

Representations of climate change in documentary television. Integrating an ecolinguistic and ecosemiotic perspective into a multimodal critical discourse analysis¹

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Abstract

The following paper investigates media representations of climate change in the context of documentary television. The paper takes the theoretical and methodological approach of a multimodal critical discourse analysis, which combines critical discourse analysis with approaches to semiotics and multimodality. In the context of this approach the paper discusses two means of integrating insights from ecolinguistics and ecosemiotics into the framework: First as an ecologically based normative standpoint, which can be used to judge current discursive strategies in the analysed media discourses about climate change; and second as part of an epistemological position, which is based on the semiotic theory of Charles Sanders Peirce and which is used to conceptualise the process of representation of the abstract phenomenon of climate change in media discourses. These theoretical foundations are operationalized in a methodological framework that pays attention to the multimodal representation of climate change in audio-visual media texts. The framework is exemplified through the analysis of a documentary television programme that was broadcast as part of a climate protection initiative on Austrian public service television. In line with the normative and epistemological foundations discussed in the paper, the analysis critically examines how the television programme communicates climate change to the public.

1. Introduction

Climate change is one of the most pressing issues of the present time and one that depends considerably on political and public action and will to confront it. The quality of public and media discourses about climate change is of vital importance in order to foster the necessary widespread public and political understanding and engagement with the issue. Investigating the current practices of the media in the communication of climate change as well as contributing to their improvement is an important goal that is motivating a large and growing body of literature in the social sciences, in cultural studies as well as in media and communication studies (Schäfer & Schlichting 2014).

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Examining the issue from the disciplinary perspective of linguistics, two major approaches have contributed to this multidisciplinary field of research: critical discourse analysis (Bevitori 2014, Carvalho 2005) and ecolinguistics (Kuha 2007, Nerlich & Koteyko 2009). Since these two research paradigms operate largely in parallel – although they have their own specific research concerns and theoretical implications – they have been frequently combined in the investigation of ecological or environmental issues (Alexander 2009, Stibbe 2014a, 2014b). Both share the same critical perspective regarding the impact of language use on the construction of meaning, ideologies and worldviews.

The following paper aims at a similar integration of critical discourse analysis and ecolinguistics. It originates from my dissertation project, in which I investigate media discourses about climate change in the context of documentary television. To this purpose, I develop and apply a theoretical and methodological framework of a multimodal critical discourse analysis. This framework combines critical discourse analysis in the tradition of the Discourse-Historical Approach (Reisigl & Wodak 2016) with approaches to semiotics and multimodality (Kress 2010). These approaches emphasize the role semiotic resources apart from language – such as images, music or sound – play in the construction of meaning in discourses. Ecolinguistics has seen a similar expansion of its research agenda from its traditional focus on the construction of the world via language to a consideration of other sign processes as well. This has given rise to an emerging paradigm of ‘ecosemiotics’ (Hess-Lüttich ed. 2006, Nöth 2001, Trampe 2008).

Accordingly, the aim of this paper is to reflect on the means and implications of integrating an ecolinguistic and ecosemiotic perspective into the proposed framework of multimodal critical discourse analysis for the analysis of media discourses about climate change. This integration takes place in two interrelated areas of the framework: its normative orientation on the one hand and its epistemological foundation on the other hand. These theoretical aspects of the framework are discussed in the first part of this paper. In the second part of the paper the methodological framework is outlined, which aims at an investigation of the multimodal representation of climate change in audio-visual media texts. An exemplary analysis in the third part of the paper exemplifies parts of such a critical analysis conducted within this framework. The research object under investigation is a documentary television programme that was broadcast as part of a climate protection initiative of the Austrian public service broadcaster ORF.

2. An ecolinguistic/ecosemiotic critical discourse analysis

2.1 Ecological normative standpoint

The theoretical and methodological framework for the investigation of media discourses about climate change, as proposed in this paper, sets out from the tradition of critical discourse analysis (CDA) – or, as it is increasingly called, critical discourse studies (CDS). CDS is not a unified approach towards the analysis of language use in social contexts, but it is a heterogeneous and interdisciplinary field that employs a variety of different approaches, theories and methods. The distinctive feature of critical discourse studies is its critical, problem-oriented perspective on social phenomena (Wodak & Meyer 2016: 2). CDS is interested in the role language and other semiotic resources play in the construction of hegemonic meanings and the reproduction of ideologies in texts and discourses (ibid.: 6f.). Researchers in CDS reject the notion of an objective, disinterested research perspective, but take up a specific (though often implicit) normative standpoint, which consists of values and ethical norms that specify what societies should ideally look like. CDS typically focuses on social processes of power, domination, subordination and injustice in society. It exposes forms of power abuse, oppression and exploitation of specific people and groups and examines the impact of specific discourses and ideologies on social structures. The critical impetus behind such endeavours lies in values and critical traditions such as social justice, equality, enlightenment and emancipation (Angermüller, Maingueneau & Wodak 2014: 59).

Explicitly ecological or environmental issues, on the other hand, have long been neglected in mainstream CDS (Stibbe 2014b: 584). Conversely, ecolinguists have frequently drawn on critical discourse analysis in their critical analyses of ecologically relevant discourses (Alexander 2009). Recently, Arran Stibbe has been active in bringing the tradition of ecolinguistics into critical discourse studies (Stibbe 2014a, 2014b). He points to the fact that social and ecological issues are not as distinct from one another as one might assume, especially considering the impact of the current impending ecological crisis:

[P]ractical issues of pressing importance in the twenty-first century such as environmental justice, water scarcity, energy security, and, in general, the gradual destruction of the ecological systems that support life [...] [are] not a separate and distant goal from mainstream CDS, since when ecological systems fail the ones who are hit first and hardest are the already oppressed groups that are a key focus of CDS. Ecological destruction, then, is part of oppressive relations

between humans and other humans, influencing others at the most basic level of the ability to continue living. (Stibbe 2014b: 584)

In the case of the issue of climate change, this is a fact that has long been acknowledged by work taking an “environmental justice” or “climate justice” approach (Dreher & Voyer 2015, Vihersalo 2008). While climate change is a global phenomenon, it is also a spatially and temporally disparate one, in which responsibility, vulnerability and risk are not equally distributed among countries, societies and social groups. While the countries and societies of the ‘Global North’ as well as socio-economically higher social groups are responsible for the bulk of the global anthropogenic greenhouse gases that drive climate change, those that are most vulnerable and at risk from the projected impacts of climate change, but who have less resources to deal with them, are the societies from the ‘Global South’ as well as socio-economically lower social groups (Dreher & Voyer 2015: 58). This mismatch reinforces and deepens the existing social inequalities and power dynamics between societies and social groups, thus making the ecological crisis a pertinent issue for CDS.

While ecolinguistics recognizes this connection of environmental problems and social processes, it goes further than that. Apart from the impact of environmental degradation and the ecological crisis on social relations between societies and people, it considers implications to other living beings as well. These include the future generations of humans that will have to suffer the consequences of our own present actions, but also non-human life forms such as animals and plants as well as the ecosystems on Earth (Stibbe 2014a: 119). Ecolinguistics critically reflects on the anthropocentric worldviews inherent in human language and discourse, promoting instead an ecocentric and biocentric perspective that ascribes intrinsic value to all life forms on Earth (Trampe 2008: 52). Ecolinguistics transfers the concept of ‘ecology’ from biology, where it refers to the interaction between organisms and their environment, to the realm of discourse and communication. Consequently, ecolinguistics is at its heart interested in the relation between humans, language and the world (Fill 2002: 15). This ecological perspective, therefore, can add to the traditional socially oriented values and norms that guide critical discourse studies.

In promoting an ecolinguistically inspired critical discourse analysis, Stibbe emphasises the importance of making the researcher’s values and ethical “philosophy” explicit, which are used to evaluate discourses (Stibbe 2014a: 120, 2015: 11). To this end, Stibbe adopts the term “ecosophy”, which was first proposed by the philosopher and founder

of the Deep Ecology Movement Arne Naess (Naess 1973). An ecosophy in this sense is a personal ‘ecological philosophy’, which consists of assumptions, values and norms regarding the relationship between human societies, other life forms and the physical environment (Stibbe 2015: 11f.). Applied to a critical ecolinguistic discourse analysis, Stibbe sees the role of this ecosophy as a normative framework, against which the discourses under investigation are judged: If the analysed discourses contradict the researcher’s ecosophy, they are resisted; if they conform to the ecosophy, they are promoted; and if they are ambivalent, their problematic aspects are highlighted, in order to offer ways of improvement (Stibbe 2014a: 122f.). Stibbe stresses the importance of theoretically justifying one’s ecosophy and aligning it with the available evidence. He further points to the need of examining every discourse for internal contradictions or unintended effects, even if it is positively evaluated (Stibbe 2014a: 121, 124). These are important points, to which I would add a stronger emphasis on self-reflexion throughout the research process. A more thorough contemplation of the concept of ‘critique’ in critical discourse analysis could be helpful here.

My own framework is aligned with the Discourse-Historical Approach to critical discourse analysis (DHA), which follows the tradition of Critical Theory and the Frankfurt School, associated with Jürgen Habermas. Critique in the DHA’s sense can be fundamentally defined as “the examination, assessment and evaluation, from a normative perspective, of persons, objects, actions, social institutions and so forth” (Reisigl & Wodak 2016: 24). More specifically, three aspects of critique are distinguished: “Text or discourse immanent critique” points at internal inconsistencies or paradoxes in the analysed texts; “socio-diagnostic critique” wants to uncover manipulative or adverse discursive practices; and “prospective critique” is aimed at improving communication processes by developing guidelines or suggestions. All three aspects have to be incorporated in a critical analysis. While the normative standpoint provides a perspective from which discursive practices are assessed, the critical investigation always has to start from a detailed and careful textual analysis, in which the researcher has to theoretically justify “why certain interpretations and readings of discursive events seem more valid than others” (ibid.: 25). ‘Being critical’ is thus more than just comparing one’s own worldview with that found in the analysed data, but involves “getting closer to the data [...], embedding the data in a social context, clarifying the positioning of the discourse participants, and engaging in continuous self-reflection while undertaking research” (ibid.: 24).

The normative perspective itself can be linked to the concept of ideology. Ideology is a central concept in CDS and is often ascribed a negative connotation, as it is understood as referring to hegemonic worldviews that need to be uncovered in discourses (Wodak & Meyer 2016: 8f.). It is, however, important to acknowledge that the normative position adopted by critical discourse analysts is itself an ideology, i.e. a distinct perspective of seeing the world. Appreciating this connection between a normative standpoint and ideology is helpful for adopting a more self-reflexive attitude in one's critique.

At the same time, the concept of ideology provides a useful tool for outlining one's normative standpoint as a guiding model for a critical discourse analysis. While Stibbe (2015: 14) formulates his 'ecosophy' by "starting with a word that sums up the ecosophy and then adding explanatory detail as concisely as possible", I suggest the adaptation of a model that is traditionally used to describe fully developed ideologies or 'grand narratives', such as communism, socialism or liberalism. Such a model rests on three imaginaries: (1) a representational model of the (problematic) status quo of society; (2) a visionary model of the desired state of society; and (3) a programmatic model of the necessary measures, which need to be taken in order to reach this envisioned society (Reisigl & Wodak 2016: 25). The benefits of following this basic model in formulating one's own critical normative standpoint lie in its transparent and precise structure, which gives a clear purpose and trajectory to one's critique. Moreover, the structure is helpful for identifying and distinguishing the epistemic knowledge and deontic claims concerning the diagnosis and prognosis of the state of society and the world, which have to be supported by evidence and argumentative reasoning.

In analysing media discourses about climate change from the perspective of an ecolinguistically informed critical discourse analysis, my own normative critical standpoint can be roughly outlined as follows: The problematic status quo that is critiqued is seen in the modern economic industrial societies that rest on a capitalist consumer ideology and on the paradigm of economic growth, which have led to anthropogenic climate change. The visionary model is that of ecological, sustainable societies that are based on a post-growth economy and on the ecological principles propagated by ecolinguistics. To reach this desired state, widespread social and political change is seen as necessary. From a critical discourse perspective this needs 'discursive change', too, which includes the raising of ecological awareness through the improvement of media communication about climate change.

This normative standpoint is theoretically aligned with the evidence available in the existing literature of natural and social sciences (IPCC 2014, Klein 2014) and with the

fundamental principles of critical discourse studies and ecolinguistics discussed above. The aim of a critical analysis following from this normative standpoint is to analyse the way the media communicate climate change to their audience and to critically evaluate whether their discursive practices encourage or hinder an ecologically beneficial interaction with the world.

2.2 Epistemological foundation – constructivist realism

Closely related to the issues discussed as part of an ecologically based normative standpoint are questions of the epistemological underpinnings of critical discourse studies. Similar to the normative standpoint itself, these are often only presupposed, but seldom discussed in an explicit way (Reisigl 2012: 49). Reflecting on epistemological questions is especially important in a research paradigm such as critical discourse studies that not only strives to have a ‘real-world impact’ with its critical research, but that routinely draws on and combines different theoretical and methodological traditions in its framework. The epistemological compatibility of these different approaches and the epistemological implications of an ecologically oriented critical discourse analysis need to be reflected.

At the heart of epistemology lie questions about the “conditions, contingencies and limits of human perception” and the “nature of knowledge and justification” (Wodak & Meyer 2016: 16f.). Such an epistemology justifies and evaluates the knowledge generated by research, but also modifies the methodology that defines how the research is conducted in order to generate knowledge (ibid.: 15f.). Critical discourse studies are usually situated between the epistemological poles of constructivism and realism, although a social constructivist position is most common.

CDS sees discourse as a form of social practice, in which knowledge and meaning are co-constructed by discourse participants (Wodak & Meyer 2016: 16). This conception of discourse points to the fundamental assumption of CDS that language and other sign processes do not merely reflect reality, but actively shape (social) reality (ibid.: 9). This assumption provides the basis for a critique of discursive practices in representing specific issues. In ecolinguistics, this assumption has frequently been connected to the principle of linguistic relativity – the belief that not only language use but also the language system itself influences the way the world is perceived (Fill 2002: 20).

A strong constructivist and relativist position is, however, problematic both for CDS and ecolinguistics. Constructivism challenges the concept of individual agency on the grounds

that people are influenced and constrained by social and discursive structures (Bland 2014: 5, Reisigl 2012: 51). Taken to the extreme of a ‘discursive determinism’ this could, however, nullify critique, as it would tend to absolve individuals from responsibility for their discursive actions and reinforce the status quo (Reisigl 2012: 51). Likewise, adopting a too relativistic conception of truth and reality, as strong constructivist approaches are prone to do, would raise the question how the normative foundation of one’s critique could be argumentatively justified (ibid.: 55). From an ecological point of view a strong relativistic epistemology would be most problematic, as it would relativise the mind-independent reality of ecological facts and issues such as climate change and it would disregard the concrete implications of discursive practices on the world (Bland 2014: 8).

To avoid these problematic aspects of a relativist epistemology, a moderate constructivism should be complemented by a weak realism that acknowledges the importance of mind-independent reality. The pragmatic and semiotic theory of Charles Sanders Peirce is useful for such a theoretical and epistemological foundation (Peirce 1931-1958).² Peirce’s theory can be characterised as an ecological theory, as it is centrally concerned with the relation between humans, signs and the outer world. Peirce’s theory is not anthropocentric, as he also considers sign processes that do not involve humans, either as producers or interpreters of signs (Short 2007: 19). Thus, it is not surprising that works in the emerging field of ecosemiotics almost exclusively draw on Peirce in their theoretical reflections (Hess-Lüttich ed. 2006, Nöth 2001, Trampe 2008).

Peirce’s theory is realist, but it is only a weak realism, because it acknowledges that we humans can only perceive and make sense of reality or the world via signs (Reisigl 2012: 65). Signs in Peirce’s view consist of a triadic relation between the “sign”, an “object”, which the sign represents, and a mediating “interpretant” (CP 2.228, 2.274). The concept of the interpretant is crucial for Peirce, as he only considers signs to be signs when they are interpreted (CP 2.308). Accordingly, how we humans perceive, define and communicate the world depends on human processes of representation and interpretation. At the same time the mind-independent reality or object has an impact on our experiences and representation processes. Peirce distinguishes between the “immediate object” as it is already represented by the sign and the “dynamic object” as the sign-independent referent in the world. While human

² Hereafter, the collected papers of Peirce are cited as follows: (CP Volume number.Paragraph number).

knowledge can only approximate this reality with the immediate object, the dynamic object has concrete material implications that need to be considered.

This is related to Peirce's famous distinction between iconic, indexical and symbolic signs. This distinction points to different relations of a sign to its dynamic object. Iconic signs represent an object through inherent qualities that they share with their object, regardless of whether such an object actually exists. Symbolic signs represent an object by means of a convention or habit, without a necessary factual connection between the two. Indexical signs, on the other hand, are contingent on the existence of the dynamic object with which they are connected (CP 2.308). It is thus the natural indexical signs that are of most relevance to a consideration of the importance of sign-independent reality. Previous work on ecosemiotics has already provided insights on the specific implications of natural indexical signs. Trampe (2008: 53) particularly has proposed that the ecological crisis can be interpreted as "a crisis in the perception and interpretation of the signs of nature". In our modern technological and mediatized societies our perception of the natural world no longer rests on primary experience and the interpretation of indexical signs, but on mediated experience and symbolic meanings of nature and environment. These symbolic meanings make it difficult to relate to the reality of dynamic objects and their implications.

These reflections can be explicated in relation to the issue of climate change, by exploring how knowledge about climate change is gathered by scientific research and transformed in media discourses (Sedlaczek 2012, 2014). Climate change is an abstract phenomenon that involves a complex network of causal relations, involving a variety of physical, meteorological and ecological processes. Scientific research identifies this complex network by interpreting a variety of natural indexical signs and developing models for the genesis, diagnosis and prognosis of climate change. This production of scientific knowledge is influenced by the institutionalised knowledge systems and conceptual foundations of natural and life sciences, which traditionally follow a positivist tradition (Doyle 2011: 4). The scientific knowledge is then mediated and transferred into the realms of media, politics and the public sphere. In this process, it is further subjected under discursive struggles over symbolic meanings between different social actors and their divergent ideologies, values and interests. When investigating media representations about climate change, it is necessary to acknowledge these conditions of the constructions of knowledge and meanings, while at the same time considering the implications of the reality of the dynamic object of climate change.

3. Methodological framework – multimodal critical discourse analysis

The deliberations on the normative and epistemological foundations of an ecolinguistically oriented critical discourse analysis presented above form the theoretical basis of my approach of multimodal critical discourse analysis. For the concrete analysis of media discourses about climate change in documentary television, these theoretical foundations need to be operationalized in a methodological framework. For this framework I mainly draw on analytical tools from the Discourse-Historical Approach and the social semiotic approach to multimodal discourse analysis (Kress 2010).

A comprehensive analysis of documentary television programmes within this framework of multimodal critical discourse analysis is three-dimensional, consisting of a context analysis, a macro analysis and a micro analysis. These analytical steps are conducted in a recursive way as they influence each other: Linguistic or semiotic phenomena on the micro level determine, but at the same time are shaped by the macrostructure of a text. Moreover, both micro and macrostructure are contingent on context factors, including text genres, intertextual links and the wider situational and socio-political background that the texts are embedded in (Reisigl & Wodak 2016: 30f.). The focus of the exemplary analysis in this paper will be on the micro analysis. The aim is to analyse the multimodal representation of climate change in a selected documentary television programme.

The notion of multimodality, as it is used in social semiotics, is a central part of my analytical framework. It refers to the belief that communication always involves more than just language, but encompasses other semiotic resources or modes as well, each providing specific “affordances” and “constraints” for constructing meaning (Kress 2010: 1; 82f.). For the multimodal analysis of filmic texts, I mainly distinguish between three categories of semiotic modes: The verbal mode encompasses spoken and written language, the visual mode subsumes the moving and still images, and the auditory mode includes music and sounds.

In line with the Discourse-Historical Approach the micro analysis focuses on discursive strategies and their linguistic or semiotic means and realizations in the analysed texts. The DHA distinguishes between six types of discursive strategies: argumentation, nomination, predication, perspectivization, and intensification or mitigation (Reisigl & Wodak 2016: 32f.). These discursive strategies are not mutually exclusive, but they are interrelated and they interact at different levels of the texts. Argumentation often assumes a primary position in discourses, while the other strategies are integrated into this argumentative

structure of the texts. As argumentation requires a more elaborate discussion of argumentation theories and models (Reisigl 2014, Sedlaczek forthcoming), it will be omitted in this paper. I will thus focus on four strategies – nomination, predication, perspectivization, and intensification or mitigation. This last strategy will be subsumed under the term ‘modalisation’.

While the DHA acknowledges the possibility for multimodal meaning making, it focuses on linguistic devices as possible realizations of the individual discursive strategies (Reisigl & Wodak 2016: 33). In keeping with the multimodal focus of my approach, I expand this framework of discursive strategies to include verbal, visual and auditory devices. Visual and auditory devices of meaning making have been identified previously by works in social semiotics (Kress & van Leeuwen 2006, van Leeuwen 1999). The social semiotic approach follows the principles of Michael Halliday’s systemic functional linguistics and his distinction of three metafunctions that characterise communication and texts: the ideational metafunction represents aspects of the world, the interpersonal metafunction positions the discourse participants and the textual metafunction forms a coherent text (Kress & van Leeuwen 2006: 41ff.). Even though their theoretical frames of reference are different, there are several possible junctures between the multimodal resources identified by social semiotics and the system of discursive strategies and devices employed by the DHA: While textual aspects would be investigated as part of the macro analysis, the ideational metafunction is reflected in the discursive strategies of nomination and predication and the interpersonal metafunction relates to the strategies of perspectivization and modalisation.

Accordingly, I will characterise the four discursive strategies under discussion and list some possible verbal, visual and auditory realisations, as they are identified by the DHA (Reisigl & Wodak 2016: 32f.) and social semiotics (Kress & van Leeuwen 2006, van Leeuwen 1999):

Nomination investigates how social actors, objects, phenomena, events, processes and actions are discursively constructed (using Peirce’s terms, these categories can be bracketed together under the term ‘objects’). Verbally, nomination is realised through linguistic devices of referencing, categorising and naming, such as deictics, anthroponyms and tropes. Visually, social semiotics offers the distinction between ‘narrative’ and ‘conceptual’ representations, which involve different ways of visually constructing and categorising the represented objects. Auditory resources provide less clear means of constructing objects, although musical instrumentation and sound effects can be used to allude to specific objects.

Predication is closely linked with nomination and looks at the characteristics, qualities and features that are attributed to the constructed objects. It particularly investigates whether these objects are qualified positively or negatively. Verbal devices for predication involve a variety of evaluative attributions and predicates. Similar visual attributes and auditory devices of music and sound can be identified that can be used to iconically qualify the represented objects.

Perspectivization is concerned with the positioning of the producer's and consumer's point of view in relation to the represented objects. This position is located between the poles of involvement and distance. Verbal means for positioning include the use of deictics, discourse markers or direct vs. indirect speech. The visual mode offers a large palette of devices for perspectivization, including camera distance as well as vertical and horizontal camera perspective, both of which can be employed statically or dynamically. The auditory mode likewise provides means for achieving distance and perspective, such as sound quality, volume and frequency level.

Finally, **modalisation** refers to the modification of the illocutionary force and the epistemic or deontic status of the representations. It ranges from strategies of intensification to strategies of mitigation. Typical linguistic devices for modalisation include modal particles, diminutives, augmentatives, and hyperboles. Visual and auditory means involve the different uses of parameters such as detail, depth, lighting and colour for images and pitch, duration, volume and depth for sounds.

4. Exemplary analysis – Communicating climate change in documentary television

To exemplify my theoretical and methodological deliberations I will now turn to an investigation of the representation of climate change in documentary television. My research object is a media discourse about climate change in a specific context – a climate protection initiative of the Austrian public service broadcaster ORF, titled “*Unser Klima*” (Our Climate). According to its website (ORF 2008-2016), the main goal of this initiative is to raise public awareness on climate change and promote active engagement with climate protection. This stated aim of ORF provides the starting point for my critical investigation. By analysing documentary television programmes that were broadcast as part of this initiative I investigate how ORF communicates the issue of climate change to the public and in what ways it promotes climate protection. Rephrased in a more ecolinguistic way, in line with the

normative standpoint formulated above, I ask whether the initiative of ORF is really beneficial in that it conveys messages that foster understanding of the scale of the problem of climate change and encourages an ecological and sustainable society; or whether it is ambivalent in that it contains contradictory representations or perpetuates hegemonic ideologies that are adverse to necessary societal changes in addressing climate change.

In my exemplary analysis I will only take a partial look into a documentary programme that was broadcast as part of ORF's initiative and I will focus on the discursive strategies used to represent climate change and especially climate change mitigation measures in the programme. The example is a short feature that was broadcast in ORF's weekly culture programme *Kulturmontag* in February 2012 (*ORF Fernseharchiv* 2012). The feature deals with the topic 'ecological architecture' and is approximately eight minutes long. More specifically, the feature discusses the growing use of the passive house technology in the residential housing sector.

In line with this central subject of the feature, both the verbal and visual representations in the programme focus on the architecture of the passive houses. Two main forms of passive houses are introduced in the feature: a single-family house in the countryside and a multi-storey residential building in an urban setting. While these two forms of passive houses are represented in slightly different ways, three main predications can be identified, which the feature tries to balance in its representations of passive houses in general: The passive houses are simultaneously qualified as ecological and sustainable technology, as aesthetic architecture and as comfortable domiciles.

The **technological ecological quality** of the passive houses is verbally described through the use of many technical nominations and attributions. These are used to stress the passive houses' energy-efficiency, their ecological construction materials and their positive impact on CO₂ emissions and climate change:³

sonnenenergie: - ein dichter baukörper, - dreifach verglaste fenster- - und eine kontrollierte lüftungsanlage samt wärmerückgewinnung, - sind die zauberworte dazu. // die fertigteile bestehen ausschließlich aus stroh, - holz, und lehm. -- und sind luftdicht verschlossen, - mittels chemiefreier - lehm - vlies technik. // ökologische gesamtbewertungen - haben bei diesem

³ Examples from the verbal content of the programme are given as broad linguistic transcriptions in the original German and in rough English translations. Different examples are separated by two slashes.

prototyp eine enorm POSitive ce-o-zwei bilanz ergeben. - die bauweise trägt damit wesentlich zur eindämmung -- der globalen erderwärmung bei.⁴

Visually, the feature is predominantly composed of what social semiotics describes as “analytic representations” (Kress & van Leeuwen 2006: 87). These follow a whole-part structure: The exterior and interior of the passive houses as a ‘whole’ are represented in a few long shots and medium shots, often involving pans or tilts as dynamic elements. The rest of the shots are mostly composed of close shots that show technical or architectural details of the passive houses – their ‘parts’ or “possessive attributes”: a detail of a window or a wooden façade, a door frame, parts of a balcony, etc. These shots allow a close look at the technical features of the passive houses that are described verbally. At the same time, they also provide an aesthetically pleasing viewing experience, a fact that is important to consider in the context of the culture programme, which typically sees architecture as a form of art.

This **aesthetic architectural quality** of the passive houses is therefore highlighted throughout the feature. It is especially discussed in excerpts from interviews with two architects of passive houses. In these interviews the architects reflect on the relationship between the aesthetic and the ecological quality of passive houses – with ambivalent characterizations. While the first architect (A1) emphasizes the potential of a ‘new aesthetics’ as a result of technological innovations, the second architect (A2) represents the aesthetic and ecological aspects as potentially conflicting, and explicitly ascribes a higher value to the aesthetic quality:

A1: ich seh: - die architekto:r --- als: -- KÜNSTlerische arbeit, -- die aber -- reaGIERN muss, - auf --- geSELLschaftliche veränderungen- TECHnische veränderungen- soziale veränderungen. // A2: architekTONische qualität -- DA:RF ni:cht geopfert werden -- äh es MUSS ein: - ein wirklich der spagat geschafft werden, dass ma - durchaus energiebewusst plant und trotzdem HOHEN - architektonischen anspruch verfolgt.⁵

⁴ Solar energy, a solid building, triple-glazed windows and a controlled ventilation system along with heat recovery are the magic words to it. // The prefabricated components consist exclusively of straw, wood, and clay and are wrapped air-tight, with chemical-free clay-fleece technology. // Ecological total evaluations have revealed a hugely positive CO₂ balance of this prototype. The construction thereby contributes substantially to mitigating global warming.

⁵ I see architecture as artistic work that however has to react to societal changes, technical changes, social changes. // Architectonic quality must not be sacrificed. A balancing act really has to be managed, that one indeed plans in an energy-aware way and nevertheless pursues high architectonic aspirations.

Besides the architectural quality, the **quality of living for the inhabitants** is also represented as a priority. Visual, verbal and auditory devices play together to construct the passive houses as comfortable domiciles. The single-family passive house, for example, is qualified verbally as a 'paradise' and a 'power place'. This qualification as a 'paradise' is reinforced visually through close shots of furnishings and decorative items, such as wind chimes, potted plants and a garden pond, which can be identified as "symbolic attributes" (Kress & van Leeuwen 2006: 105). The auditory mode similarly mirrors these verbal and visual representations with a soft music, which includes low drum rhythms and high metal sounds. These can be seen as iconically mirroring the 'wooden' and 'glassy' atmosphere of the passive house.

The quality of living is also linked to the ecological quality of the passive houses. This is not done in an explicit way, but by using metaphoric predications, in which the term 'climate' is used to refer to a 'healthy atmosphere', or by making a comparison to another ecological issue:

etwa alle drei bis vier stunden wird die gesamte luft im haus - ausgetauscht. - das bringt ein gesundes raumklima- // zum gesunden klima der mieter gehört für querkraft auch die förderung sozialer kontakte. // nach dem motto, - biologisches essen muss auch schmecken, - sollte dieses passivhaus auch zum wohnen einladen.⁶

These metaphoric representations can be regarded as ambivalent, as they have the effect of distancing from the dynamic object of climate change. Ambivalences in the representation of climate change in the feature also become apparent in its final statement, which includes a call for action, but which uses noticeable distancing and mitigating strategies:

UMdenken ist nötig, - warnen klimaexperten. denn ressourcen schonen könne man wesentlich besser - in mehrgeschoßigem wohnbau, - als beim einfamilienhaus - auf der grünen wiese. -- aber ist das in österreich, dem land der häuslbauer, - überhaupt vorstellbar?⁷

⁶ About every three to four hours the entire air in the house is exchanged. This brings a healthy indoor climate- // To the healthy climate of the residents the encouragement of social contacts also belongs for *querkraft*. // According to the motto 'organic food has to taste good' this passive house is supposed also to invite to living comfortably.

⁷ Rethinking is necessary, climate experts warn, because one can protect resources considerably better in the multi-storey residential building than in the single-family house in the green countryside. But is this even imaginable in Austria, the land of the home builders?

Here, the use of indirect speech with an indeterminate authority of ‘climate experts’ has the effect of distancing towards the expressed claim. The rhetorical question at the end is a mitigating strategy that puts doubts on the possibility of the postulated change, because of an alleged Austrian attitude that is implied as unlikely to change – namely that most Austrians want to live in a single-family house on the countryside and not in a flat in a multi-storey residential building.

As a first tentative result of this partial analysis one can observe that while the feature tries to balance the different qualities of the passive houses in its representations, it shows some ambivalences in the way it tries to communicate climate change mitigation. In order to formulate a thorough critique a more comprehensive analysis of the programme and of the context of the initiative of ORF would be needed. This, however, was beyond the scope of this article.

5. Conclusion

Critical discourse studies and ecolinguistics are two research paradigms that share a similar critical orientation towards the impact of the use of language and other semiotic resources on the construction of meaning and ideologies. Ecolinguistics advocates a specific ecological point of view, which can add to the mainly social focus of CDS. This paper provided a discussion of how such an ecolinguistic and ecosemiotic perspective is useful for the normative critical standpoint and the epistemological foundations of an approach to multimodal critical discourse analysis. This approach is being developed in the context of an investigation of media discourses about climate change in documentary television.

The specific research object under investigation consists of documentary television programmes that were broadcast as part of a climate protection initiative of the Austrian public service broadcaster ORF. A thorough critical investigation of this research object within the framework of multimodal critical discourse analysis would depend on a comprehensive analysis of the television programmes and initiative on the micro, macro and context dimensions. The exemplary analysis presented in this paper could only provide a limited insight into parts of this analytical procedure. The first results of this investigation point to the pertinence of the issues discussed as part of the normative and epistemological foundations: that media discourses about climate change are permeated by a variety of

symbolic meanings of climate change, whereas the dynamic reality of climate change and its implications prove hard to represent.

References

- Alexander, R. (2009). *Framing Discourse on the Environment: A Critical Discourse Approach*. New York: Routledge.
- Angermüller, J., Maingueneau, D. and Wodak, R. (2014). *The Discourse Studies Reader: Main Currents in Theory and Analysis*. Amsterdam: Benjamins.
- Bevitori, C. (2014). "Values, Assumptions and Beliefs in British Newspaper Editorial Coverage of Climate Change". In: Hart, C. and Cap, P. (eds.). *Contemporary Critical Discourse Studies*. London: Bloomsbury. 603-625.
- Bland, D. (2014). "Environmental Discourse: Power, Agency, and the 'Green Consumer'". *Language & Ecology*. Available at: www.ecoling.net/articles.
- Carvalho, A. (2005). "Representing the Politics of the Greenhouse Effect: Discursive Strategies in the British Media". *Critical Discourse Studies* 2/1. 1-29.
- Doyle, J. (2011). *Mediating Climate Change*. Farnham: Ashgate.
- Dreher, T. and Voyer, M. (2015). "Climate Refugees or Migrants? Contesting Media Frames on Climate Justice in the Pacific". *Environmental Communication: A Journal of Nature and Culture* 9/1. 58-76.
- Fill, A. (2002). "Tensional Arches: Language and Ecology". In: Fill, A., Penz, H. and Trampe, W. (eds.). *Colourful Green Ideas. Papers from the Conference 30 Years of Language and Ecology (Graz, 2000) and the Symposium Sprache und Ökologie (Passau, 2001)*. Bern: Peter Lang. 15-27.
- Hess-Lüttich, E. W. B. (ed.) (2006). *Eco-Semiotics. Umwelt- und Entwicklungskommunikation*. Tübingen: Francke.
- IPCC (2014). *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Ed. by Core Writing Team, Pachauri, R. K. and Meyer, L. Geneva, Switzerland: IPCC.
- Klein, N. (2014). *This Changes Everything: Capitalism vs. the Climate*. New York: Simon & Schuster.
- Kress, G. (2010). *Multimodality: A Social Semiotic Approach to Contemporary Communication*. London: Routledge.
- Kress, G. and van Leeuwen, T. (2006). *Reading Images: The Grammar of Visual Design*. 2nd ed. London: Routledge.
- Kuha, M. (2007). "Acceptance and Avoidance of Responsibility in World Leaders' Statements About Climate Change". *Language & Ecology* 2/3. Available at: www.ecoling.net/articles.
- Naess, A. (1973). "The Shallow and the Deep, Long Range Ecology Movements: A Summary". *Inquiry* 16/1-4. 95-100.
- Nerlich, B. and Koteyko, N. (2009). "Carbon Reduction Activism in the UK: Lexical Creativity and Lexical Framing in the Context of Climate Change". *Environmental Communication: A Journal of Nature and Culture* 3/2. 206-223.
- Nöth, W. (2001). "Ecosemiotics and the Semiotics of Nature". *Sign Systems Studies* 29/1. 71-81.
- ORF (2008-2016). *Unser Klima*. Available at: <http://klima.orf.at> [access date: 29.02.2016].
- ORF Fernseharchiv (2012). *Kulturmontag: Unser Klima 2012: Energiewende / Klimahäuser*. Ed. by Nicola Eller & Katharina Huemer, 06.02.2012.
- Peirce, C. S. (1931-1958). *Collected Papers of Charles Sanders Peirce*. Ed. by Hartshorne, C. et al. 6 Vol. Cambridge: Harvard University Press.
- Reisigl, M. (2012). "Epistemologische Grundlagen der Kritischen Diskursanalyse und Funktionalen Pragmatik". In: Januschek, F., Redder, A. and Reisigl, M. (eds.). *Kritische Diskursanalyse und Funktionale Pragmatik*. Duisburg: Universitätsverlag Rhein-Ruhr. 49-71.
- Reisigl, M. (2014). "Argumentation Analysis and the Discourse-Historical Approach. A Methodological Framework". In: Hart, C. and Cap, P. (eds.). *Contemporary Critical Discourse Studies*. London: Bloomsbury. 67-96.
- Reisigl, M. and Wodak, R. (2016). "The Discourse-Historical Approach (DHA)". In: Wodak, R. and Meyer, M. (eds.). *Methods of Critical Discourse Studies*. 3rd ed. London: Sage. 23-61.

- Schäfer, M. S. and Schlichting, I. (2014). "Media Representations of Climate Change: A Meta-Analysis of the Research Field". *Environmental Communication: A Journal of Nature and Culture* 8/2. 142-160.
- Sedlaczek, A. (2012). *Die visuelle Repräsentation des Klimawandels in Dokumentarfilmen. Eine Multimodale Kritische Diskursanalyse*. Universität Wien: Diplomarbeit. Available at: <http://othes.univie.ac.at/17971/>.
- Sedlaczek, A. (2014). "Multimodale Repräsentation von Klimawandel und Klimaschutz. Eine theoretische und methodologische Annäherung am Beispiel des Österreichischen Rundfunks". *Wiener Linguistische Gazette* 78A. 14-33. Available at: <https://www.univie.ac.at/linguistics/publications/wlg/78A2014/Sedlaczek.pdf>.
- Sedlaczek, A. (forthcoming). "Multimodal Argumentation in a Climate Protection Initiative on Austrian Television". In: Mohammed, D. and Lewiński, M. (eds.). *Argumentation and Reasoned Action: Proceedings of the First European Conference on Argumentation, Lisbon, 9-12 June 2015*. Vol. II. London: College Publications.
- Short, T. L. (2007). *Peirce's Theory of Signs*. Cambridge: Cambridge University Press.
- Stibbe, A. (2014a). "An Ecolinguistic Approach to Critical Discourse Studies". *Critical Discourse Studies* 11/1. 117-128.
- Stibbe, A. (2014b). "Ecolinguistics and Erasure: Restoring the Natural World to Consciousness". In: Hart, C. and Cap, P. (eds.). *Contemporary Critical Discourse Studies*. London: Bloomsbury. 583-602.
- Stibbe, A. (2015). *Ecolinguistics: Language, Ecology and the Stories We Live By*. London: Routledge.
- Trampe, W. (2008). "Sign-World-Systems". In: Döring, M., Penz, H. and Trampe, W. (eds.). *Language, Signs and Nature: Ecolinguistic Dimensions of Environmental Discourse. Essays in Honour of Alwin Fill*. Tübingen: Stauffenburg. 39-57.
- van Leeuwen, T. (1999). *Speech, Music, Sound*. London: Macmillan.
- Vihersalo, M. (2008). "Framing Climate Change in Montreal 2005: An Environmental Justice Perspective". In: Carvalho, A. (ed.). *Communicating climate change: Discourses, mediations and perceptions*. Braga: Centro de Estudos de Comunicação e Sociedade, Universidade do Minho. 34-52. Available at: http://www.lasics.uminho.pt/ojs/index.php/climate_change/article/view/413.
- Wodak, R. and Meyer, M. (2016). "Critical Discourse Studies: History, Agenda, Theory and Methodology". In: Wodak, R. and Meyer, M. (eds.). *Methods of Critical Discourse Studies*. 3rd ed. London: Sage. 1-22.