أساء وتعدى وظلم"/"abuses, exceeds (the limits), and does a wrong"). Thus, for the Prophet, lands and watercourses have rights that should be given by humans.

Relatedly, further highlights of the Prophet's positive ecological stance and his positive perception of elements of nature are derived from three significant relational processes employed in the Hadiths. First, Muslims are described as "شركاء فى الماء والكلأ والنار") / "partners in water, herbage, and fire"). This identification reveals the principle of justice in distributing natural resources; the principle that all humanity is in bad need for following in our modern world. The principle that is simply the solution for nearly all problems of humanity is called for by Prophet Muhammad hundreds of years ago. Second, he positively perceives "الأرض"/ "the earth" as being "مسجدا وطهورا"/ "a mosque and as a means of purification" which reveals an attitude of respecting and glorifying an element of nature. Third, "الطهور"/ "purity" (cleanliness) is identified as being "شطر الإيمان"/ "half of faith". Highly elevating cleanliness that way to be associated with one's faith implies an illocutionary force of motivating people to keep their environment clean from pollution at daily practices basis.

6.2.2. Vocabulary/ Lexis
An important general feature of the selected Hadiths is that the domains of experience underlying them are lexicalized in a cluster of interrelated words and meanings. Given lexicalization of the selected Hadiths, there is hardly any doubt

about the Prophet's ideological ecological position. His words show tilting towards preserving the environment and sustaining natural resources. The Hadiths' general lexicon involves repeated negative emotive terms associated with the evaluation and consequences of bad deeds that negatively affect the environmen ملاعن– أساء

أصابته لعنتهم –سرف–تعدى ظلم/ "damned- abuses- exceeds-does a wrong-wasting- will be afflicted with their curse". By contrast, they contain repeated positive emotive terms associated with the evaluation and consequences of good deeds that positively affect the environment and encourage positive ecological practices: كُتِبَ –أجر فله فيها –فله صدقة –دخل الجنة –نعم ما فعلوا –(الأعمال) أفضلها

له حسنة/ "the best deed- the best is what they did- will enter the Paradise-will have a reward- for him is a reward- a reward is prescribed for him".

An important lexical choice in the Prophet's discourse is the conjunctive "or" in Hadith (٢): ،"ما من مسلم يغرس غرسًا ، أو يزرع زرعا ، فيأكل منه طير أو إنسان أو بهيمة "إلا كان له به صدقة / "Never does a Muslim implant land or cultivate plants from which a bird, a man or a beast (sheep) eats, but for so doing he will have a reward".
It entails a relation of *hyponymy* where the three joined words "طير أو إنسان أو بهيمة" / "a bird, a man or a beast (sheep)" are interrelated together under the spuerordinate term 'living things'. It hence indicates the Prophet's keenness on building a society caring of larger-than-human world. The Prophet's society is not self-centered or individualistic. Rather, it cares for other creatures. This choice implies *the Prophet's belief that all of God's creations are equal before Him and that all of them should have equal rights in their environment*. It reveals an ideology of respecting non-human elements of nature (not minoritizing them) and promoting the concept of sharing one whole universe. Furthermore, the depiction that way implies an underlying belief in achieving sustainability by considering forms of intercommunication between components of the environment. It also implies a call to shy away from any behavior based on centered individualization.

6.3. Interpersonal metafunction

Another significant aspect underlying the Prophet's Hadiths is their *mood* which is a component of interpersonal meaning. The interpersonal mood of the Prophet's Hadiths varies between *declarative* and *imperative* sentences. Instructions of the Prophet with regard to the behavior towards the surrounding environment are given by both persuasion and intimidation techniques; the fact which reflects the Prophet's keenness on making his people follow his instructions and adhere to them. Declarative sentences are sometimes employed by the prophet in the context of encouraging and inducing the recipients to do an act that helps preserve the environment; in the case of which he informs them with the rewards they will get in the Hereafter if they do such acts. Thus, as examples, " من يزرع زرعا أويغرس غرسا /من أحيا أرضا ميتة /من أماط أذى عن الطريق /" (whoever implants land or cultivates plants / removes harms from the roads/ brings dead land into life" كان له بها صدقة / فله فيها أجر /دخل الجنة /) (will have a reward/ for him is a reward/ will enter the Paradise). At other times, however, the Prophet's instructions are given via imperative sentences so as to create the impression of obligation in the minds of the recipients "لايبولن أحدكم – طهروا – اتقوا/" ''avoid –clean- no one of you urinates''.

7. Conclusion

The analysis of Prophet Muhammad's Hadiths related to environmental issues shows that he was a pioneer in the domain of environment conservation and resource management. Stibbe's analytical framework exposed the stories the Prophet lived by. Meaning is constructed in the Hadiths through the choice of salience. Important ecological topics are foregrounded. The technique of salience helps to construct nature as worthy of consideration. The linguistic devices that contributed to salience are abstraction or generalization, hyponymy, and frequency; all of which reinforce an appeal to senses.

Analysis in terms of Halliday's SFG has asserted a unique Prophetic environmental philosophy. In terms of the ideational/experiential metafunction (agency), the Prophet's ecosophy includes a belief that: 1) man is responsible for protecting the environment and will be punished otherwise; and that 2) elements of nature have rights that should be preserved by man so as to maintain a harmonious balance between him and them (water, air, and land). Lexical choices reveal an

ecosophy based on: 1) a belief that the earth and its elements should not be abused or overexploited; and 2) evaluation and reverence of elements of nature. Interpersonal metafunction dimension shows keenness on delivering all these instructions in relation to the environment by all means.

Last but not least, the Prophet's ecosophy shows an environmental awareness that is sadly lost today. It reflects dimensions of cognition and familiarity with the reality of our modern situation. The Prophet's instructions internalize a social and cultural order related to the surrounding environment, consciously or unconsciously. He offers for his followers habitual guidelines based on the broadline policy that ecological equilibrium can be constructed in the universe by accepting diversity and intercommunication to achieve a sort of equalitarian coexistence.

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