

NON-SPONTANEOUS AND COMMUNICATIVE EMOTIVE INTERJECTIONS

ECOLOGICAL PRAGMATIC OBSERVATIONS

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Abstract: The basic feature of emotive interjections is that they are spontaneous. This feature implies that they are not intentional and, hence, not communicative. Nevertheless, in addition to spontaneous and non-communicative emotive interjections one can observe emotive interjections that are non-spontaneous and communicative and emotive interjections that are spontaneous and communicative. This heterogeneity poses a fundamental problem for the classification and description of interjections, and it is this problem that is the focus of this article. The article presents an ecological pragmatic analysis of emotive interjections with special regard to the evaluation of four accounts of the heterogeneity. The article's contribution consists of observation-based evidence in the form of an analysis of three occurrences of interjections that differ with regard to their spontaneity and communicativity. The article suggests that the basic sign relation of emotive interjections is indexical, but it also shows that an iconic and a symbolic relation can be added to this basic relation.

1. The interjectional chaos

It is not unusual for an area of linguistic research to appear incoherent or even chaotic. Nevertheless, interjections are a remarkable one of a kind. In some descriptions, interjections are not integrated into grammatical structures (Jespersen 1968/1922; Sapir 1970; Stange 2016; Trask 1993), in others, they constitute units in the grammar of speech (Norrick 2014). In some descriptions, they are non-communicative (Fries 1952), in others, they are devices that constitute the essence of communication (Ameka 1992). In some descriptions, they are purely emotive words having no referential content (Quirk et al. 1972), in others, they are semantically rich and have a definite conceptual structure (Ameka 1992; Evans 1992; Goddard 2014; Wierzbicka 1992; Wilkins 1992).

In some descriptions, they are response cries (Goffman 1978), in others, they contain a predicative relation (Meinard 2015; Wilkins 1992). In some descriptions, they are involuntary reactions (Fries 1952; Nübling 2004; Stange 2016), in others, they are items that encode communicative intentions (Ameka 1992; Wilkins 1992). In some descriptions, they are restricted to expressing emotions and sensations (Jespersen 1968/1922; Nübling 2004; Stange 2016), in others, they "introduce and connect utterances to foregoing talk, they act as tags, they fill pauses, they signal listener responses and assessments, all in addition to expressing emotions" (Norrick 2014:251).

A contributing factor to the above chaos is undoubtedly a tendency in recent research to extend the area covered by interjections. According to Norrick (2014), interjections include: directives like *sh!*, attention getters like *pst*, response markers like *yeah*, backchannels like *mhm*, *mm*, *uh-huh* and *hm*, fillers like *um* and routines like *hello*, *bye-bye* and *thank you*. What these utterances have in common is that they can occur in isolation. But this poses insoluble problems if we try to identify common functional, i.e. semiotic, pragmatic and semantic, features. This problem is characteristic of the approaches that use structural criteria, for example Evans (1992), Norrick (2014) and Wilkins (1992). Thus, when these approaches find that interjections are a heterogeneous class, it is a consequence of basing classification on structural criteria.

To base the classification of interjections on structural criteria is a choice of research strategy; it is not in any sense given by nature that expressions of emotions and sensations, directives, attention getters, response markers, backchannels, fillers and routines belong to the same class. Another research strategy is to combine structural and functional criteria, taking a starting point in structural criteria and adding functional criteria (Ameka 1992; Meinard 2015; Wierzbicka 1992; Wilkins 1992). Ameka takes a starting point in the structural criteria "little words or non-words which in terms of their distribution can constitute an utterance by themselves and do not normally enter into construction with other word classes" and "do not normally take inflections or derivations" (Ameka 1992:105). These criteria result in a functionally heterogeneous set of utterances. This heterogeneity is then handled by distinguishing between types of interjections based on their function. Thus, on the basis of Jakobson's (1960) distinction between text functions, Ameka (1992) proposes a distinction between emotive, conative and phatic interjections. However, the structural criteria include a number of utterances the functions of which seem to differ significantly from typical interjections like ah (oh). For example, routines like undskyld (sorry) and tak (thank you) and onomatopoeias like vov (bark) and ding. In order to distinguish interjections from such utterances, Ameka identifies specific functional features of interjections. Unlike routines, interjections are "spontaneous immediate responses to situations" and "not addressed" (Ameka

1992:109). The problem is that these two features do not seem to apply to conative interjections like *sh!*, and phatic interjections like *mm*. Similarly, unlike onomatopoeias, interjections are "expressive of a mental state" (Ameka 1992:113). But it is not clear in what sense conative and phatic interjections are expressive. In fact, Ameka distinguishes between expressive interjections, on the one hand, and conative and phatic interjections, on the other (Ameka 1992:113-114). These maneuvers reveal that emotive interjections differ fundamentally from the conative and phatic interjections in terms of their function. From a functional point of view, it is therefore unclear what can be gained by examining and describing these based on the same premises (see also Stange 2016).

An alternative to the above strategies is to combine formal and functional criteria and to take a starting point in functional criteria (Goffman 1981; Jespersen 1968/1922; Ries 1952; Nübling 2004; Stange 2016). If you do so and consider the functional features that Ameka identifies, i.e. spontaneous, not addressed and expressive, to be criteria of interjections, interjections are restricted to emotive interjections, i.e. signs of sudden emotions and sensations. The work presented here adheres to this strategy and is thus confined to emotive interjections.

What is interesting, however, is that even if we apply functional criteria and limit the research area to emotive interjections, the area still seems to be heterogeneous. Thus, one can observe both emotive interjections that are spontaneous and non-communicative, and emotive interjections that are non-spontaneous and communicative (Goddard 2014; Goffman 1981; Stange 2016; Wharton 2003; Wilkins 1992). This heterogeneity poses a fundamental problem for approaches that use functional criteria, and it is this problem that is the focus of this article. An ecological pragmatic analysis of emotive interjections with special regard to this heterogeneity will be presented here. The question to be answered is: How do we explain that emotive interjections can be spontaneous and non-communicative, and non-spontaneous and communicative, based on functional criteria? The article's contribution consists of observation-based evidence in the form of an analysis of three occurrences of interjections that differ with regard to their spontaneity and communicativity.

The article is structured as follows: The second section outlines a functional account of emotive interjections with a starting point in Jespersen's (1968/1922) definition and (1965/1924) classification of interjections. The third section describes the fundamental heterogeneity that has been observed within the area of emotive interjections and outlines four proposed accounts of this heterogeneity. In the fourth section, three cases are analyzed in order to investigate and describe this heterogeneity and evaluate the four aforementioned accounts. The last section provides a brief summary.

2. Emotive interjections as a basic function

2.1 The functional implication of Jespersen's definition and classification

Jespersen (1968/1922:415) defines the "usual" interjections as "abrupt expressions for sudden sensations and emotions", and then he adds "they are therefore isolated in relation to the speech material used in the rest of the language". This definition is a good starting point for a comparison of definitions of interjections because it includes all the types of criteria used in linguistic descriptions of interjections: word-level structure (abrupt), semiotic (expressions), semantic (sensations and emotions), pragmatic (sudden) and sentence-level structure (isolated). It also identifies the three features that have been associated with interjections across the more or less incompatible descriptions (Ameka 1992; Schourup 1982; Stange 2016), namely 1) they are spontaneous, 2) they express emotions and 3) they occur in isolation. What is special about Jespersen's definition is that it implies a relation between these features. When references have been made to Jespersen's definition in linguistic descriptions of interjections, the adverb therefore has, quite remarkably, been left out (e.g. Kryk 1992:194; O'Connel & Kowal 2008:136; Schourup 1982:13). But this adverb entails a crucial point. The understanding of the relation indicated by "therefore" requires a selective inference since the assertion that explains the grammatical feature "isolated" includes four possible reasons: premise 1 'abrupt', premise 2 'expressions', premise 3 'sudden' and premise 4 'emotions and sensations'. But it cannot be because expressions are abrupt that they are isolated. Nor can it be because they are signs of emotions or sensations; because the sentence *I have pain* is also a sign of emotions. The only plausible inference is that they are isolated because the emotions and sensations they indicate are sudden. This inference also suggests a specific interpretation of the semiotic premise 'expressions', namely that they are symptoms (Bühler 1965/1934) or indexes (Bühler 1965/1934; Peirce 1986:169-177); i.e. there is a lawful or factual relation between sign and object. The point of Jespersen's definition, thus, is that interjections have the grammatical properties they have because of these pragmatic and semiotic features.

When Jespersen, as a grammarian, classifies the usual interjections based on grammatical criteria, they form a subclass of particles because they share the grammatical trait with the particles that they do not take inflections. But Jespersen is aware that words from other word classes can be used in the same way:

As a last part of speech, the usual lists give *interjections*, under which name are comprised both words which are never used otherwise (some containing sound not found in ordinary words e.g. an inhaled f produced by sudden pain, or the suction stop inadequately written *tut* and others formed by means of ordinary sound e.g. *hullo*, *oh*), and on the other hand words from the ordinary language e.g. *Well! Why? Nonsense!*

The only thing that these elements have in common is their ability to stand alone as a complete utterance; otherwise they may be assigned to various word classes. They should not therefore be isolated from their ordinary uses. Those interjections which cannot be used except as interjection may most conveniently be classed with other particles (Jespersen 1965/1924:90).

When Jespersen determines what they have in common, this should be understood as syntactically and morphologically in common. Because when the list of interjections includes syntactically and morphologically different words, this is precisely because at least some of these words have in common that they can be used in the same way. This functional overlap is decisive for the definition of interjections. An example may be illustrative. The following two interjections are performed by two pilots on an airliner when they encounter a bird strike on final approach:

(00.00.00)

(00:02,42)

((a loud thud indicating a bird

strike))

oh

(00:00,58)Captain(pilot monitoring): (00:01,13)

First officer (pilot flying): shit 好了

Captain (pilot monitoring):

((Captain lifts his right hand in an unflappable way indicating that there is no cause for concern))



(00:02,84)Captain (pilot monitoring): just fly it then1

(747-400 final approach 2008)

The expression that the captain expresses in immediate continuation of the incident is "oh". According to Jespersen, oh belongs to the class particles because it cannot be used in other ways than defined by the semiotic, semantic and pragmatic criteria for interjections. The expression that the first officer utters in the same circumstances is "shit". According to Jespersen, shit does not belong to the same word class as *oh* because it can be used in other ways with the structural criteria that the realization of these functions implies, among other things inflection and dependency relations. In this case, both words are nevertheless expressions of sudden emotions and sensations. Both words must be understood as occasioned by the incident and can be interpreted as an index on this basis; "oh" is a sign of surprise, and "shit" is a sign of surprise

as well as concern. One can say that there is a difference in response time, but it is very small (0.55 sec) and can be explained by a difference in tasks and task load between the pilot monitoring and the pilot flying. Thus, both "oh" and "shit" fulfill Jespersen's semiotic, pragmatic and semantic criteria of interjections. They differ structurally, but they have the same function.

According to Jespersen, a functional overlap is not a reason for classifying words in the same way. In other words, there is no one-to-one relation between the syntactical and morphological features of interjections and the function they serve. The crucial thing in Jespersen's definition and handling of the grammatical classification problem is that it implies that interjections are not a word class but a function. Hence, to exclude "therefore" from Jespersen's definition is not trivial. Because this allows the description of interjections to take a starting point in the structural criteria with all the problems this implies for a coherent description (see section 1). A solution to these problems is, therefore, to consider interjections as a function.

2.2 What is a function?

A function is defined as the fulfillment of a task in the human niche by means of an utterance. Hence, a function is a relation between an utterance and a task. 'Niche' is an ecological concept; it covers the environment that human beings are adapted to through evolution. Thus, a function is not a language internal relation (Hjelmslev 1993/1943), but a language external relation (Bühler 1965/1934). In other words, 'task' is a pragmatic category. The reason for the use of the term *niche* rather than the narrower term *communication* is that language - although communication is undoubtedly the basic and overriding purpose of language - apparently fulfills tasks for us other than communicative tasks, for example thinking and aesthetic tasks. For a number of tasks in the human niche it applies that they can be fulfilled by other means than verbal signs, for example gestures, facial expressions, postures, laughter, cries, sneezes, pictures and figures. The tasks we are interested in in this context, however, are the tasks that can also be fulfilled verbally. The concept of function is thus related to the concept of function we know from models of sign and text functions such as Bühler's (1965/1934) and Jakobson's (1960), i.e. a relation between a sign and a factor in a situation of language use. However, the factors suggested in these models, for example sender, receiver, context, are complex. This means that the function that relates to a factor may include tasks that differ significantly from each other. The function that relates to the sender can be realized by utterances like HAAH, and (oh), lort (shit) and for satan (fucking hell), attitudinal adverbials like desværre (regrettably) and heldigvis (fortunately), expressive speech acts like jeg har det ad helvede til (I feel like hell) and det er for galt! (this is terrible!). This article uses the term function for more specific, subordinate functions. This makes it possible to distinguish between the functions that the aforementioned expressions serve.

An important entailment of the outlined functional viewpoint is that there is no one-to-one relation between linguistic structure and function. Signs that differ grammatically and morphologically can be recruited to fulfill the same task (Harder 2010:236-268), for example, as in example 1. Conversely, the function may be assumed to prefer certain morphological, syntactical and semantic characteristics. That is, the morphological, syntactical and semantic characteristics of the set of utterances we call interjections are *motivated* by the task (Bühler 1965/1934). It is this relation that can lead us to believe that interjections are a word class or that there are structural and/or semantic criteria for defining interjections. However, from the functional point of view, this would be putting the cart before the horse. At most you can say that the function is a constraint on the form of expression and that this constraint contributes to a regularity in the formal realization of the function. Determining which forms of expression can realize the function is, however, an empirical question.

2.3 The task of emotive interjections

The task of emotive interjections must be described with a starting point in one of the fundamental features of emotive interjections, namely that they are spontaneous (Ameka 1992; Goddard 2014; Goffman 1981; Jespersen 1968/1922; Nübling 2004; Ries 1952; Schourup 1982; Stange 2016; Wharton 2003; Wilkins 1992). *Spontaneous* means that something is happening or is done in a natural, often sudden way, without any planning (Cambridge Dictionary). It is this feature that Goffman tries to capture with metaphors in the often-cited passage: "natural overflowing, a flooding up of previously contained feeling, a bursting of normal restraints, a case of being caught off guard" (Goffman 1978:800). That is, interjections are basically something that happens to us rather than something we do; they are not intentional (Caffy & Janney 1994:329, Buck 1994:266).

This understanding of interjections has a biological, evolutionary basis. In *Expression of the Emotions in Man and Animals*, Darwin describes expressions and gestures "involuntarily used by man and the lower animals, under the influence of various emotions and sensations" (Darwin 2010/1890:28). Darwin considers expressions of emotions and sensations to be results of our attunement to the niche. Under certain circumstances, it has been useful to act in certain ways, for example when we are threatened. Our perceptual system is adapted to the pickup of information about such circumstances (Gibson 1979), and our nervous system is adapted to transform this information into actions. The pickup of information about the above circumstances induces a state of mind, and when such states are induced, we react in certain ways:

Certain complex actions are of direct or indirect service under certain states of the mind, in order to relieve or gratify certain sensations, de-

sires, &c.; and whenever the same state of mind is induced, however feebly, there is a tendency through the force of habit and association for the same movements to be performed. (Darwin 2010/1890:29).

Examples are elevation of the eyebrows, opening the mouth, protrusion of the lips, strong breath, blinking and trembling. These actions are habitual and involuntary. This is indicated by the fact that we also perform them where they are of no use. The function of these actions is therefore not to solve the problem entailed by the circumstances that induce the emotion, but to relieve and gratify the emotions and sensations induced. However, it may be assumed that there has been and still is a functional relation so that the action that relieves and gratifies emotions and sensations, in one way or another, has contributed to solving the problem, for example coughing when we are choking. Hence the evolutionary edge, hence the habit.

The fact that these actions are basically beyond our control is essential to their function. According to Damasio, emotions, understood as the processes of performed activities and bodily reactions that happen to us when we encounter something in the world, are part of our evolutionally inherited autopilot (Damasio 1999). They enable us to act appropriately without thinking. According to the biological, evolutionary description, these actions function as immediate reactions that relieve or gratify emotions or sensations that arise in circumstances where it has been beneficial to act in certain ways. Now, the point is that such actions following Darwin include interjections. Thus, in line with this description, the task of emotive interjections – in so far as they are spontaneous – is to relieve or gratify emotions and sensations.

When Darwin describes these actions as *expressions* of emotions and sensations, this should not be understood as a communicative function. These actions are not *expressives* in the sense of speech act theory (Searle 1996/1979:15), according to which the action is intended, and the expression *counts as* an act with the social obligations it implies. They are exclusively expressions in an observer's perspective; it is the person who observes the performer of the action who understands the action as a sign. Thus, interjections are not aimed at anyone, but solely at relieving or gratifying emotions and sensations. That is why Fries consider them to be non-communicative:

All these expressions seem to be spontaneous reactions to a situation suddenly confronting the speaker. (...) They may, of course, be overheard by a listener and the hearer gains some impression of the kind of situation to which the speaker is reacting (...) These forms (...) are not used to elicit regular responses from those who hear them. Their purpose is not communicative (Fries 1952:53).

It is clear that this delimitation depends on a specific definition of communication, namely that communication entails that the speaker not only provides information to a listener, but also does it with an informative intention (Grice 1957; Sperber & Wilson 1986). It is therefore a narrower concept than what we find in some theories of information, for example, Bateson's (2000/1972:283).

That is, interjections – insofar as they are spontaneous – are not addressed and not carried by an informative intention, and, therefore, they are non-communicative. In semiotic terms, they are neither signals nor symbols, but symptoms (Bühler 1965/1934) or indexes (Peirce 1986). This is the basic implication of the feature spontaneous.

3. The heterogeneity of emotive interjections

The problem with the above description of the function of interjections is that you can observe emotive interjections that appear to be non-spontaneous and emotive interjections that appear to be communicative. This heterogeneity has been noticed in the research on interjections. For example, Goffman observes that people who are being attended to by dentists use ow! or ouch! as a signal to the dentist that they are beginning to feel some pain. Furthermore ow! and ouch! can be used empathetically to signal the speaker's understanding of the listeners pain (Goffman 1981:105-106). Wilkins refers to English informants having observed that "when their children say "Ow!", it is not usually the case that the children are experiencing any real or significant pain. Instead, children tend to use this interjection knowing that it will get their parents' attention, and knowing that it can be used to start a chain of events that will lead to their sibling getting into trouble" (Wilkins 1992:149-150). And, on the basis of a large corpus analysis of English emotive interjections, Stange finds that "[o]ne and the same interjection can (...) vary in its degree (...) to which it is a spontaneous, reflexlike expression" (Stange 2016:199).

This heterogeneity has been dealt with in various ways in the descriptions of interjections. Without claiming an exhaustive meta-analysis, one can distinguish four accounts: semantic (Wilkins 1992), pragmatic (Wharton 2003), contextual, typological (Goddard 2014) and contextual, parametric (Stange 2016). In the following these four accounts will be outlined.

Semantic: The semantic descriptions are based on the assumption that interjections are conventionalized and that they encode speaker attitudes and communicative intentions (Ameka 1992). In these descriptions the fact that interjections can occur in isolation, i.e. as independent, meaningful expressions, plays an important role. This means that if they are used communicatively, the informative intention must be a part of their semantics. In line with this, Wilkins (1992) considers interjections to be speech acts. Hence, they have an illocutionary purpose, namely "to show how the speaker feels at the exact moment of speaking" (Wilkins 1992:152). Therefore, Wilkins' Natural

Semantic Metalanguage-based explication of the meaning of the expression *wow* comprises an informative intention in the form of the element: "I say '[wow!]' <u>because I want to show</u> how surprised (and impressed) I am feeling right now" (Wilkins 1992:151 (my emphasis)).

Pragmatic: The starting point for Wharton's account is that "most primary interjections are under our conscious control" and that "we should be careful not to overestimate the expressive, instinctive nature of these" (Wharton 2003:51). In continuation of this assumption, Wharton concentrates on describing interjections as communicative. The description is based on the Grice-inspired relevance theoretical concept of ostensive-inferential communication (Sperber & Wilson 1986). Inferential communication implies that only some of the meaning included in the process of understanding is explicit. For example, I can say shit and mean 'I am really surprised by what you're telling me now. The point is that it is possible for the listener to infer the meaning. The prerequisite for this form of communication is that the utterance includes two layers of meaning: "The first, basic layer is the information being 'pointed out', the second layer is the information that the first layer has been pointed out intentionally" (Wharton 2003:67). In other words, it's not sufficient for me to say shit, I have to say it with the intention that you make the inference that I am surprised, and you have to recognize my intention. Hence the term ostensive. Interjections, then, are described based on Grice's (1957) distinction between natural meaning and non-natural (i.e. coded, conventional, symbolic) meaning. Wharton's point is that we can produce natural meaning with an informative intention, and that this is what we do with interjections in so far as they are communicative. According to Wharton, interjections are located somewhere between natural and non-natural meaning. To illustrate this status Wharton uses the distinction between showing and telling:

to show someone you are delighted with a gift you allow them to see your natural reaction, a smile; to tell them you are delighted you utter something like 'it's wonderful!'; to utter an interjection like *wow* is to communicate that you are delighted by adding a certain element of coding which takes it beyond mere display, but falls short of language proper (Wharton 2003:51).

Wharton then describes interjections as ostensive-inferential communication as follows: They are located on "various points along a continuum of communicative behaviours, ranging from those in which relatively direct evidence of the basic layer of information is provided — showing, to those where all the evidence provided is indirect — saying." (Wharton 2003:68-69).

Contextual, typological: Goddard (2014:54) distinguishes between four types of uses based on the relation between the interjections and the context: immediate (stimulus-bound) uses, didactic uses, discursive uses and ironic

uses. Immediate uses are primary. They approximate what we have described in subsection 2.3. Thus, it is characteristic of Goddard's Natural Semantic Metalanguage-based explications of the semantics of interjections that, unlike Wilkins', they do not include an informative intention component. On the other hand, they include components like 'I know' and 'I want', and immediate uses also include conative interjections like *sh!* Thus, immediate uses do seem to be characterized by a degree of consciousness and intentionality. Didactic uses are to use an interjection "to display or model a (purported) reaction for someone else" (Goddard 2014:54). Discursive uses cover "situations where the stimulus is not something in the immediate context, either a physical-sensory stimulus or a human action or behavior, but rather something the speaker is thinking about." (Goddard 2014:54-55). Ironic uses are not specified. Most importantly, Goddard notes that "discursive usages depend on prior understanding of how the interjection is used in immediate contexts." (Goddard 2014:54-55).

Contextual, parametric: The starting point of Stange's description is that interjections proper are spontaneous in the sense described in section 2.2. This status is characterized as "semi-automatic" (Stange 2016:17-18). The term covers that they "function as immediate verbal reactions to a certain event or stimulus, and their production is supposed to require less planning than that of 'well-formed' or 'normal' utterances" (Stange 2016:20). The reason for the use of the qualifier semi, is that interjections may "vary with regard to how spontaneous their production actually is, depending on the automatic or conscious appraisal processes involved in the emotional experience" (Stange 2016:18). To account for interjections that appear to be addressed and communicative, Stange distinguishes between degrees of interjectionality (Stange 2016:17). Interjections proper constitute one pole on the scale. For these, it applies that they are primarily emotive, produced semi-automatically, exclamatory, i.e. produced with increased volume, and that they do not require an addressee. Interjections in the opposite end of the scale are primarily phatic, non-exclamatory, intentional, and an addressee is required (Stange 2016:17). According to Stange, the degree of interjectionality is contextually determined. In line with this, a number of factors determining the degree of interjectionality are investigated. However, Stange doubts that it will prove beneficial to provide a grid of all possible combinations of factors. Instead, five parameters determining the degree of interjectionality are suggested: "the context of use; the variant used (if alternatives are available): simple vs. complex; physical absence vs. presence of the stimulus; the nature of the stimulus: concrete vs. abstract; focus on self vs. focus on the other." (Stange 2016:201).

As is evident from the outlines above, these descriptions differ considerably. Perhaps one could question some of these descriptions based on a conceptual analysis, but I will refrain from a theoretical discussion

here. Instead, I will try to test and compare their ability to describe a small set of carefully selected authentic examples of interjections. The purpose is to determine how informative and accurate the descriptions are.

4. An analysis of spontaneous, non-spontaneous and communicative emotive interjections

In this section, three analyses of interjections are presented. The methodological approach used in these analyses differs from those previously used in the studies of the semantics and pragmatics of interjections. Before these analyses are presented, the method is described briefly.

4.1 Method

All methods have their advantages and disadvantages. In previous studies of the semantics and pragmatics of interjections, mainly two methods have been used: 1) intuition-based approaches based on constructed examples, literary examples or examples isolated from their linguistic and extra-linguistic context (e.g., Ameka 1992; Kryk 1992; Meinard 2015; Wharton 2003; Wilkins 1992; Wierzbicka 1992) and 2) corpus-based observations (e.g. Norrick 2014; Stange 2016). A well-known weakness of the intuition-based approaches is that the assessment of acceptability and the comparison of variants requires a construction (or reconstruction) of the context of use, and this context is not necessarily generalizable. In other word, arguments like "[i]t seems a little odd to say (or to write)" (Wierzbicka 1992:161) are not very convincing, and you can almost always find so called 'odd' or 'less acceptable' utterances in natural contexts without indications of anomalies.

In corpus-based methods, the examples are natural language, the analyst has access to the co-text that can serve as support in the interpretation, and one can define the context of use by selecting types of exchanges, for example mother child communication. The problem with corpus-based methods is that only structural criteria can be applied in searches, and the search results are separated from their extra-linguistic context. Thus, it may be difficult to determine whether a particular interjection is spontaneous and whether it is communicative.

The method used in the three analyses below is based on ecological pragmatics (Borchmann 2018; Hodges 2009). Ecological pragmatics implies two overall methodological requirements: The object must be natural language, and it must occur in a well-defined, well-established and specifiable non-linguistic context. An ecological pragmatic analysis meets these two requirements by concentrating on language use embedded in practical activities, such as professional road cycling, rifle hunting, spearfishing, recreational diving, beer brewing, scheduled air traffic and soaring. Such activities can serve as well-defined, well-established and specifiable contextual frames. Thus, they are constrained by specific values and goals; they are characterized by typical

courses of actions, procedures, strategies, tools and affordances; practitioners have specific needs for information in order to control, select and coordinate actions, and there are norms for the information in the environment that they should attend to, as well as well-established sources of information and standardizations of information; the effects on the body and the emotions and sensations that the performance of the activity entails are well-known and predictable; and communication is conventionalized and often includes a phraseology. All this provides us with good indications of the intentions and of the understanding of intentions of language users and thus makes it possible to determine what constitutes deviation and what does not. The downside is that the rich contextual description limits the number of available examples, and this makes it questionable to generalize from the examples. The ecological pragmatic approach tries to solve this problem by selecting and analyzing occurrences of language use that are archetypal with regard to particular aspects of language use. In the present case, the three examples are archetypal with regard to their spontaneity and communicativity.

All three examples are embedded in the activity of soaring, more specifically the launch. As it will become apparent from the analyses, the launch has a potential in relation to the description of interjections because it involves fierce effects on the body as a perceptual system, circumstances that induce emotions and sensations, demands for the suppression of actions that relieve and gratify emotions and clear indications of emotions as well as the suppression of actions that relieve and gratify emotions and sensations. The analyses are based on the author's cognitive ethnographic studies of the activity of soaring. The current examples are video recordings from the speaker's, i.e. the pilot's, perspective. The first case, example 2, is from a native speaker of English, recorded with a cockpit-mounted camera. It originates from an English pilot's website. The second and third cases, examples 3 and 4, are from native speakers of Danish, recorded with a head-mounted camera. This material has been collected by the author as a part of studies of the activity of soaring in Denmark. The recordings are analyzed and transcribed using the program VideoPad.

In the following, analyses of three cases that include one or more examples of interjections are presented. The cases have been selected so that they comprise 1) spontaneous, non-communicative interjections, 2) non-spontaneous, communicative interjections and 3) spontaneous, communicative interjections. The three cases are analyzed separately in the order given.

4.2 Spontaneous, non-communicative interjections

The interjections below are uttered by a glider pilot during an aerotow launch. In an aerotow launch the glider is connected to a tow plane with a cable, and the tow plane pulls the glider up to a given height² (e.g. 800 m) where the

glider pilot releases the cable. Both the glider pilot and the tug pilot have the possibility of releasing the cable if problems arise during the launch. In the current launch, the airbrakes of the glider open. Airbrakes are a device used to descend, and they are primarily used in landing. It is critical if they open during the launch, because they prevent the glider from climbing. The airbrakes are locked when the pilot isn't using them, and it is part of the cockpit check before the launch to ensure that they are locked. Should they accidentally open during the launch they should be closed immediately. In this launch, they open without the pilot noticing it. There are, however, clear indications that the pilot notices anomalies caused by the open airbrakes. When a glider pilot detects such anomalies during a launch, (s)he should immediately release the cable and land while still within the runway. But in this case the pilot is passive; he lets the situation evolve. At one point, the tow plane's situation becomes dangerous due to the glider's open airbrakes, and as a consequence, the tug pilot releases the cable. The glider pilot is left at a low height, outside the runway and with an obstacle 100 m in front of him. The pilot stalls³ the glider in an attempt to avoid the obstacle, and the glider crashes. The pilot is not seriously injured. In this course of events, the glider pilot utters a sequence of interjections:

2			
	(00:00,00)		((The tug pilot gives full throttle. The glider accelerates. The glider pilot's left hand is placed
			on the cable release handle.))
	(00:17,25)		((The glider's airbrake opens without the pilot
	(00:17,23)		
	(00.25.70)		noticing it.))
	(00:25,70)		((Airspeed 43 kt. The glider lifts off.))
A	(00:39,00)		((Climb rate is too low due to the open airbrake.
			It is still possible to release the cable and land
			within the runway.))
1.	(00:39,87)	Glider pilot:	fucking hell
В	(00:51,00)		((End of runway approaches, height is too low.))
2.	(00:52,34)	Glider pilot:	for fuck's sake
C	(01:03,51)		((Height app. 25 m, airspeed 54 kt. Tug pilot
			releases the cable.))
3.	(01:04,24)	Glider pilot:	hh .hh
	(01:04,94)		((Airspeed begins to drop.))
4.	(01:05,25)	Glider pilot:	SHIT
	(01:05:65)		((20 meter tall trees 100 meters ahead. The pilot
			pulls the control stick back and to the left.))
D	(01:06,18)		((Airspeed drops rapidly below stall speed. ⁴ The
			glider stalls.))
5.	(01:07,81)	Glider pilot:	e ···

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6. (01:08,88) Glider pilot: oh my God
(01:10,09) ((The glider touches the top of the trees. The sound is loud))
7. (01:11,23) Glider pilot: phruuh
8. (01:12,08) Glider pilot: fucki:ng
E (01:12,71) ((The glider hits the ground, slides sideways and stops.))
9. (01:14,97) Glider pilot: fuck<sup>5</sup>
F (01:15,00) ((The glider has crashed.))
10. (01:15,90) Glider pilot: AARHH
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(Airfield in England, 2017)

Each of these utterances occurs under specific circumstances that require an action and have the potential for inducing an emotion or sensation. In line with this, the utterances are indicators of certain emotional and sensational states. Thus, the lexical expressions used are often used to express emotions and sensations, namely (2-1), (2-2), (2-4), (2-6), (2-8) and (2-9), and several of the utterances reflect emotional and sensational states: (2-3) and (2-5) are the result of a sudden powerful movement of the diaphragm; (2-7), (2-8) and (2-9) are uttered with excited abdominal muscles; and (2-8) and (2-9) are uttered with excited jaw muscles. The utterances thus appear to be actions related to emotions and sensations. The next thing to be noted is that the actions are of no use under the present circumstances; they may even be considered counterproductive in so far as they replace actions that could have been useful. The appropriate action under circumstance (A) is that the pilot releases the cable and lands on the runway or at least checks the cockpit or the wings to see if there are anomalies there. But the pilot does not release the cable and does not check the cockpit or the wings. The appropriate action under circumstance (B) is to locate a landing possibility outside the runway and, when a possibility is located, to release the cable and land the airplane there. But the pilot does not turn his head to locate such a possibility. What the pilot does under these circumstances is to express emotions and sensations. Thus, they appear to be actions that relieve and gratify emotions and sensations, and while such actions may be appropriate, and (2-1) and (2-2) enable the pilot to become aware of the situation and his inappropriate approach, they are not used in this way. Thus, the pilot's utterances appear to be involuntary. Finally, one can note that there is nobody else in the cockpit. Hence, there is nobody he can address, the utterances are not caused by other utterances nor can they generate a response. Admittedly, there is a camera in the cockpit, but since the utterances do not give a flattering impression of the pilot, one can assume that they are not directed at those who will watch the movie afterwards. That is, the

utterances above are spontaneous in the sense described in section 2.2; they are not intentional, not addressed and not communicative.

The next thing we can observe is that they vary. There are both utterances that meet the criteria of so-called primary injections, i.e. words or non-words that cannot be used in other ways (Ameka 1992:105), namely *hh* .*hh*, *phhh*, *phruuh* and *AARHH*. And there are utterances that meet or are composed of words that meet the criteria of secondary interjections, i.e. words that can be used in other ways than interjections (Ameka 1992:111), namely: (2-1), (2-2), (2-3), (2-5), (2-7) and (2-8). Apparently, these grammatical and semantic differences do not affect their function as actions that relieve or gratify emotions and sensations. Thus, we can observe that words that differ grammatically and can serve different communicative functions can be recruited to serve the function as interjections.

Now, what it is interesting is that the variations in expression - although the utterances are involuntary - also appear to express variation in emotions and sensations. This relation can be uncovered in the ecological pragmatic analysis. Circumstance (A) is an anomaly that must be perceived and responded to according to the values, goals and procedures of the activity. In line with this, utterance (2-1) indicates that the speaker perceives an anomaly; thus, fucking hell can indicate surprise. Circumstance (B) is a development of circumstance (A) which has now become critical since the landing possibility afforded by circumstance (A) is no longer available, and the pilot must actively seek out alternative possibilities for action. The pilot's actions, and not least the absence of actions, are indications of the pilot's passivity, in the sense that he does not proactively take control of the situation and stop the development of the circumstances by acting on the perceivable anomalies. Utterance (2-2) indicates that he perceives circumstance (B), but that he places the responsibility for the situation outside himself. Thus, for fuck's sake is typically used as a regret or reproach of others. Circumstance (C) is a sudden change of circumstances implying that the pilot is alone to deal with a situation that has become critical. Utterances (2-3) and (2-4) indicate the shock that this can induce. Circumstance (D) entails that the pilot has run out of possibilities for action and that the situation can no longer be salvaged. Utterances (2-6), (2-7) and (2-8) indicate the fear and the muscular tensions induced under this circumstance. Circumstance (E) is the outcome of the course of events and actions, and (2-10) indicates the emotional state of the pilot under this circumstance. Thus, if we compare the utterances with the circumstances, there is a very close connection between 1) the circumstances, 2) the semantic constraints of the words and the physiological indications and 3) the emotions and sensations that the different circumstances can induce. These relations between circumstances, signs and objects can be illustrated in this way:

Circumstance	Sign	Object	
Climb rate is too low	fucking hell	SURPRISE, WONDER	
		Gloss: 'this is abnormal'	
Height is too low	for fuck's sake	FRUSTRATION, GRIEVANCE Gloss: 'this could be different' 'this ought to be different' 'someone other than me is responsible for this'	
Tug pilot releases the cable	hh .hh	SHOCK (STRONG MOVEMENT OF THE DIAPHRAGM)	
Low height, no runway	SHIT	Gloss: 'this is real' 'this is dangerous'	
Tall trees ahead, low speed	phh	STRAIN	
The glider stalls	oh my God	FEAR, DESPAIR	
The glider touches trees	phruuh	FEAR, STRAIN	
The glider falls to the ground	fucki:ng	FRUSTRATION, STRAIN	
The glider hits the ground	fuc <u>k</u>	FRUSTRATION, STRAIN	
The pilot has crashed	AARHH	RAGE	

What can be noted here is the variation of signs: some are innate bodily reactions, others are learned cultural, conventionally guided actions. The latter are particularly interesting. Because they show that the spontaneous actions of the speaker are not only learned and governed by conventions, but also involve some kind of selection of these conventions so that the action can be understood as information about specific emotions and sensations. From the functional point of view, we can say that the niche makes an inventory of forms that differentiate emotions and sensations available to language users, and that our body borrows from the inventory when it carries out the task of relieving and gratifying emotions and sensations. Just as the relief or gratification of a particular emotion prefers one natural sign over another, it also prefers one non-natural sign over another. Apparently, this selection takes place without the awareness of the speaker.

In summary: 1) There are spontaneous interjections in the original sense, i.e. not intended, not addressed and therefore not communicative, 2) these appear to serve the function of relieving and gratifying emotions and sensations, 3) the performance of this function is independent of whether interjections are primary or secondary, and 4) interjections – although spontaneous – may be characterized by the selection of conventional expressions that are informative with regard to the emotional and sensational state of the speaker. These observations can now be compared to the four accounts of the heterogeneity of interjections.

Wharton's pragmatic account can be ignored as it is limited to the communicative function of interjections. And it is not meaningful to say that the glider pilot in example 2 intends to show something to someone by means of his utterances. This is not a weakness of Wharton's account, but a consequence of its relative precision as a description of how we communicate by means of interjections.

Wilkins' semantic account implies that the utterances – as illocutionary acts - count as an expression of the speaker's emotions with the social obligations that this convention implies, and that this informative intention is coded. This is clearly a misleading description for examples such as the ones in example 2. The pilot's utterances do not count as anything, and the pilot does not commit himself to anything to anyone. Not even the basic input output conditions for a felicitous illocutionary act are satisfied (Searle 1996/1969:57). As for the semantics, one can ask: What is the basis for claiming that the informative intention is coded in expressions such as aarh, oh or shit when they are used without informative intention and are interpretable as information about the speaker's emotional and sensational state independently of an informative intention. If we were to prove that aarh, oh or shit are uttered with an informative intention, we have to refer to something other than the expressions. It may be aspects of vocalizations, gaze, gestures, shifts in posture (Thibault 2011:225); it may be the timing relative to the circumstances, the co-text or the context. But it cannot be the expressions arrh, oh or shit. Such a description is therefore misleading.

Goddard's distinction between types of use (see section 3) enables us to distinguish the pilot's use of interjections from the uses that Wharton and Wilkins describe (see section 3). This is informative. One can say, however, that it seems misleading when Goddard identifies semantic elements like 'I know' and 'I want' in the explication of the semantics of a set of interjections. At least, it is not an accurate characteristic of the pilot's state of consciousness when he utters (2-1) and the subsequent utterances. But this might also be due to a vagueness in the semantic metalanguage.

Stange's contextual parameter account (see section 3), on the other hand, appears to be an informative and accurate description of the pilot's language use. This is primarily because interjections are basically considered to be emotive, exclamatory, semi-automatic utterances that do not require an addressee. This applies to the pilot's utterances. Furthermore, it appears that all the values of the five parameters for the degree of interjectionality that can be determined by means of the ecological pragmatic analysis predict a high degree of interjectionality. Thus, the context of use is characterized by the absence of a listener; the variants used are mostly relatively simple; the stimulus is present; the stimulus is concrete; and the focus is on self. It can be argued that some of these parameters are vague and that Stange's corpusbased method does not enable us to determine the values of these parameters

accurately. However, if they are used in combination with the ecological pragmatic analysis, they prove to be correct.

Hence, the analysis of the first case raises doubts about the semantic account as an informative and accurate description. It supports Goddard's typological account as an informative description but raises doubts as to the semantic analysis associated with it. And it supports Stange's parameter account as an informative and accurate description.

4.3 Non-spontaneous emotive interjections

The interjection in example 3 below "HAAH for satan" (HAAH fucking hell) is uttered by a student glider pilot during a training flight with an instructor. The flight includes an aborted winch launch. A winch launch is performed by connecting the glider to an engine-driven winch located at the opposite end of the runway. At the mediated request of the pilot, the winch driver opens the throttle and the glider is pulled up to a given height (typically 300-500 m in Denmark). The glider automatically disconnects. The pilot can also release the cable in the case of hazardous situations. A winch launch is the most critical phase of a flight, partly because there are fierce forces at stake, partly because the glider is close to the ground with the limited maneuvering possibilities this entails. As the glider's construction can be overloaded, there is a weak link between the winch and the glider that brakes if the pull force exceeds a given value. Weak links brake now and then, the cable can break, and the winch can grind to a halt. In these cases, the glider loses speed rapidly and will stall within a few seconds if the pilot is passive. In these cases, the pilot must lower the nose to regain flight speed, pull three times on the cable release knob, ensure that flight speed is indicated, evaluate the situation, make a decision as to how to land and land. This procedure is part of the training program. Aborted winch launches constitute several educational standards that must be met in order to get a certificate, and they are trained regularly. The training takes place in this way: The instructor sitting behind the student releases the cable. In some standards, the aborted launch is announced in advance, in others it is not. In some standards it is at high height, in others at low or medium height. The student must show that (s)he can handle the situation in order to meet the standard and be allowed to continue the training program.

The training program is organized in two parts so that the student in the first part flies with an instructor in a two-seat glider where both the student and the instructor have controls. This means that the instructor can give the student oral instructions and can take over the control if necessary. Once the student has completed a number of specific standards with the instructor, the student passes on to the second part in which the student flies alone. In the current situation, the student is just about to move to the second part of the program. One of the last flights before a student is allowed to fly alone typically includes an unannounced aborted launch. In this flight, the instructor gives

the student an unannounced aborted launch. The student knows that this can happen, but in the current situation the altimeter is covered in conjunction with the training of another standard, and therefore the student thinks that she will not get an aborted launch. As will be apparent, the student says what she perceives, what she intends to do and what she does. This is standard in training flights, so that the instructor has access to the student's situational awareness and intentions.

 $3 \quad (00:00,00)$ ((The student gives thumbs-up to the airfield

attendant to signal that she is ready))

1. (00:04,69) Student: .hh hh

(00:11,11) ((The glider accelerates, lifts off and begins to climb))
A (00:31,51) -> ((Height app. 170 meter. The instructor releases the

((Treight app. 170 meter. The histractor release

cable))



Pic. 1: The deceleration causes the student's head to tilt forward so the head mounted camera points downwards

В	(00:32,23)	((The student pushes the control stick slightly forward, pulls the cable release knob once, pulls the control stick a little backwards, pushes the control stick forward and then a little backwards. The negative g-force is negligible))
	(00:35,38)	((The glider regains flight speed))
2.	(00:35,65) Student:	og jeg har flyvefart
		I've got flight speed
С	(00:36,35)	((The student pulls the cable release knob once, hesitates, and then pulls the knob twice))

3. (00:38,28) Student: og jeg vil dreje rundt på en afkortet landingsrunde and I will turn for a shortened landing pattern

4. (00:48,14) Student: ja

yes

5. (00:49,76) Student: og vi har

and we've got

6. (00:52:86) Student: øh hh

eh hh

((The glider enters downwind leg and landing speed

is indicated))

(00:53,56) Student: og jeg har landingsfart

and I've got landing speed

((Student pushes the radio push-to-talk button, grabs the microphone with her left hand and moves

it closer to her mouth))

7. (00:56,07) Student: tango roneo-- tango romeo til bane syvogtyve

tango roneo-- tango romeo for runway two seven

((The student flies a standard traffic pattern and performs a round out. The glider touches down, rolls out and stops. The student and the instructor

have a short exchange about the landing))

The actions and the communication in this part of the sequence are left out for the sake of space

(02:23,50) ((The student unlocks and raises the cockpit hood))

8. (02:25,28) Student: -> HAAH for satan

HAAH fucking hell



Pic. 2: The student utters (3-8) while opening the cockpit hood.

den ((den afbrudte start)) kom bag på mig 22. (02:27,14) Student: that ((the aborted launch)) caught me by surprise (02:28,70) Student: selvom det står der så kom den bare bag på mig 23 even if it is stated it did catch me by surprise kom det virkelig bag på dig 24. (02:30,66) Instructor: did it really surprise you 25. (02:31,34) Student: ja det gjorde det yes it did 26. (02:31,81) Instructor: så er det rigtig godt reageret [alligevel] well it is very well reacted [anyway] (02:33,03) Student: [ja] [yes] (02:33,27) Instructor: og det er det jeg vil jeg se and that is what I want to see 28. (02:34,43) Student: godt ok (02:34,75) Instructor: flot

fine

(Gesten Airfield, 2017)

The subject of analysis is (3-8). (3-8) consists of a nonconventional expression haah and a conventional expression for satan (fucking hell). Haah is uttered with increased volume. It has phonetic similarities with the word ha which according to Den Danske Ordbog can be used to express surprise. According to Den Danske Ordbog, for satan is used to express anger, contempt, pain or other strong emotion. In this case, the subsequent utterance (3-9) indicates what (3-8) expresses. Here the speaker communicates that (3-8) is to be understood as an expression of the surprise the speaker experiences in connection with the aborted launch (A). Thus, "den" (that) is a deictic reference to the aborted launch (A). The aborted launch is the only relevant referent in the common ground (Krifka 2008; Stalnaker 1974; Tomasello 2008) of the participants, and as is evident in the subsequent exchange, it is the aborted launch they are talking about. The contrastive stress indicates a focus alternative set, and thus that there are other aborted launches that have not caught the speaker by surprise.

Now, the interesting observation from a functional view point is that the utterance indicates a surprise at something that happened almost two minutes prior to the utterance. The speaker herself communicates the psychological distance to the event and the emotion it allegedly induces by using past tense of the verb *kom* (*came*) in (3-9). And, indeed, the speaker has performed a number of cognitive demanding tasks in the intermediate period that can

contribute to the experience of psychological distance. As to this emotive interjection, it therefore applies that it is not spontaneous.

Next, we can observe that the interjection is integrated in the sequence. The subsequent utterance (3-9) is related to (3-8), so that (3-9) is a specification of (3-8), while (3-8) serves both as an illustration of what is communicated with (3-9), and an argument for what is claimed by (3-9). Therefore, one can also say that it has a communicative function, and the fact that it is uttered long after the event that induces the emotion it expresses shows that it is under the control of the speaker and that it is intentional. Thus, we have encountered an emotive interjection that is non-spontaneous in every sense of the word. The exigent question is: How do we account for this occurrence from a functional point of view? What function does it have? And how does it serve this function?

In the following, I will try to answer these questions by means of the four accounts outlined in section 3, while continuing to utilize the potential of the ecological pragmatic analytical method. We have found that (3-8) is not spontaneous, but intentional and communicative. This raises doubts about its function as an action that relieves or gratifies emotions and sensations. The first question we need to ask is thus: What is the relation between the utterance and the emotion it signifies. As regards the utterance the first part is uttered with high volume, and it is relatively simple. According to Stange's parameter account, both these values indicate a high degree of interjectionality. Hence, it supports the assumption that the utterance relieves emotions and that it is a window to the speaker's current emotional state. However, the stimuli are not present. Here we have a characteristic problem of a parameter account; we are left with conflicting values. A hypothesis that could explain these seemingly incompatible values, however, is that (3-8) is the result of a suppressed reaction that is triggered only after the demands for controlled, appropriate actions cease. Darwin (2010/1890:28) points out that a large number of expressions of emotions and sensations are, in fact, the result of attempts to suppress actions that relieve and gratify emotions and sensations. It is also consistent with Wharton's idea that interjections are under our conscious control (see section 3). The ecological pragmatic method of analysis can help clarify whether the speaker is actually emotionally influenced, namely by involving the extra-linguistic context as well as the co-text. Firstly, an aborted launch entails a direct bodily effect that can induce emotions: The release of the cable produces a high sound and a mechanical impact that is felt as a blow against the bottom of the glider; the pull force that approximates the plane's weight (550 kg) disappears suddenly; the subsequent deceleration is registered by the archways in the inner ear and affects the neck muscles (see picture 1); the appropriate action to push the elevator control stick forward implies that the plane's pitch changes 40-70 degrees downwards, with the negative g-force this movement implies. We can add that these stimuli are

very concrete and thus, according to Stange, support the assumption of a high degree of interjectionality. Secondly, the circumstances have the potential to induce emotions and sensations because of the risks they entail. Statistically, winch launch is the most dangerous phase of the flight. There are violent forces at stake; one is close to the ground; and one passes layers of air where wind speed and wind direction change and where there may be turbulence. Incorrect actions or a loss of attention can be fatal. These risks generally have the potential to induce emotions such as nervousness, fear and tension. The current event also has the potential to induce surprise. It is the instructor's task to ensure that the aborted launch comes as a surprise to the student, and in the current situation, the covered altimeter is a contraindication of a simulation of an aborted launch. In summary, all the conditions for the inducement of emotions and sensation are fulfilled.

The fact that the student is emotionally influenced is evident from the subsequent course of actions. Here, she deviates from procedures and phraseology. Thus, she only pulls once on the cable release knob (3-B) under circumstance (3-A). And as she pulls the cable release she also pulls the elevator control stick slightly backwards (3-B) instead of keeping it in a forward position until flight speed is regained. Only after she has ensured indicated flight speed does she pull three times on the release knob (3-C), and here she pulls once, hesitates and pulls twice. With (3-5) the student begins an utterance without finishing it. (3-6) expresses hesitation and doubt. Utterance (3-7) differs from radio phraseology. Although the student does not yet have a radio certificate, she knows and has previously used the local phraseology. It implies that the recipient, the sender, the position and the intention must be stated. Likewise, roneo is not a part of the radiotelephonic alphabet. All these deviations indicate that the student was surprised and that she is tense. And in so far as the student nevertheless refrains from uttering the interjection immediately when the stimuli occur, it seems that interjections may be under our conscious control.

These facts support the hypothesis that the interjection is the result of a suppressed action that is only performed when the demands for controlled, appropriate actions cease. An interesting comparison can be made with example 2: In this case the speaker relieves and gratifies emotions spontaneously and uninhibited. But he also crashes.

The problem with this hypothesis, however, is that it cannot explain the fact that the expression – as the co-text indicates – is intentional and has a communicative function. Here, Stange's parameter account is of no help. And, surely, it would be misleading to say that the utterance is phatic. Wharton's account, on the other hand, seems to have an explanatory value. According to Wharton, the speaker must produce (3-8) with the intention of showing her emotional state. The expression is direct evidence of the basic layer of information, namely that she was surprised. Most importantly, the function of

showing is not restricted to the current emotional state; emotional states with a temporal displacement can also be shown. Note also that this account does not rule out that she is still affected by the inhibited action. This would only make the basic layer of information all the more convincing. This account seems to be both informative and accurate in relation to the current use. Here the cotext indicates that (3-8) can be assigned a rhetorical function as an illustration of and as an argument for what is claimed with the subsequent utterance (3-9). Indeed, the speaker has a motivation to convince the listener that she was surprised. Because – as it appears in the subsequent exchange – this contributes to the positive evaluation of her performance. This interpretation seems to explain all the values of Stange's parameters. Therefore, Wharton's account is supported, and consequently, we can say that the function of utterances like (3-8) is to show an emotional or sensational state.

The fact that (3-8) is uttered with an informative intention also makes it possible to analyze it as a speech act. But here it becomes clear that it does not fulfil the sincerity condition as an expressive speech act: The speaker is not in the emotional state that she shows she is in. Rather, we must regard (3-8) as an imitation of a speech act, and as such, it is not an independent act, but assigned to a subordinate rhetorical function as an illustration and argument for the assertive speech act (3-9). Note, thus, that (3-8) cannot be understood isolated from (3-9).

According to Goddard (3-8) must be an example of discursive use, i.e. "situations in which the stimulus is not something in the immediate context, either a physical-sensory stimulus or a human action or behavior, but rather something the speaker is thinking about" (Goddard 2014:55). One can discuss whether the speaker is 'thinking' about stimuli, or whether it is rather the tension that remains and contributes to the persuasiveness of the basic layer information. Goddard does not specify the use further. On the other hand, his claim that discursive uses depend on prior understanding of how the interjection is used in immediate contexts is vital. If the utterance is to serve the function as ostensive-inferential communication, the listener must understand how the interjection is used in immediate contexts. This is what makes the utterance persuasive: She was as surprised as the imitated interjection would have indicated in an immediate context. That is what she wants to show. It also points to a decisive flaw in the semantic account: If the informative intention is part of the semantics of the interjection, it blocks this use. In other words, the semantic account is functionally inconsistent.

Finally, we can – by virtue of the ethnographic aspect of the ecological pragmatic method – ask the informant why she said what she said. She answered:

Jeg ville sige til ham at den kom som en overraskelse. Jeg ved godt at den står i mine normer, men ikke med afdækket højdemåler. Han klarede det meget godt at give mig den.

I wanted to say to him that it came as a surprise. I know it is stated in the educational standards, but not with a covered altimeter. He did a god job giving it to me. (Interview with informant)

This supports the interpretation of the utterance's function as showing an emotion or sensation.

The above thus supports Wharton's description as the most informative and accurate as regards utterances like (3-8), i.e. utterances where the context is characterized by the speaker having to suppress his/her reactions to stimuli at the time they occur, where the expressions are simple, where stimuli are concrete, where stimuli are absent and where the focus is not only on self. One can also say that Goddard's description is informative insofar as it distinguishes this use from immediate uses. But more importantly, it supports Goddard's claim that all other types of use are based on the primary, immediate use. Goddard's description therefore simultaneously points to a functional inconsistency in the semantic descriptions: The informative intention cannot be part of the semantics of interjections if they are to be used to show emotions and sensations; it must be a part of their pragmatics.

In section 2.1, we have described the sign relation of the basic interjection as a symptom/index, i.e. a lawful or factual relation between sign and object. Should we characterize the sign relation that characterizes the use of (3-8), we can say that an iconic relation is added to the indexical relation: There is a similarity relation between (3-8) and the index that the speaker imitates by means of (3-8).

4.4. Spontaneous, communicative emotive interjections

The last example is a spontaneous, communicative interjection. This type is probably the most frequent in the linguistic corpora and also the one that most linguistic descriptions have concentrated on. According to the functional implications of the spontaneity described in subsection 2.2, it is actually the most complicated and problematic one: How can an interjection be both spontaneous and communicative? This is basically a contradiction.

Like (3-8) the example occurs in a winch launch in a training flight. The student sits in the front seat, and the instructor sits behind the student. This student is not as far along in the training program as the student in example 3. A special contextual circumstance is that the student has had a series of bad experiences in which the instructor has intervened in the flight. Because of this, the student has lost confidence and motivation. The instructor has been made aware of this by another student, and the goal of this flight is to give the student a good experience that can help her regain confidence and motivation.

4		
	(00:00,00)	((The cable tightens, and the glider accelerates))
	(00:07,45)	((The glider lifts off. Airspeed is 70 km/h and rapidly increasing))
	(00:08,46)	((Airspeed is 90 km/h, the student keeps the control stick in a forward position))
1.	(00:08,68) Instructor:	og opad opad and upwards upwards
2.	(00:09,75) Instructor:	der er flyvefart
		there is flight speed
		'we've got flight speed'
3.	(00:11,92) Instructor:	opad
		upwards
4.	(00:12,64) Instructor:	op
		up
	(00:15,26)	up((The student turns her head to the right to check her course))
5.	(00:15,26) (00:18,99) Instructor:	((The student turns her head to the right to check her
5.	•	((The student turns her head to the right to check her course))
5.	•	((The student turns her head to the right to check her course)) træk lidt mere
5.	(00:18,99) Instructor:	((The student turns her head to the right to check her course)) træk lidt mere pull a little more
5.	(00:18,99) Instructor: (00:36,20)	((The student turns her head to the right to check her course)) træk lidt mere pull a little more ((The student levels off nicely))
 6. 	(00:18,99) Instructor: (00:36,20) (00:38,33)	((The student turns her head to the right to check her course)) træk lidt mere pull a little more ((The student levels off nicely)) ((The cable releases automatically))
	(00:18,99) Instructor: (00:36,20) (00:38,33) (00:39,19)	((The student turns her head to the right to check her course)) træk lidt mere pull a little more ((The student levels off nicely)) ((The cable releases automatically)) ((The student pulls the cable release knob three times))
	(00:18,99) Instructor: (00:36,20) (00:38,33) (00:39,19)	((The student turns her head to the right to check her course)) træk lidt mere pull a little more ((The student levels off nicely)) ((The cable releases automatically)) ((The student pulls the cable release knob three times)) super
6.	(00:18,99) Instructor: (00:36,20) (00:38,33) (00:39,19) (00:39,44) Instructor:	((The student turns her head to the right to check her course)) træk lidt mere pull a little more ((The student levels off nicely)) ((The cable releases automatically)) ((The student pulls the cable release knob three times)) super super



Pic. 3: Airspeed is ok, the glider is stable, task load is low.

8. (00:41,41) Instructor: [og så] ind over betonpladsen

[and then] across the concrete plant

9. (00:43,03) Student: yes

(00:43,31) Instructor: bagom bagved

around behind

10. (00:44,06) Student: ja

yes

11. (00:45,17) Instructor: ligesom de andre

like the others

12. (00:45,23) Student: ja jeg skal lige ha (0.8) ro på

yes I just need to (0.8) calm down

13. (00:47,81) Instructor: 400 meter

400 meters

(True Airfield, 2017)

In a winch launch, the pilot must pull the elevator control stick slowly backwards when the glider has gained flight speed. If the pilot pulls too much too quickly, there is a risk that the weak link brakes, and this will leave the pilot in a situation that is virtually impossible to salvage. The pull must be slight in the beginning, and then, when the glider gains height and the angle to the winch changes, the pilot can pull more and more. In the final phase immediately before the cable releases, the pilot must push the stick slightly forward and level off.

In this launch, the student is too passive in the first phases. Each of the instructor's utterances (4-1), (4-2), (4-3), (4-4) and (4-5) are uttered because the student does not pull sufficiently on the elevator control stick. As height is gained, however, the student acts appropriately; she checks her course, pulls sufficiently on the elevator control stick, levels off nicely, pulls three times on the cable release knob, and they also achieve a good height (4-13). For this reason, and perhaps also considering the student's general psychological condition, the instructor praises the student with the utterance (4-6). Immediately after this, the interjection that we are going to analyze occurs.

Utterance (4-7) is a so-called primary interjection. According to *Den Danske Ordbog*, *åh* is used to express many different emotions, for example enthusiasm, pleasure, surprise and disappointment. In this context it can be understood as a sign of relief and joy because the start went relatively well and because the speaker was praised by the instructor. This interpretation is supported by an interview with the informant. The answer to the question "why did you say åh?" she answered: "det var rart at det lykkedes, og det var rart med anerkendelsen" (*It was nice that I succeeded, and it was nice to get recognition*).

The utterance must be considered spontaneous as it is uttered in immediate continuation of the instructor's *super* (4-7) signaling the acknowledgment that induces the emotion that the speaker's *åhh* is a sign of. On the other hand, it can be considered communicative because it 1) is integrated into an exchange as a response to another utterance, 2) can be understood as an appropriate response to this utterance; 3) can be considered intentional as it is not inappropriate in the situation and does not replace an appropriate action and 4) is relevant in the current context where the student's general psychological state has been thematized and forms the basis for the purpose of the flight. Thus, the utterance appears both spontaneous and communicative. This means that accounts that assume the original and basic function of interjections such as Darwin's (2010/1890) and Ries' (1952) are insufficient. Again, we have to turn to accounts of interjections as communicative.

In this case, Wilkins' proposal that interjections are speech acts with an illocutionary purpose seems to have explanatory value. Thus, for (4-7) the following applies: *Normal input and output conditions* (Searle 1996/1969) obtain; the *propositional content rule* (ibid.) is satisfied (an expressive speech act does not need to have a propositional content); the *preparatory rules* (ibid.) are satisfied since there are stimuli in the situation that can induce an emotion and since the listener is not aware of the speaker's emotions; the *sincerity rule* (ibid.) of an expression of relief and joy appears to be fulfilled based on what the analysis has revealed about the context. It is also supported by utterance (4-12) indicating that the speaker has been tense. As to the *essential rule* (ibid.), the question arises: In what sense can we say that (4-7) *counts as* an expression of the emotional state of the speaker?

The count-as-relation is Searle's account of the informative intention. It is a conventional relation and, thus, an example of non-natural meaning. Now, the problem is this: How is the informative intention (ostensively) expressed, and in what sense does it commit the speaker. Again, we can reject the semantic account implying that the informative intention is coded in the expression. This is also clear in the speech act analytical perspective: The fact that the sign is a spontaneous expression of emotions and sensations and thus does not in itself carry an informative intention is the prerequisite for the sincerity condition to be satisfied.

According to Wharton (see section 3), the communicative function of interjections is that the speaker produces a more or less natural sign of emotional or sensational states with the informative intention that the listener infers the emotional state of the speaker based on the utterance as a natural sign of an emotional state. This is an informative and accurate description of (3-8). But there seems to be a difference between (3-8) and (4-7). The speaker does not show her emotional state. Rather the speaker *lets* her body show her emotional state. That is, it is an absence of suppression or inhibition. And this absence can be considered intentional insofar as it is possible to

suppress or inhibit such actions. Based on Wilkins' idea of interjections as speech acts and Wharton's description of interjections as ostensive-inferential communication, we can say that the illocutionary purpose is that the speaker lets her emotional state manifest itself and that the manifestation counts as a sincere expression of the emotion in that the speaker commits herself to the absence of suppression or inhibition. It is vital that the expression has a dual function: it functions non-communicatively as an action that relieves or gratifies emotions, and it functions communicatively by refraining from suppressing or inhibiting the action. There is, thus, a special focus on the sincerity condition; the expression counts as an expression of the emotional state of the speaker because the sincerity condition is satisfied. The sincerity condition and the essential condition "overlap" (Searle 1996/1969:66-67). The convention is, therefore, that the speaker lets the body show. That is what the speaker commits herself to, and not the emotional state.

The problem with Goddard's typology is that we cannot distinguish the utterances in example 2 from the utterance (4-7). And there is an important difference. In the first case, there is no informative intention; in the second, there is an informative intention. Stange's characterization of interjections proper as semi-automatic, on the other hand, points to this possible difference as it indicates that interjections may vary with regard to how spontaneous their production actually is. According to Stange, it depends on the automatic or conscious appraisal processes involved in the emotional experience. As far as the parameters are concerned, they require a method to determine their values, and once again they leave us with apparently incompatible values. On the other hand, by determining the values of the proposed parameters, we can actually distinguish between degrees of interjectionality. Thus, the values that apply to (4-7) differ from the values that apply to the utterances in example 2 and from the values that apply to (3-8). Therefore, Stange's parameter account is informative.

Finally, we can determine the sign relation that characterizes (4-7). It differs both from the lawful relation of the index we saw in example 2, and from the similarity relation of the icon we saw in example 3. As Wilkins' and Wharton's accounts (see section 3) indicate, the sign relation that characterizes (4-7) is a conventional relation. Above, this convention has been described as follows: the speaker commits herself to letting her body show the emotional state she is in. By virtue of this convention we can characterize the relation as a symbolic relation. A symbolic relation is added to the basic indexical relation. Thus, there is a conventional relation between (4-7) and the index the speaker lets her body show with (4-7).

5. Conclusion

The starting point for these analyses was that emotive interjections are a function and that the function is a spontaneous and non-communicative

relief and gratification of emotions and sensations. This raised the question: How can we explain the fact that some interjections are non-spontaneous and/or communicative? Based on an ecological pragmatic analysis of three carefully selected examples, the article has answered this question by applying and evaluating four accounts of this heterogeneity.

The result is clear in several respects. The semantic account, which implies that the informative intention is part of the semantics of interjections, can be rejected. The analyses here show that this account is misleading as regards spontaneous, non-communicative interjections and that it blocks the description of the rhetorical function of interjections as illustrations and arguments and the description of interjections as felicitous speech acts.

As for the assumption that interjections are speech acts, it appears that only some emotive interjections are speech acts. For these acts it applies that the essential condition and the sincerity condition coincide. In order to satisfy the sincerity condition, the act that indicates the emotional state must be spontaneous. This description is informative as regards some emotive interjections.

The pragmatic account is limited to interjections with a communicative function. However, it provides an accurate description of such interjections: Speakers can produce an index that shows an emotional state, with an informative intention. However, as regards spontaneous, communicative interjections, the term appears to be inadequately specified. Rather, the speaker lets her body show her emotional state.

Goddard's contextual typology appeared to be informative insofar as it could distinguish between immediate and discursive uses. But it is not sufficiently informative to distinguish immediate uses without an informative intention from immediate uses with an informative intention. On the other hand, Goddard's claim that the immediate use is the basis for discursive uses and other types of use proved informative and accurate.

Stange's contextual parameter account proved to be the only one capable of both embracing and distinguishing between all the presented examples of interjections: 1) spontaneous, non-communicative, 2) non-spontaneous, communicative and 3) spontaneous, communicative. The identified parameters appeared to be too general, and a corpus analysis is insufficient as a method to precisely determine the values of the parameters. However, the proposed ecological pragmatic method of analysis enabled the parameters to be assigned a value, and the parameters showed that they are informative with regard to differences in the spontaneity and communicativity of interjections.

The ecological pragmatic method of analysis and the associated selection of paradigmatic examples made it possible to distinguish between three possible interjectional sign functions:

	Spontaneous, non-communicative	Non-spontaneous, communicative	Spontaneous, communicative
Temporal relation to object	Immediate	Displaced	Immediate
Function	Relieve and gratify emotion and sensations	Show emotions and sensations by imitating the relief and gratification of emotions and sensations	Show emotions and sensations by conventionally letting the body relieve and gratify emotions and sensations
Sign relation	Indexical	Iconic	Symbolic

These three Peircean sign functions are basic. Whether they are exhaustive with regard to the sign functions of interjections in general, and whether the descriptions of the three functions are generally informative and accurate, is an empirical question.

Notes

- ¹ Notice that the pilots alternate between English and Chinese. A large fraction of flight operations in the global commercial aviation system are conducted using a mixture of English and some other language(s) (Hutchins et al 2006). Contributing factors are that the ICAO standard radiotelephony phraseology is in English and that indexes, checklists, procedures and concepts in a very large part of the aircraft fleet are in English.
- ² *Height* is above field elevation; *altitude* is above mean sea level.
- ³ A stall occurs when the pilot pulls so much on the elevator control stick that the angle between the aerofoil and the airflow becomes so large that the airflow no longer creates lift and therefore cannot carry the plane. The plane is helplessly left to gravity and falls to the ground.
- ⁴ As specified in PZL-Bielsko's flight manual for SZD-50-3 "Pucazc".
- ⁵ The emphasis by the letter *k* signals a particularly distinct pronunciation of the *k*-sound.

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