

# The Linguistics of Keyboard-to-screen Communication. A New Terminological Framework\*

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## Abstract

New forms of communication that have recently developed in the context of Web 2.0 make it necessary to reconsider some of the analytical tools of linguistic analysis. In the context of keyboard-to-screen communication (KSC), as we shall call it, a range of old dichotomies have become blurred or cease to be useful altogether, e. g. "asynchronous" versus "synchronous", "written" versus "spoken", "monologic" versus "dialogic", and in particular "text" versus "utterance". We propose alternative terminologies ("communicative act" and "communicative act sequence") that are more adequate to describe the new realities of online communication and can usefully be applied to such diverse entities as weblog entries, tweets, status updates on social network sites, comments on other postings and to sequences of such entities. Furthermore, in the context of social network sites, different forms of communication traditionally separated (i. e. blog, chat, email and so on) seem to converge. We illustrate and discuss these phenomena with data from Twitter and Facebook.

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## 1 CMC, EMC, DMC, IBC?<sup>1</sup>

At the beginning of his new textbook *Internet Linguistics*, David Crystal (2011) discusses the appropriate terminology for the study of language used in the new media and reflects on different concepts, such as "computer mediated communication" (CMC), "electronically mediated communication" (EMC) or "digitally mediated communication" (DMC). Similar terms by other scholars are "Internet-based communication"<sup>2</sup> (IBC) used, for instance, by Michael Beißwenger (2007) or "Internet-mediated communication" used by Francisco Yus (2011). Up until now CMC has been the most popular and the most traditional one among these terms. It was first used in the eighties of the last century (cf. the title of an early paper

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<sup>1</sup> Abbreviations used in this article are as follows: CA: communicative act, CAS: communicative act sequence, CMC: computer mediated communication, CMD: computer mediated discourse, DMC: digitally mediated communication, EMC: electronically mediated communication, IBC: Internet-based communication, KSC: keyboard-to-screen communication.

<sup>2</sup> This term is used, for instance, by a recently established German research network, with Michael Beißwenger as its speaker. According to its website, the members pursue the following goals: "to compile suggestions for standards and the processing of linguistic data from German internet-based communication and, second, to develop methods and tools for their empirical computer-assisted analysis", cf. <http://www.empirikom.net/bin/view/Main/WebHome>, accessed June 20, 2012.

by Baron 1984), it has become widespread since, due to scholarly work by Susan Herring<sup>3</sup>, Naomi Baron, Crispin Thurlow, and many others, and is still being used in the title of a recent handbook (Herring, Stein and Virtanen forthc. a). Following Herring (2007: 1), CMC may be defined as "predominantly text-based human-human interaction mediated by networked computers or mobile telephony." As is shown by this definition, Herring counts text messaging among the modes of CMC (cf. "mediated by ... mobile telephony"), as do Thurlow and Poff (forthc.) or Bieswanger (2007), for instance (but see also Herring forthc.). Yet, this point of view is not without controversy since cell phones are usually not considered to be computers and, as Crystal (2011: 2) clearly points out, "people do not really feel they are holding a computer up to their ear when they talk on their cell phone." The same problem appears when we consider including text messaging in the alternative term "Internet based communication" (IBC). In spite of the fact that it is possible to send text messages from a web browser, sending them from a cellular phone is still far more popular – and it is not Internet based. Like prototypical modes of CMC such as emailing, sending text messages is also influenced by the specific technical properties of the particular device used (computer, smart phone, cell phone). Consequently, it is justified to subsume both, cell phone based text messaging and Internet based communication, under one concept. But which one should this be? What can serve as the umbrella term for all modes of human-to-human communication in the new media, such as email, instant messaging, text messaging, chat conversation, private messages on Facebook, tweets and others that are already in use or may still emerge?

In *Internet Linguistics*, Crystal concludes his terminological remarks stating that one of the more inclusive names, i. e. EMC or DMC, will probably replace CMC as a standard term, or that some other name will likely "emerge from cyberspace" (Crystal 2011: 2). In times of ongoing media convergence (cf. Jenkins 2006 for a thorough analysis of this tendency) names like EMC or DMC seem to be more convenient indeed, since they shift the focus from the computer as basic medium of communication to the way the data are transmitted (electronically/digitally). However, they do not entirely fit either: "electronically mediated communication" (EMC) – the term preferred by Baron (2008) – or "electronic communication" (e-communication) – as Herring (2011) calls it – is too broad a term, since it would also include mass media communication via TV and radio, which is not in the focus of researchers analyzing language use in the new media. The same is true for "digitally mediated communication" which focuses on the fact that communication takes place in digital (as opposed to analogue) settings. Still, this term seems to become more popular these days considering new book titles such as "Digital Discourse" (Thurlow/Mroczek 2011a). Crystal, for his part, suggests the term "Internet Linguistics" but this term applies to the academic discipline, rather than to the matter of investigation which is under discussion here. This is also the case for the term "cyberpragmatics" proposed by Francisco Yus (2011) for his approach to the analysis of interactions in the new media based on Relevance Theory (cf. Sperber/Wilson 1995).

Thus, the question still remains: which term is appropriate to refer to the various forms of communication<sup>4</sup> which are a) primarily graphically realized, b) either in a one-to-one, a one-to-many or a many-to-many-format and c) mediated by cell phones, smart phones, or

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<sup>3</sup> Note that the first issue of the *Journal of Computer-Mediated Communication* (JCMC) goes back to the year 1995. Susan Herring was editor-in-chief from 2004 to 2007. She also coined the term CMD (= computer mediated discourse), which focuses on discourse activities within CMC.

<sup>4</sup> The notion "form of communication" used here and in the following refers to medially dependent communicative practices such as instant messaging, emailing on the one hand and instances of face-to-face-communication on the other hand. The notion must not be confused with "text genres" or "discourse genres" such as academic paper, legal contract, academic talk or sermon. These are genres which are possible within different forms of communications, they are not forms of communication themselves (cf. Bublitz 2012: 4153f.; Dürscheid 2011).

networked PC tablets and computers? The term we suggest for these communication practices is "keyboard-to-screen communication" (KSC). This term covers all forms of communication which fulfil the three requirements mentioned above without focusing on the use of a particular medium. We hereby take into account that there is a shift from medium-specific communication towards "content that flows across multiple media channels" as pointed out by Jenkins (2006: 243). We even go a step further than Jenkins by assuming that, within KSC communication, there is not only a convergence of media, but also a convergence of forms of communication: The user does not have to change either the medium (e. g. telephone vs. computer) in order to switch to another communicative activity or the platform to use another communication tool. Of course, there are different technical devices involved in KSC (Blackberries, iPhones, iPads, PCs, etc.), but all these devices, as different as they are, have one thing in common, i. e. a physical keyboard (or a virtual one on a touch-screen) and a screen. Independently of the medium chosen for the respective conversation, the message is typically typed on a keyboard and typically read on some type of screen.<sup>5</sup> The screen is even involved twice in the process of KSC; the sender edits his or her message on a screen, and the receiver reads it – maybe in a different layout – on another screen. However, although the basic equipment (keyboard, screen) is usually the same on either side, the starting point of the message transmitted is always the producer's keyboard, while its target is the recipient's screen. Thus, KSC can be precisely defined by these two constitutive factors. Another advantage of the term suggested is that it reflects the tendency of media convergence without ignoring the fact that some technical devices are mandatory for this type of communication between individuals. Furthermore, it is important to note that, following the first requirement mentioned above, KSC excludes telephone calls over IP or Skype conferences, at least when they rely on voice-chat only, and it excludes interactions via filmed messages in video blogs, which have recently become popular on YouTube. Herring, Stein and Virtanen (forthc. b) reject our term KSC because of this limitation, but for us the component "keyboard" underlines the fact that – up to now – graphically encoded communication is in the center of KSC research. Maybe the importance of graphically encoded communication will fade in the future due to upcoming technologies triggered by speech recognition. Excluding them from KSC, however, seems to be appropriate because of their different linguistic features. If they prove to become a success, it will be interesting to compare them to KSC as we discuss it here.

Finally, two last points are important: Firstly, when using the term KSC, we always have to keep in mind that communication is not a simple transmission of a message from the sender to the receiver (and vice versa), as has been suggested by former communication models. Rather, in all instances of KSC both participants create meaning while interacting with each other. In this, we follow Bublitz (2012: 153), who states that participants "by focussing on and responding to each other, are jointly engaged in creating meaning and handling social relations." As we will see later on, in section 3, creating meaning – from the producer's point of view – is the same as creating a communicative act, i. e. performing a verbal or non-verbal activity with a certain communicative intention.

Secondly, although the term KSC highlights the fact that producer and recipient both need technical devices to interact with each other, this is not the main aspect scholars should take into consideration when investigating KSC. As Herring (2007) points out, two main factors, the medium as well as the situation, influence language use in CMC (i. e. in KSC, as we call it). Regarding this point, we agree with Androutsopoulos (2006), Thurlow and Mroczek (2011b) and others, who claim that, within the scientific study of CMC/KSC, a more user

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<sup>5</sup> The notion of "screen" within KSC refers to the computer screen or the display of a smart phone, mobile phone, PC tablet, etc.; the term "keyboard" to computer keyboards or smart phone/mobile phone keypads and also to touchscreen-based keyboards on smart phones or PC tablets.

related approach instead of a medium related one is preferable, but still we stress the fact that technology itself is the starting point which enables the particular communication practices in the first place. Thus, by using the term KSC, we emphasize that certain technical devices are prerequisites for this type of communication while still keeping in mind that within KSC research the analysis of user activities and user expectations play a crucial role.

To sum up, KSC is the name we suggest for the technical setting which affords certain practices of communication (i. e. forms of communication). Within KSC, various forms of communication can be differentiated, which, in their turn, are based on various "communicative acts" and "communicative act sequences" (see below). Consequently, the discipline which deals with KSC related research questions should be called "KSC linguistics", rather than "Internet linguistics", as Crystal suggests. Of course, "Internet linguistics" is a more transparent term but it covers only one part of KSC. It excludes cell phone-based messaging which, as we have pointed out above, shares many features of Internet based communication and should thus be included in a term that covers research studies concerning language use in the new media.

In section 2 of this paper we outline the main features of KSC by showing that traditional distinctions of linguistic analysis (for instance text vs. utterance, asynchronous vs. synchronous, diachronic vs. synchronic, private vs. public) are blurred in the new realities of Web 2.0<sup>6</sup> and especially in the Social Media. In section 3, we introduce a new analytic grid to describe instances of KSC, and we propose an alternative terminology for the traditional terms "text" and "utterance" which can be meaningfully applied to such diverse entities as weblog entries, tweets, status updates and other postings on social network sites. Then, in section 4, we illustrate and discuss our KSC approach with data from Twitter and Facebook. Finally, implications for further research will briefly be discussed in section 5, and it will be argued that traditional analytical categories, although they are problematic, are still important, if we want to situate new communicative activities within KSC or if we want to compare KSC with other, even newer forms of communication in the future as explained above.

## **2 Features of keyboard-to-screen communication**

Having defined our use of the term KSC, we start this section by resuming the analytical categories which are usually applied to distinguish between different forms of communication and which form our basis when describing typical features of KSC, namely: 1) "asynchronous" versus "synchronous", 2) "written" versus "spoken", 3) "monologic" versus "dialogic", 4) "text" versus "utterance", 5) "public" versus "private", 6) "mobile" versus "stationary", and 7) "monomodal" versus "multimodal". By doing so, we will reveal that some of these distinctions have been blurred, while others cease to be useful altogether, particularly if we consider recent web-based services such as social network sites (SNSs).

Our first distinction, "synchronicity" versus "asynchronicity", is argued by Herring to be one of the most important factors "that have been observed to condition computer-mediated discourse" (cf. Herring 2007: 13). She continues: "Asynchronous systems do not require that users be logged on at the same time in order to send and receive messages; rather, messages are stored at the addressee's site until they can be read" (2007: 13). While we agree with her on these statements, we do not follow her definition of synchronicity (though it is widespread in the literature). Herring (2007: 13) argues that "in synchronous systems [...] sender and addressee(s) must be logged on simultaneously; various modes of 'real-time' chat are the most common forms of synchronous CMC." However, we argue that this is only one prerequisite

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<sup>6</sup> The term "Web 2.0" is here used in a broad sense to refer to Internet applications that are collaborative (Wikis) and/or interactive. For a recent attempt of defining Web 2.0 and its implications for computer-mediated discourse analysis (in her terms) see also Herring (forthc.: 1).

for synchronous communication. It ignores the way in which the messages are transmitted. In our usage we make a three-way distinction between synchronous, quasi-synchronous and asynchronous communication: Synchronicity applies only to situations in which the messages are transmitted not turn-by-turn, but stroke-by-stroke. In addition to the co-presence of the interactants, production and reception of a message must take place at the same time (as is the case in face-to-face interaction, in a telephone call, or in former Unix Talks). In a typical chat conversation as it is practiced nowadays this is not the case. Thus, we prefer to use the term "quasi-synchronous" for this communication form.<sup>7</sup>

Bolander and Locher (2010: 180) state that "IM [Instant Messaging] is a synchronous medium". We would prefer to call it quasi-synchronous as well. The participants of IM typically are co-present, and they expect a direct reaction to their messages but they cannot see the reaction while it is being produced but only when it is finished and transmitted. It is precisely because of this lack of true synchronicity that "there may be consequences if one does not signal that one is away from the computer", as Bolander and Locher (2010: 180) point out. If the recipient were able to see the sender's typing, some misunderstandings could be avoided. Email communication in its typical form, on the other hand, is undoubtedly asynchronous since co-presence at the keyboard is not required in any way. But emailing may become quasi-synchronous if by chance the communication partners are both using their mail programs at the same time and sending message to and fro in short intervals. In KSC research it is, therefore, crucial to take into consideration the degree of (a-)synchronicity and to distinguish between asynchronous, quasi-synchronous and synchronous forms of communication.

Furthermore, we suggest to extend the time based distinctions to three levels: co-presence, synchronicity and simultaneity. Co-presence requires the interactants to be engaged in the interaction at the same time as in a typical face-to-face communication but without the requirement for the interactants to be in the same location. Co-presence is, of course, the *sine qua non* for synchronous and quasi-synchronous communication as well as for simultaneity. Synchronous and quasi-synchronous refer to the timing of the production and reception of messages. Simultaneity, finally, is given only if two or more messages are produced at the same time. This may be the case with WhatsApp, for instance, an application which allows users to send text messages and also provides text chat and voice chat. Here, it may happen that both participants are typing messages simultaneously or that one participant is typing a message while the other is speaking simultaneously. All these conditions have an impact on the linguistic features of the communication. If there is no co-presence of sender and addressee in a virtual space, the sender usually drafts messages more explicitly and less spontaneously. When a writer edits an online newspaper article, for instance, he or she has to make sure that the messages are self-explanatory since the addressee cannot require further information immediately (as in a chat conversation, for instance). In contrast, if the communication is quasi-synchronous, i. e. if the messages are exchanged within some seconds, the messages' style is usually more informal, i. e. closer to the so-called language of communicative immediacy (cf. Koch/Oesterreicher 1985; Koch 1999; Landert/Jucker 2011 for a short overview).

For the difference between "spoken" and "written" within our linguistic framework we follow Koch and Oesterreicher (1985) (for the cultural dimension of this distinction see the often

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<sup>7</sup> Herring (2007: 14) also differentiates between the different options for transmission (turn by turn, character by character, line by line), but she refers to this as a separate medium factor ("message transmission", which can be 1-way or 2-way). Thus, our use of the term "synchronicity" combines two of Herring's factors, "synchronicity" and "message transmission". What we call quasi-synchronous communication would be classified as "synchronous" and "1-way" by Herring, whereas truly synchronous communication would be "synchronous" and "2-way".

quoted study by Ong 1982). The authors differentiate between the written (graphic) and spoken (phonic) code on the one hand and between language produced in a more formal (communicative distance) or in a more informal (communicative immediacy) way on the other hand. The former can only appear as a dichotomy, while the latter moves on a scale between two poles. The language of communicative immediacy is prototypical for the phonic code, whereas the language of communicative distance is more often realized in the graphic code. Yet, these are only prototypical expectations, communicative immediacy can also be found in the graphic code and communicative distance in the phonic one. Examples of communicative immediacy in the graphic code are often found, for instance, in quasi-synchronous interactions. In such an environment, the message style becomes more informal; it shows more features of the language of communicative immediacy. We assume that there is an even closer correlation between informality and (quasi-)synchronicity than between informality and the particular code used. A sermon, for instance, is realized in the phonic code in spite of its formality, and a chat communication is realized in the graphic code in spite of its informality.

In the relevant literature the two dimensions are, unfortunately, often confounded. David Crystal (2011: 21), for instance, states that "Internet language is identical to neither speech or writing"; and Naomi Baron (2008: 48) asks "Is CMC a form of writing or speech?" In these examples, both authors must be referring to the conceptual dimension, i. e. the language of immediacy versus the language of distance, because they are talking about language that is clearly realized in the graphic code. The ambiguous terminology leaves the reader puzzled since the dichotomy between the phonic and the graphic code does not leave room for guesswork on the medial dimension.

This brings us to the next level of linguistic description, the distinction between "monologic" and "dialogic", as well as between "text" and "utterance". We discuss these analytic categories together since they depend on each other. Prototypically, a text is monologic while an utterance is dialogic. A text is generally said to be a) realized in the written code, b) edited for asynchronous reception, c) long, d) context free, e) planned and f) monologic (see section 3 for a more detailed discussion). There have always been deviations from such an idealized correlation, but – as we will argue in more detail in the next section – some of these relatively clear-cut distinctions have been further obliterated in recent formats of KSC.

For chat contributions, to take one specific example, neither the term "text" nor the term "utterance" seems to fit. They are realized in the graphic code, and thus may resemble a text. But they are also spontaneous, unplanned, context embedded (e. g. "What are you doing now?"), short and situated in a dialogic (more precisely: in a quasi-synchronous) context, and thus are more like prototypical utterances. Ultimately, "text" and "utterance" appear to be among those terms which are misleading within KSC research and should be given up. But if we do so, we need an alternative term which covers both texts and utterances as well as communicative types that do not belong to either of these groups. In section 3, we will suggest the term "communicative act" for this purpose.

For the distinction between "public" and "private", we follow Landert and Jucker (2011), who distinguish systematically between three dimensions: the communicative situation (the scale of public accessibility), the content (the scale of privacy) and the linguistic realization (the scale of communicative immediacy). While the scale of communicative immediacy is borrowed from the model by Koch and Oesterreicher (1985) as described above, the other two scales are based on an approach by Dürscheid (2007). She points out that it is important to identify two levels, the accessibility of the communication and the nature of its topic. The term "public" (as opposed to "non-public") should be reserved for the accessibility of the communication, while "private" (as opposed to "non-private") denotes the nature of the topic. Landert and Jucker (2011: 1424) put it clearly: "This allows us to distinguish between public

and non-public settings on the one hand and between private and non-private contents on the other." But although this affords an adequate linguistic description of the features of KSC, another problem still remains and has become even more virulent with regard to new services in Web 2.0. With the advent of social network sites, private topics are made accessible for a large group of people or – depending on the privacy setting<sup>8</sup> – even for the whole Internet community.

In her recent dissertation, an ethnographic study on Social Media, danah m. boyd [sic] (2008: 21) uses the term "public" to refer to "both a space where people may gather, interact, and be viewed and also an imagined community of people who share similar practices, identities, and cultural understandings." As a result of this definition, she also changes the term from an uncountable noun to a countable one. For her there is not only "the public" but there are different "publics". What is accessible to one public may not necessarily be accessible to another public. She gives the example of politicians addressing "the public" in different countries. They will necessarily be addressing different groups of people. We accept that the accessibility of specific contents on the Internet may vary for different groups of people but we prefer to refer to these groups as (circles of) communities rather than publics, in order to maintain the distinction between public and non-public. If the term "public" is applied to communities of whatever size, even the most intimate content would be public in the sense that it is accessible to a (very small) community of people. The two dimensions of public versus non-public and private versus non-private will be covered in more detail in section 4, with regard to Twitter and Facebook.

The distinction between "mobile" and "stationary" media use has also become out-dated in recent developments in the new media. Nowadays, many people own a smart phone, which allows them to use the Internet anywhere and anytime. With just a smart phone in the pocket and a moderately fast Internet connection, any type of KSC becomes as mobile as typing a text message on a traditional cell phone. This extended use may have effects on language use. If more and more people are able to log onto the Internet from anywhere, messages are likely to become more situation and environment dependent, briefer and more spontaneous – in short, they become more and more utterance-like.

For the terms "monomodal" and "multimodal", finally, we follow Stöckl (2004), who distinguishes four modalities: language, images, music and sounds. But, in contrast to him, we assume that these modalities are not on the same level: images, music and sounds, although being semiotic resources as well, are different from verbal signs in that there is no fixed relation between *signifiant* and *signifié*, thus between form and meaning. However, this is not the crucial point for the contribution at hand (cf. Kress 2010, for a more detailed discussion on multimodality). More important for our argumentation is that, within KSC, an increase in multimodality (or "quadro-modality" to be more precise) can be observed, since language, images, sounds and music often are combined. Furthermore, Stöckl's division of these four modalities into medial variants (cf. Stöckl 2004: 17) must also be mentioned. Taking into account only the two modalities that are more important for our purposes, images and language, we can differentiate between still pictures and animated pictures (i. e. video) for images and between the graphic and the phonic code for language.<sup>9</sup> The boundaries between these codes are clear-cut as mentioned above.

To sum up, we have seen that there are analytical categories, which have to be properly defined before using and adopting them when describing the features of KSC, and there are

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<sup>8</sup> Miriam Locher (p. c.) correctly points out that the term "privacy settings" (which is used by Facebook, for instance) is used to describe the concept of controlling the accessibility and is, therefore, concerned with what we call public versus non-public.

<sup>9</sup> To be precise, signing should be included here as a third medial variant.

others, which have to be given up, such as "text" and "utterance". The question remains what the latter couple should be replaced with and how we can describe the communicative activities in KSC, or "outputs", as Crystal (2011: 10) calls them, in an appropriate way. In the next section, we will introduce the terms "communicative act" and "communicative act sequence" to redefine the concept of "text" and "utterance" and we present our approach for analyzing KSC on the basis of this terminological framework.

### 3 Communicative acts and communicative act sequences

As pointed out above, the terms "text" and "utterance" have always been rather fuzzy. They share the fate of other technical terms in linguistics that also exist as words in everyday language. Whenever a definition is proposed, it turns out that it does not cover some entities that intuitively should be covered or – alternatively – it covers entities that intuitively should be excluded. A consensus is easier to reach for technical terms that do not use everyday words. In the case of the term "text", it is not clear, for instance, whether it applies only to instances of written language or whether it should also apply to spoken language and even to images (see e. g. Stöckl 2004).

Nevertheless and in spite of the fuzzy boundaries some features have traditionally and typically been associated with texts, while a different set of features is generally associated with utterances. Thus, as we have already pointed out, texts are typically realized in the graphic code, they are monologic and rather long. They are used in asynchronous communication, that is to say they are produced by the writer some time before they are received by the reader. Generally the writer has time to plan and revise a text before it is transmitted, and texts tend to be relatively context free. They do not depend on the immediate communicative context in order to be interpreted. Utterances, on the other hand, are produced in the phonic code, they occur in dialogic contexts, and they are used in synchronous communication. Their production and reception are simultaneous. They tend to be short, spontaneously produced, and they often rely on the immediate context for their interpretation. It is obvious that there have always been more complex constellations, but by and large the distinction has been useful to distinguish different realization units for language.

In the context of the keyboard-to-screen communication (KSC), however, the distinction ceases to be useful and must be abandoned. We, therefore, propose the term "communicative act" (CA) to cover entities that have traditionally be termed "text" or "utterance". We use the term to refer to all forms of ostensive communication, that is to say communication that comes with a communicative intention in the sense of Sperber and Wilson's (1995) *Relevance Theory*. For Sperber and Wilson this includes verbal and non-verbal communication, but it excludes behaviour that is not intended to communicate. If somebody checks his or her watch, it may remind a bystander of the actual time and in this sense the checking of the watch is communicative, but it is only an act of ostensive communication if the watch checker intended the bystander to notice the watch checking.

As such, the term "communicative act" is a more general designation that covers language units irrespective of their monologic or dialogic context, irrespective of their synchronous, quasi-synchronous or asynchronous communication pattern, and ultimately also irrespective of their production in the graphic or phonic code or even in a non-verbal manner. In the context of this paper, however, we will focus on instances that are either produced in the graphic code or at least include parts in the graphic code but this limitation is due to our focus on keyboard-to-screen communication and not to the scope of the definition of the term "communicative act".

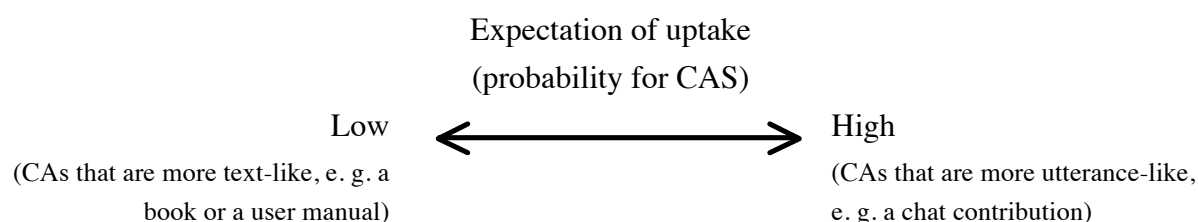
Thus the term "communicative act" covers instances of what traditionally has been termed a "text". Relevant examples would be an entire book, a newspaper article, a letter, a user



manual, an email message and similar texts that are usually realized in the graphic code. It also includes longer monologic instances of language that are usually realized in the phonic code, such as an academic talk, a news bulletin on radio, a church sermon or a speech at a political rally. The term also covers instances of what is normally called an utterance, such as a greeting, a compliment, a request or other speech acts that are often realized in the phonic code. And – crucially – the term also includes instances of language that are more difficult to capture with the traditional terms "text" or "utterance", e. g. chat contributions, status updates on Facebook, comments on an article of an online newspaper, a tweet or re-tweet on Twitter and even activities such as clicking on a button on Facebook to "poke" a "friend" or to "like" one of their status updates. The "Poke" button is used to tell friends that one is thinking of them. Pressing this button will simply trigger an automated note on their profile saying that they have been poked. Thus, it is an instance of a communicative gesture, i. e. a non-verbal CA sent by the user to one other person.

When we look at this broad range of units that are covered by the term "communicative act", we realize that some of them tend to occur in relative isolation, e. g. books or user manuals, while others are generally embedded in a whole string of related units, e. g. chat contributions or tweets. For such strings of communicative acts we would like to introduce the term "communicative act sequence" (CAS). Obvious examples of communicative act sequences would be oral conversations, classroom discourse, an email interaction, an exchange of letters, a timeline on Twitter (i. e. a sequence of related tweets, see section 4.1 below), a chat conversation, a thread on a newsgroup or forum, or a short text message dialogue. Typically, a communicative act in such a sequence is linked to the previous unit (as is the case in adjacency pairs). However, as we will see later on for Twitter and Facebook, there are communicative acts which do not follow this practice since they do not make reference to previous CAs although they are part of the same sequence.

Many CAs can occur in relative isolation or can be embedded in a communicative act sequence. In other words, communicative acts differ as to the extent to which their producers can expect other communicators to respond. CAs have different uptake expectations or different probabilities of occurring in a communicative act sequence (see figure 1).



**Figure 1: Scale of uptake expectations**

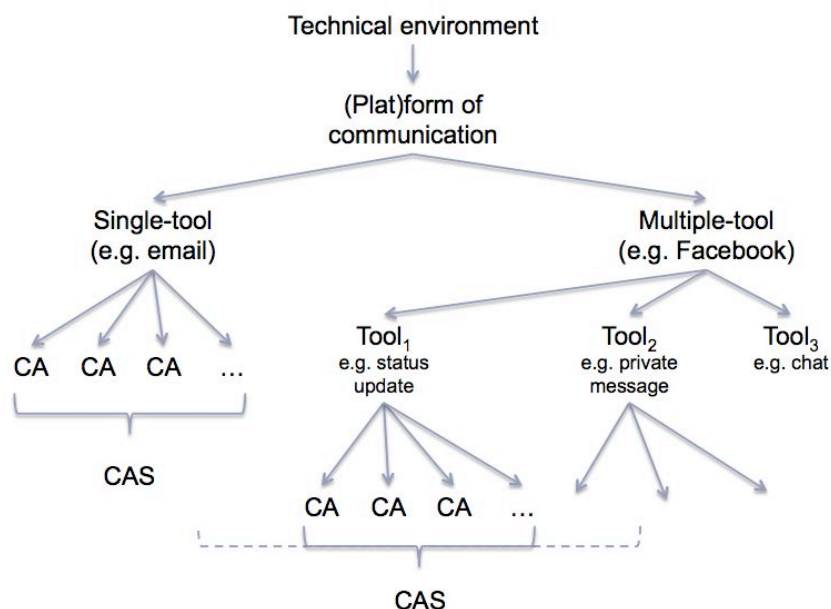
Thus, we have replaced the dichotomy of monologic and dialogic contexts with the scale of uptake expectations. This makes it easier – as the case studies on Twitter and Facebook below will illustrate – to talk about the status of CAs, such as a tweet or a status update, which are often embedded in communicative act sequences but not necessarily so.

Let us come to our point: Communicative acts, and, therefore, also communicative act sequences, always occur in the context of specific forms of communication, or platforms of communication, as we shall call them.<sup>10</sup> We distinguish between single-tool platforms, such as chat, email, blog or SMS, and multiple-tool platforms, such as Facebook, Twitter, Skype, online newspapers and so on. These platforms are defined through the number and types of forms of communication that are technically available. In the case of a single-tool platform

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<sup>10</sup> As we have already mentioned, Crystal (2011: 10) uses the term "outputs" for these entities, because this term is theoretically neutral and does not imply any linguistic unity where perhaps none may exist.

there is only one type. In the case of multiple-tool platforms a range of different types is available. These tools, in turn, provide the basis for the production of CAs. It can regularly be observed that providers of specific platforms of communication extend the range of tools available to their users. Thus, Skype, for instance, introduced a chat tool, Facebook introduced "poke" and "like" buttons, online newspapers extend the options for their readers to comment and contribute, and so on. Figure 2 gives an overview of our model.



**Figure 2: Analytical grid for communicative acts (CAs) and communicative act sequences (CASs)**

A platform of communication needs a technical environment in which it can work. This can be a computer, a smart phone or a similar technical device. A single-tool platform like email allows its users to create individual communicative acts. These acts may but need not combine to larger sequences. In the case of multiple-tool platforms, several tools allow the creation of communicative acts which may or may not combine to communicative act sequences, as for instance status updates, chats and private messages on Facebook. In some cases it is also possible that CAs from different tools combine to CASs. Comments on status updates on Facebook, for instance, may be sent as a private message to the writer of the status update. They are thus part of a CAS that is produced both on Facebook and in an email sequence (see below section 4.2). This is shown by the broken line in figure 2.

#### 4 Case studies: Two social network sites

In the following we shall present two short case studies to illustrate the usefulness of the terminological distinction proposed above. As illustrations we will look at Twitter and Facebook. Both of them have been established relatively recently and are particularly well-known SNSs. According to recent studies (cf. Pew Internet study 2011), SNSs enjoy great popularity, and the legitimate question arises whether they will even replace other forms of communication such as email in the near future. Particularly during leisure time they already play an important role in the lives of many users, and the commercial uses of the communication tools included in SNSs may increase in the near future, too.

Let us start our two case studies with an often-cited definition of SNS.<sup>11</sup> In their introduction to a special issue of the *Journal of Computer Mediated Communication*, boyd and Ellison (2007) describe SNSs as

<sup>11</sup> See, for instance, Bolander and Locher (2010: 169) or Yus (2011: 111).

web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site.

The first feature refers to the fact that, by joining an SNS, users typically construct a profile with information about themselves. Depending on the specific SNS and the applied privacy settings the user information given in these profiles may be more or less public (i. e. more or less accessible, following our definition). It typically contains information about the user's gender, age, location and interests. Such user profiles may present detailed and accurate pieces of information about the user's real life, but they may also be more or less fictional. For other users who happen to be familiar with a particular user in real life, it may be apparent which pieces of information are accurate, which are somewhat idealized and which are completely fabricated. For the analyst, however, it is important to treat a user profile as an individual projection that does not allow us to draw any reliable inferences about the demographics of the real user who created this profile. Thus, we adopt the practice of literary analysts to distinguish between the real author and the I-narrator or the implied author. As analysts we do not have access to the real author, but only to the textual realities of the I-narrator or – to be more precise – of the identity she or he is constructing on the SNS (see Bolander/Locher 2010 for more details).

The second defining feature of SNSs according to boyd and Ellison (2007) is the list of other users that are connected with each user. In some cases connections have to be established by both sides. One user typically asks another user for the permission to establish a connection. If the other user agrees, a connection is established and the users become what is usually known as "friends". In other cases, users do not have to ask for permission and can establish a one-sided connection and thus become what is usually known as "followers". Twitter, for instance, has followers. In the default case, each user is free to follow other users of his or her choice. Facebook has both friends and followers. Normal individuals can only be connected to as friends, while celebrities (e. g. Roger Federer, Barack Obama), commercial enterprises (e. g. newspapers, business corporations), organizations (e. g. charities, The British Monarchy, Linguist List), and the like can be connected to as a follower rather than a friend.

The third feature proposed by boyd and Ellison (2007) pertains to the access that each user has to the other users with whom he or she is connected. In the case of "friends" this access is typically symmetrical. Both friends can view each other's profiles, connections and activities (depending on the particular SNS) while in the case of "followers" the relation is asymmetrical. The follower connects to a user whom he or she follows, but not vice versa. Checking their friends' profiles and commenting on their activities even seems to be more important to many users than posting their own status updates. Thus, following the findings of the recent Pew Internet study Facebook users "are more likely to comment on another status than to update their own status" (2011: 14).<sup>12</sup>

The distinction between "friends" and "followers" is also relevant when considering whether material can be used as data for an academic paper. It is an important difference whether a user communicates to a restricted number of addressees or whether he or she makes a message available to whoever has access to the Internet. CAs that are only accessible to a list of addressees controlled by the user, on the one hand, are not quotable without the explicit permission of the user who created this CA. Such a user communicates in a non-public context. CAs that are accessible to whoever wishes to read them, on the other hand, are to all

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<sup>12</sup> In this first national report on SNS, conducted on landline and via cell phones, between October and November 2010, 2,255 American adults were questioned on their use of SNSs. One purpose of the survey is to reveal in what way this use is related to demographic characteristics, such as age, gender and social class (cf. Hampton 2011 for more detailed information).

intents and purposes publicly accessible. Thus, we treat status updates or tweets by "users" such as Barack Obama or The British Monarchy as quotable because they are fundamentally public in the same way that a newspaper article is public. In addition, we treat comments by other users to such status updates (if they are freely available to all followers of the celebrity) in the same way that we would treat letters to the editor and, therefore, as quotable. Status updates on Facebook that are published without accessibility restrictions are also treated as public in this sense and, therefore, quotable. boyd (2008: 86f.) correctly points out that the focus in this discussion should be on the intended audience, rather than on the technicalities of the privacy settings.

In drawing the line, I decided to directly reference content that was clearly meant for mass consumption and to do everything possible to protect content that appeared to be intended for peers or small audiences. I decided that it was unethical to amplify content's visibility when that does not appear to be the teen's intention. (boyd 2008: 87)

Ess et al. (2002: 7) discuss the same dilemma in slightly different terms. They distinguish between content produced by subjects, e. g. as participants in small chat rooms, or by authors addressing a wide audience, and they advise for extra caution in the use of the former. We follow the same principle and only quote data which does not appear to be sensitive and which is not intended for a small audience only.

According to the recent Pew Internet study mentioned above, the number of those using social networking sites has nearly doubled since 2008. Particularly Facebook enjoys considerable popularity in the US: 92% of all SNS users are on Facebook; 13% use Twitter. Of course, one must also ask how often they are logged in on these platforms and how often they are active themselves, but these findings already reveal that social networking becomes increasingly important. This is also supported by estimations published by Quantcast (<http://www.quantcast.com/>, accessed January 5, 2012), according to which Facebook is visited by 142,9 million people per month in the US alone and is thus the second most popular website in the US (after Google with 166,7 million people per month). Twitter, on the other hand, ranks fifth with 68,6 million people per month in the US.

#### **4.1 Twitter**

Twitter is a social networking site that came into existence in 2006. Users connect to other users by "following" them. Permission by the user being followed is not required unless Twitter users specifically protect their accounts. Two users may of course follow each other, but often the relationship between follower and followed is asymmetrical.

Twitter is a multiple-tool platform but it allows only a fairly limited number of different CA types. The most important of these are the tweets, which are messages limited to 140 characters. In addition, users have profile pages but apart from a self-descriptive profile statement that is restricted to 160 characters and a picture, the profile page is system generated and contains a list of recent tweets and some statistics about the number of tweets produced by the user, the number of other users that this user follows and the number of users following this user. Figure 3 represents the profile page not of a person, but, as is often the case as well, of an organization, the Linguist List.



Figure 3: Twitter profile page of Linguist List, accessed July 1, 2011

The self-descriptive profile statement of Linguist List reads "The world's largest online linguistic resource" together with a webpage address. The system also generates some information about the specific connection between the user calling up this page and Linguist List. The main part of the profile page, however, is devoted to recent tweets produced by Linguist List.

In addition to the profile page and tweets, Twitter also supports private messages which can be exchanged directly between different users. If such an exchange takes place, we no longer have a one-to-many communication as in the case of Linguist List and its followers but a one-to-one communication between follower X and follower Y. In addition to the CAs which are monologically posted as in the Linguist List tweets, there are CAs posted as tweets by individuals in a dialogic context. These "@replies" or @-CAs, as we may call them, form a communicative act sequence (CAS) with two or more turns corresponding to the course of discussion. It is noteworthy that such @-CAs directed at a specific addressee do not appear in a different window. They are embedded in the CAS created by public tweets, thus, a CAS appears in another CAS. This may be compared to an oral conversation where a short one-to-one exchange (= CAS<sub>2</sub>) takes place between two participants of a larger group of people while the main CAS (= CAS<sub>1</sub>) continues between the other people in the larger group.

A recent study (pearanalytics 2009) has tried to classify tweets according to their content in a more detailed way. On the basis of a sample of 2,000 tweets produced during a ten-day period it was established that 40 per cent of all tweets were what was called "pointless babble", 37 per cent "conversational", nine per cent "pass along value", six per cent "self promotion" and four per cent each for "spam" and "news". "Pointless babble" was defined as "the 'I am eating a sandwich now' tweets", while "conversational" was defined as "tweets that go back and forth between folks, almost in an instant message fashion, as well as tweets that try to engage followers in conversation, such as questions or polls" (pearanalytics 2009). However, this classification and in particular the category labels appear to be very tendentious. boyd (2009) criticises the study and suggests that "social grooming" might be a better term than "pointless babble". She correctly points out that what may appear as "pointless babble" to an outsider may be socially relevant and interesting for the people for whom the message was intended.

The situation is similar to mobile phone conversations carried out in public places. What appears to be relevant and interesting to the conversationalists involved in the phone call may appear as "pointless babble" to the involuntary bystanders and overhearers of the conversation (see also Crystal 2011: 50 or Yus 2011: 138).

Tweets are usually public. Whatever a user tweets is immediately accessible to everybody who has chosen to follow this user and in addition this communicative act is available via searches to everybody else. What a user reads by default is a timeline of all recent tweets posted by the accounts that he or she follows. Depending on the choice of accounts a user follows the timeline may be entirely random with tweets that do not share any semantic links. They are only united by their time of production and by the user's range of interests that has selected exactly these accounts. It is such timelines of unconnected tweets that necessitates the new terminology that we have proposed above. They cannot be called a text because they do not show any systematic coherence. And they cannot be called a sequence of utterances because tweets in a timeline are very often not dialogically related.

However, according to Crystal (2011: 47), tweets have recently become more dialogic. In the early years of Twitter he observed a preponderance of self-contained utterances (e. g. "Beautiful day here in London" or "Am stuck in a lift") while in a 2010 sample he found tweets that displayed clearly dialogic elements, such as "That probably means something in another language" or "lol yeah I wasn't thinking fast enough" (Crystal 2011: 47). However, even such "dialogic" tweets are likely to end up in timelines in which they are separated from the tweets that they are referring to.

Finally, with two extracts from Twitter we will illustrate the usefulness of our terminological distinctions. These two timelines can be described as communicative act sequences with the properties mentioned above. They appear in the temporal sequence in which they have been produced as a result of the reader's choice of accounts he or she wants to follow or as a result of a particular search term. Although the author of a tweet cannot predict the precise contexts in which readers will be able to see his or her tweet, he or she can influence the uptake expectations by including @-phrases as mentioned above and hashtag -phrases. The latter are words, abbreviations or expressions preceded by a hash-sign (#). These hashtags are a way of marking specific expressions or abbreviations in order to make them more easily searchable and, thus, to create a more coherent CAS (i. e. a CAS where the individual CAs are thematically linked to each other). During the royal wedding of Prince William and Katherine Middleton on 29 April 2011, for instance, many users used the hashtags #rw11 and #royalwedding in order to make sure that other users interested in the royal wedding could read their tweets. Hashtags are always written in one word without intervening spaces but sometimes with internal capitals that indicate word boundaries (e. g. #RoyalWedding). Figure 4 gives a short extract from a CAS that developed so quickly that it seems very unlikely that anybody would have been able to follow all the tweets that were produced with these hashtags.

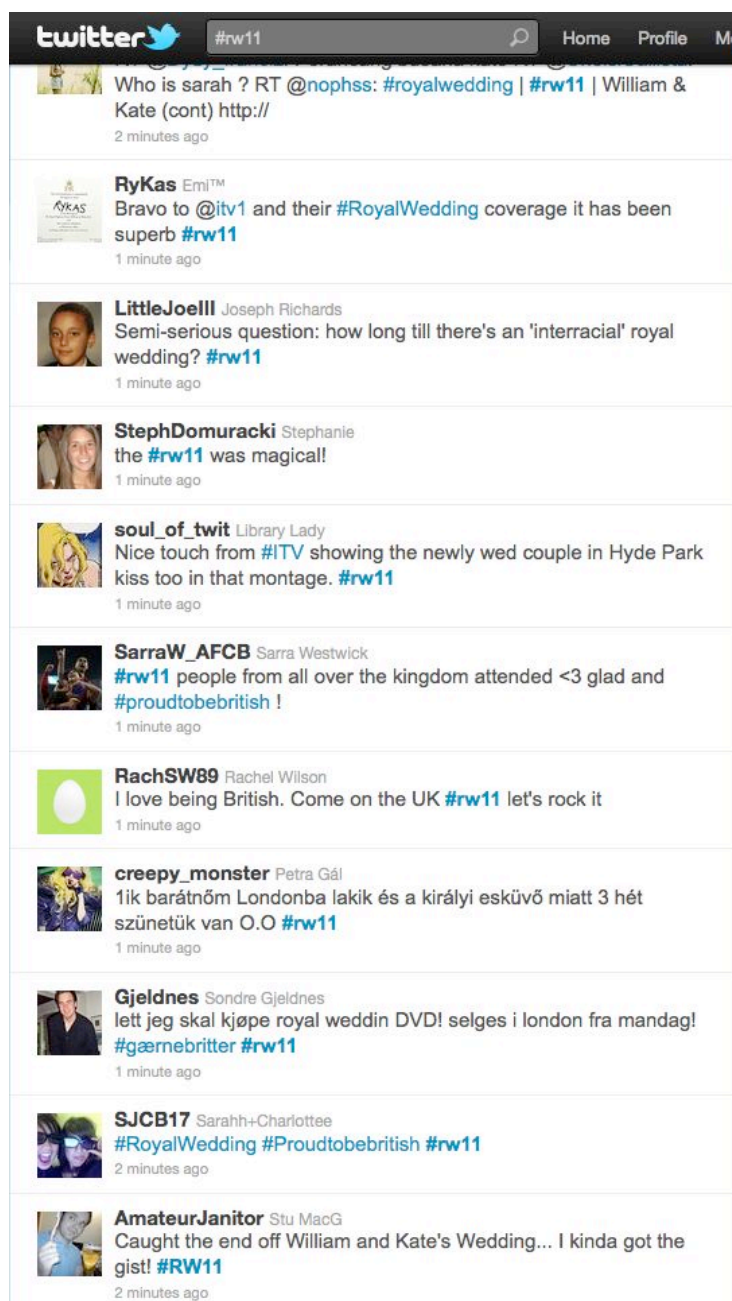


Figure 4: Tweets with the hashtags #rw11 and #royalwedding11, accessed April 29, 2011

The timeline in figure 4 shares the coherence through the topics of the individual CAs, but even in this CAS the CAs do not relate directly to each other. Indeed not even all of them are in English. Uptake expectations, nevertheless, are high because the authors of these tweets can expect their tweets to appear within a CAS related to the Royal Wedding. Hashtags can also be used by much smaller communities with equally high uptake expectations. A group of users, e. g. delegates attending a conference, may decide to use a particular hashtag in order to discuss the papers of the conference while they are in progress. In this case the resulting CAS in the context of the spoken presentation attended by all the users who contribute CAs to this CAS may be very coherent (see Crystal 2011: 54 for a relevant example). In the cases of searches as exemplified in figure 4, however, the searches may produce CASs that are united only by the lexical coherence provided by the search term.

At-searches are very similar. They search tweets that are addressed to particular users with the at-prefix, e. g. @djokovic or @federernews, and they also result in CAS whose coherence is

provided by the search term itself and by the temporal sequence in which the retrieved tweets were produced.

Full-text searches allow the retrieval of all tweets that contain the search term in whatever form. The resulting CAS differ somewhat from the hashtag search and the at-search. Tweeters who use a hashtag or an at-prefix intend their tweets to be relevant for the respective searches, while full-text searches may also retrieve tweets that were not meant to be coherent contributions to the search item. The trend search, finally, uses a list of key words provided by Twitter on expressions that are frequently used at a particular time and in a particular location. The default location is usually based on the user's location in the Internet, but the location can be changed manually to other locations that are supported by the system. At a certain point during the royal wedding of Prince William and Katherine Middleton, for instance, the expression "they kissed" appeared on the list of trends. As a result many users commented on the fact that "they kissed" was trending, rather than on the original event itself (see figure 5).



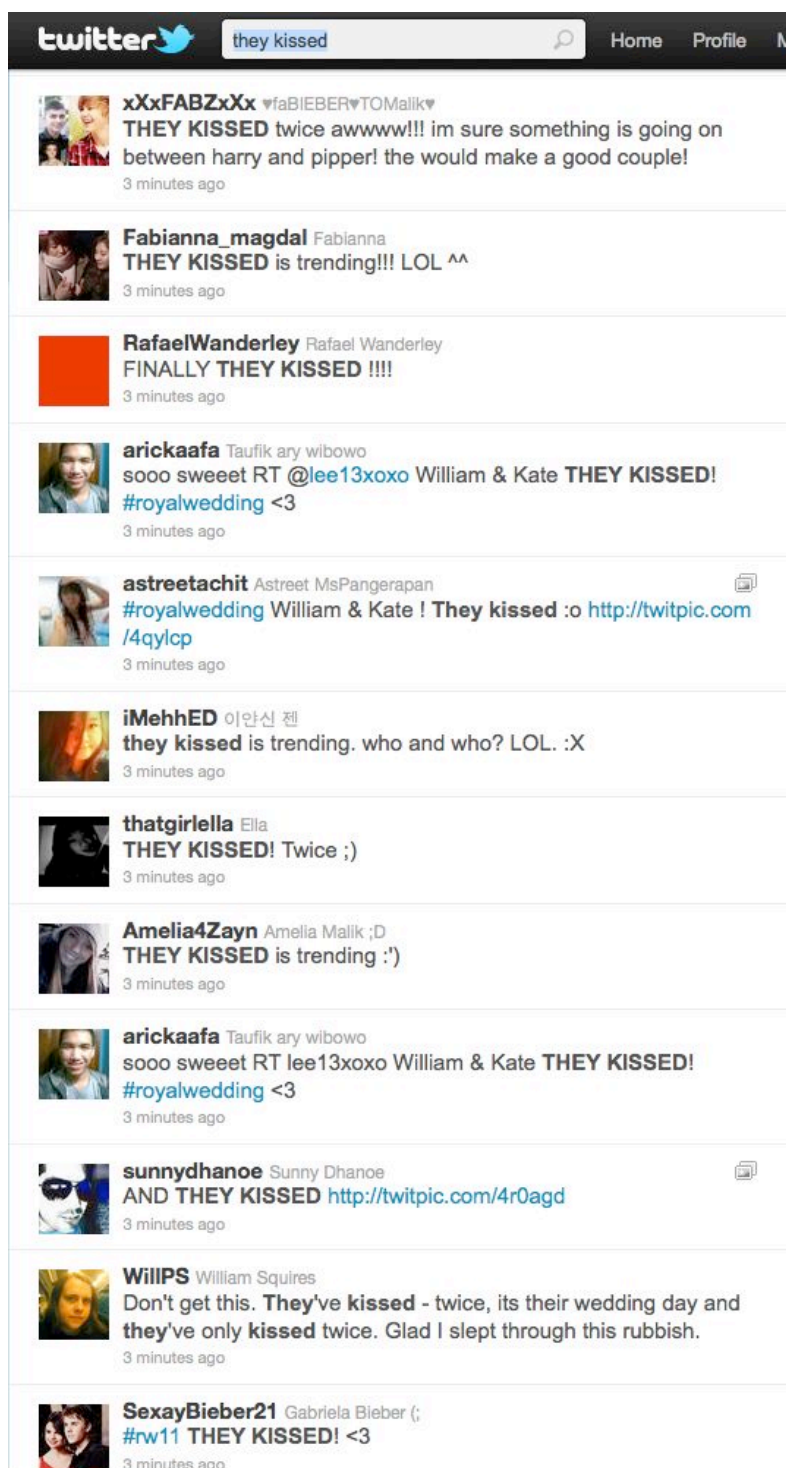


Figure 5: Tweets retrieved by the trend search "they kissed", accessed April 29, 2011

In summary, the SNS Twitter is a platform that allows its users to contribute CAs to CASs, and to retrieve individualized CASs. These sequences have very specific coherence relations that are provided on the one hand by the temporal sequence in which they were produced and on the other hand, and more significantly, by the specific search strategies used by the retriever. As such they are neither dialogic in the traditional sense nor do they form a coherent text in the traditional sense. The individual CAs are embedded in multiple CASs depending on the personal choices of different followers or on the particular search string which retrieved it. The uptake expectations of individual tweets depend on the followers and on the hashtags that are used. At conferences with a small group of people who agreed on a hashtag for this particular conference in order to twitter about various aspects of the conference,

uptake expectations may be very high, while in the case of a mega event like the royal wedding with hundreds of tweets per minute uptake expectations may be reduced to the certainty that a specific tweet will appear in a relevant CAS read by hundreds or even thousands of other users.

## 4.2 Facebook

Facebook goes back to 2004 and its use was initially limited to college students. Nowadays, it is a network for everybody – in contrast to e. g. LinkedIn, which is mainly used for professional networking, studiVZ, a German SNS for students or Academia, a network for academics. Currently, in the US, Facebook is ranked as the most popular SNS, followed by MySpace, LinkedIn and Twitter (cf. Pew Internet study 2011). Like Twitter, Facebook is a communication platform, which is accessible via the Internet or via dedicated applications on smart phones, PC tablets and networked computers. Thus, it is not based on one communication tool only (such as email) and not bound to a particular medium. In this sense, Facebook offers a wide range of keyboard-to-screen communication, and it is highly accepted among young people – unlike Twitter, which is much less popular among teens. This may be illustrated by using German survey data (cf. the JIM-Study 2011, a telephone survey among 1205 young people aged between 12 and 19): Only 5 per cent of the interrogated teens send tweets whereas 78 per cent are on Facebook or use a similar network.<sup>13</sup>

But what are the advantages of this SNS, why is it so popular? On the one hand, it is more interesting to join a network which is already in frequent use since the chance to meet people the user already knows is much higher. On the other hand, it offers more activities than Twitter. In addition, it provides an appropriate basis for an in-group communication. Twitter, in contrast, is a communication platform which, as we have seen, has only very limited options to reduce reader access. Of course, many Facebook users have 500 or even more "friends" and consequently there is also a large readership that is more or less unknown to the user, since users often are not aware of whom they add as "friend" if they get a friend request.<sup>14</sup> Thus, quite regularly the user's everyday communication on Facebook takes place among 10 or 20 of his or her friends only while the other contacts are merely non-interactive or even unknown. They are, what boyd (2008: 34) calls the "invisible audiences". In the offline world these audiences may belong to distinct social contexts but within the Facebook community the contexts are "collapsed", as boyd (2008) describes it, i. e. the spatial, social or temporary boundaries that separate them in the real world break down. The only link they have in common in the online network may be one single friend on Facebook.

While our first case study on Twitter focused on the application of the distinction between CA and CAS as we introduced it in section 3, this chapter is mainly dedicated to the communication practices on Facebook with a special focus on the analytic categories discussed in section 2. Particularly the distinction between quasi-synchronous and synchronous becomes relevant here, since, in contrast to Twitter, Facebook provides a tool for quasi-synchronous communication, i. e. the Facebook chat. This communication form can only take place between confirmed friends and only on a one-to-one basis. In the Facebook

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<sup>13</sup> Similar results are shown by another Pew Internet study carried out in 2010 (see <http://www.pewinternet.org/Media-Mentions/2010/Few-teenagers-embracing-Twitter-report-finds.aspx> for more details, accessed January 11, 2012). These findings may be astonishing considering the fact that young people are so keen on keyboard-to-screen communication. One probable reason is given in the report: "experts suggest the difference is that most teens want to socialize with their friends and peers, not broadcast to the larger world."

<sup>14</sup> This can be illustrated by the following personal communication (a 27-year-old woman with 745 friends at the time of writing): "Yeah, I don't even know half the people who follow me on facebook anymore because alot [sic] of them come from University lectures..."

chat window, the users see a list of the persons who are online and thus potentially ready to chat at the moment.<sup>15</sup> This is as an advantage over other forms of communication, such as email or SMS, where the writer can never know exactly when the addressee is actually going to read the message. Once the Facebook chat communication has started, an animated icon informs about the communication partner's keyboard activity. This does not make the communication synchronous but still allows keeping track of a CA being produced, thereby helping to avoid simultaneous CA productions on either side and thus preventing incoherent chat sequences. Undoubtedly, the chat is the communication form with the highest uptake expectation on this platform: While the chat is going on, the communicators expect the other person to respond immediately. On Twitter, in contrast, the likelihood of a posting's developing into a CAS is much lower.

If, on the other hand, we are looking for similarities between Facebook and Twitter, we have to turn to wall postings. They can be compared to Twitter because in both cases the writer's posting can be read by a wider audience, i. e. by all friends (in Facebook) or all followers (in Twitter). An example from Facebook is given in figure 6. Margrit<sup>16</sup> writes on Kelly's wall, the message is answered by Kelly while this small CAS can be read by the whole invisible audience.



Figure 6: Message on a friend's wall

Just like in Twitter, CAs on Facebook up until now have never been in the phonic code. Of course, images, sounds and music may be added to these CAs by sharing a link to a video clip, for instance, or by uploading a photo; these modalities can figure as added information to CAs or even represent CAs themselves. In this sense, Facebook is multimodal. In spite of the fact that external contents of this type can always be posted, the communication itself is – for the time being – based on the graphic code. However, it typically shows features of the language of immediacy. This is particularly the case for chat conversations on Facebook but also postings on a user's wall and comments on these postings are often written in an informal language although they are not quasi-synchronous.

The illustration in figure 7 shows some of the communication forms just mentioned, as well as others, which will be explained further down.

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<sup>15</sup> Or, to say it more cautiously: a list of the persons whose browsers are opened at the moment. They may not be at the keyboard at all and thus not available. Actually, if a user is inactive on the site for more than ten minutes this is indicated by the system.

<sup>16</sup> Although we did ask all users' permission to use their wall postings, we still preferred to blur pictures and replace names for reasons of confidentiality. The names given here are thus fictive names, even though the conversations are real and unchanged.

The image shows a screenshot of the Facebook interface. At the top, there is a text input field with the placeholder text "What's on your mind?". Below this field are three buttons: "Like · Comment · Share", "share" (with the Facebook 'f' logo), and "Send message" (with a speech bubble icon). Below these buttons is another text input field with the placeholder text "Write something...".

On the left side, there is a "Chat" window showing a list of contacts: Andy Smith, Kelly King, and Paul Brown. Below the list is a search bar with the text "Search".

On the right side, there is a "New message" form. It has a "To" field with the placeholder text "Enter a friend's name or email address", a "Message" text area, and icons for attaching files and photos. At the bottom of the form are "Send" and "Cancel" buttons.

**Figure 7: Communication forms on Facebook**

Let us start with the system prompt "What's on your mind?" in figure 7. In the respective field, the user can enter a text with up to 420 characters, thus he or she can "share" his or her status. This status update appears on the user's profile page and, depending on the privacy settings, on their friends' wall. Status updates, similarly to tweets on Twitter, often contain some information about what the users are doing at the moment, what they feel, where they are, whether they need some advice, what they plan on doing in the near future and so on. In their pilot study examining the profile pages of ten Facebook users living in Switzerland, Bolander and Locher (2010), for example, find that most of these persons' status updates refer to their state of mind or to action in progress or to future action.

Although status updates of this kind are prototypically considered to be a form of one-to-many communication, a dialogic conversation can develop out of them, just as we have seen with Twitter. This is pointed out by Carmen K. M. Lee, who carried out a study on the communicative functions of 744 status updates. Lee (2011: 118) states: "Facebook status updates are not as monologic as they seem; some can be highly interactive and relational in nature." This observation can be interpreted, following our terminology, in two ways – depending on the expectation of uptake of the original posting. Firstly, it often happens that a CA which was originally intended as pure information gets still commented by others on the user's wall. Thus, a CA with a low expectation of uptake can mark the beginning of a CAS. Secondly, there are wall threads with status updates which are characterized by a high expectation of uptake from the very beginning. This is especially the case if the starting CA is a request for help as is shown in the example in figure 8, which received 30 comments.



**Figure 8: Status update with high expectation of uptake**

Another aspect needs to be highlighted at this point. Since the topics of the CAs produced in Facebook are often of the type "I'm sitting in the garden", the communicative purpose of these CAs may be questioned, as in the case of tweets. Here we join boyd (2009) in arguing that this type of communication may be relevant on the social level, and in this way strengthens the ties between the users. Through their interactions on Facebook, they regularly get some information about each other and, as Yus (2011: 127) points out, it is precisely this mutuality of information, which can "serve as a preliminary context for future interactions."

If it is not necessary for the communication partner to read a message immediately, there is also the option to send a "new message" (see figure 7). The prompt one gets when clicking this button looks like an email, except that there is no subject field. This function does not replace an ordinary email application, but it is yet another step towards a single platform for all communicative purposes. However, messages are often not sent directly, but rather posted on the addressee's wall as we have seen above, in figure 6. This is also a one-to-one form of communication since there is a designated addressee and the uptake expectation is focussed on this person; but still this type of message can be read and answered not only by the addressee but also by all friends of the addressee and of the writer. Thus, in this case, there is an inner communication circle in which the actual exchange takes place, and an outer circle in which we find the whole readership, i. e. bystanders and overhearers (or, to be more precise, 'overreaders'), who are not involved in the interactions and thus watch invisibly (cf. boyd's term "invisible audiences", 2008: 34) while the members of the inner circle are contributing.

The "Like" button, another communication practice shown in figure 7, triggers an automated comment on a picture or on a wall entry without the need to write any text. Interestingly enough there is a "Like" but no "Don't like" or "Dislike" button. It is thus only possible to place a positive evaluation, which may create a conflict for users who would like to express their opinion on a status update containing bad news. The "Like" function, just like the "Poke" function mentioned above, is of a phatic nature. They are both used to create immediacy and an in-group feeling, but also to call the attention of a communication partner. Besides, the "Like" feature has another advantage: A user only needs to press the "Like" button in order to make that status update appear on his or her own. The same is true for the "Share" button shown in figure 7. It is used to place text, pictures or other media types from outside

Facebook on the wall, be it on the user's own one or on that of a friend. As such, it is comparable with "Send" or "OK" buttons in other systems. However, in Social network sites, the focus is not so much on sending messages between a sender and a recipient, but rather on participation in a common communicative space. Information is being shared and shared information is being read. As is pointed out by Bolander and Locher (2010: 169), Facebook emphasizes this notion of sharing (and connecting), which is shown by the Facebook slogan: "Facebook helps you connect and share with people in your life".

In the following, we give a final example for a Facebook interaction on the user's wall (see figure 9). The language style on this wall thread is very informal, i. e. close to the pole of communicative immediacy: discourse particles appear ("hehe"), clauses are incomplete ("me too"), a kind of phonetic spelling is used to represent an accent ("ze Germans") and spelling conventions are ignored ("germain"). We may even assume that the longer a CAS becomes, the more informal the language turns out to be.



Figure 9: Status update and wall thread

In spite of the fact that Kelly's status update does not ask for a reaction<sup>17</sup>, some of her friends still do react: Nicole, Erica and Samantha successively react to Kelly's posting (with a delay of several minutes or even hours), even if only Nicole and Erica seem to comment on the contents of Kelly's status update. Three users, perhaps from the group of commenters or others, reacted by "liking" the update. In addition, Samantha does not answer to the initial posting but to Erica's posting. Thus, this is a CAS (CAS<sub>2</sub>) embedded in the main CAS (CAS<sub>1</sub>) such as we have seen for Twitter.

<sup>17</sup> Except that receiving no answers at all to an initial CA would be a negative reaction in the eyes of Kelly, since she is a user with more than 500 friends and thus probably expects any of her postings to be answered by somebody.

To sum up, Facebook is a multiple-tool platform for which it is impossible to say whether it is quasi-synchronous or asynchronous, monomodal or multimodal, based on texts or on utterances, monologic or dialogic, mobile (via applications for smart phones) or stationary (via PC) and which can be characterized by a formal or (more frequently) an informal language. Thus, Facebook is all in all: the profile page, which provides information about the user, represents a monologic context, the chat window, which offers quasi-synchronous communication, represents a dialogic one; the language used in the chat conversation is typically in an informal style, the profile information typically in a more formal style. The distinction between public and non-public and between private and non-private is not clear-cut either. Status updates, for instance, may contain private topics, whereas other CAs, such as the user's profile information (hometown, sex, work or study environment etc.), are of a far less private nature. Furthermore, messages users send to each other are not public, whereas comments drafted on each other's wall are public (at least for all friends). However, this convergence does not pose a problem for the description of KSC. If the traditional analytical categories are adjusted to the communication practices this type of communication as suggested here, KSC linguistics even enlarges the possibilities of linguistic investigation.

## 5 Conclusion

As we have seen in the previous sections, some of the categories usually applied to distinguish between different forms of communication are problematic and should be re-defined or should even be given up ("text" and "utterance"). This was our reflection on the macro level, after having introduced the appropriate term for human-to-human interaction in the new media: keyboard-to-screen communication (KSC). Then, we turned to the micro level of KSC by introducing the terms CA and CAS, which present basic units of KSC but do not only apply to human-to-human interaction in the new media. They apply to all instances of ostensive communication. The case studies in section 4 finally showed that the terms introduced before can also be used for the communication practices on Twitter and Facebook. At the same time, in the course of this section, we provided some information on SNSs in general and on two SNSs in particular and situated this in our linguistic framework.

By referring to traditional analytical categories in a well-defined manner (such as we did for the concepts of "synchronous", "public" and "private") we can not only situate new CAs within the range of new forms of communication but we can also compare these CAs to earlier ones. In this way we are able to characterize the differences between communicative practices before the advent of Web 2.0 and those that have developed since. For instance, we can state that, in former days, KSC was limited to single-tool platforms which could be classified as being either public or non-public (e. g. blogging vs. text messaging) whereas nowadays, multiple-tool platforms emerge, which bundle all communication practices (as will be the case for another new SNS, *google+*, which has recently been launched by Google).

Moreover, CASs increasingly transcend platforms. A comment on a status update on Facebook triggers an email that is sent to the email account of the originator of the status update, articles of online newspapers often include buttons for sharing them on Facebook or on Twitter, and tweets often incorporate links to external webpages, to mention just three relevant examples. In this way CASs are created that extend beyond the boundaries of individual platforms of communication and create even more complex communicative situations than those sketched out in figure 1.

This brings us to the last point of our conclusion: What should be the name of this sub-discipline of linguistics, which investigates all these features of KSC? We have suggested "KSC linguistics" since "media linguistics", for instance, seems too wide a term (it includes investigations on language use on TV, on radio and in newspapers as well) and "Internet linguistics", suggested by Crystal, is too narrow (it excludes text messaging via cell phones).

Note that the terms "text linguistics" and "discourse linguistics", which are well established in the scholarly literature, are even less convenient since they focus on texts (CAs typically produced in a monologic context) or utterances (CAs typically produced in a dialogic context); that is to say they focus on CAs which cannot strictly be differentiated in KSC. Furthermore, the technical setting always plays a crucial role in these communication practices and should not be ignored – neither in the study of the data nor in the terminology used to describe this object of investigation. Thus, as we have argued, another term has to be introduced in order to face these new possibilities in technically mediated human-to-human interaction. Of course, KSC linguistics will face many challenges, and, as Crystal (2011: 149) points out at the end of his book, we have to develop "a sophisticated theoretical and applied Internet linguistics" (or KSC linguistics in our terms). Hopefully we have made a contribution to these challenges on the theoretical level – not only by sketching a new terminological framework but also by showing that this framework can be applied to new instances of KSC.

### References

- Androutopoulos, Jannis (2006): "Introduction. Sociolinguistics and computer-mediated communication". *Journal of Sociolinguistics (Special Issue)* 10 (4): 419–438.
- Baron, Naomi S. (1984): "Computer-mediated communication as a force in language change". *Visible Language* 18 (2): 118–141.
- Baron, Naomi S. (2008): *Always on. Language in an Online and Mobile World*. Oxford: Oxford University Press.
- Beißwenger, Michael (2007): "Corpora zur computervermittelten (internetbasierten) Kommunikation". *Zeitschrift für germanistische Linguistik* 35 (3): 346–375.
- Bieswanger, Markus (2007): "2 abbrevi8 or not 2 abbrevi8. A contrastive analysis of different space and time-saving strategies in English and German text messages". In: Floyd, Simeon et al. (eds.) (2007): *Texas Linguistic Forum 50*. Austin, Texas Linguistic Forum: 1–12.
- Bolander, Brook/Locher, Miriam (2010): "Constructing identity on Facebook: Report on a pilot study". In: Junod, Karen/Maillat, Didier (eds.) (2010): *Performing the Self*. Tübingen, Narr Francke Attempto: 165–187. (= *Swiss Papers in English Language and Literature* 24).
- boyd, danah m. [sic] (2008): *Taken Out of Context. American Teen Sociality in Networked Publics*. PhD Dissertation, UC Berkely. Available at <http://www.danah.org/papers/TakenOutOfContext.pdf>, accessed November 10, 2012.
- boyd, danah m. [sic] (2009): *Twitter: "pointless babble" or peripheral awareness + social grooming*. [http://www.zephorio.org/thoughts/archives/2009/08/16/twitter\\_pointle.html](http://www.zephorio.org/thoughts/archives/2009/08/16/twitter_pointle.html), accessed November 10, 2012.
- boyd, danah m. [sic]/Ellison, Nicole B. (2007): "Social Network Sites: Definition, History, and Scholarship". *Journal of Computer-Mediated Communication* 13 (1). Available at <http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html>, accessed November 10, 2012, article nr. 11.
- Bublitz, Wolfram (2012): "From speaker and hearer to user and user: What metacommunicative terms tell us about participation in computer-mediated communication". In: Busse, Ulrich/Hübler, Axel (eds.) (2012): *The Meta-Communicative Lexicon of English Now and Then. A Historical Pragmatics Approach*. Amsterdam/Philadelphia, John Benjamins: 151–176. (= *Pragmatics & Beyond New Series*).
- Crystal, David (2011): *Internet Linguistics: A Student Guide*. London: Routledge.
- Dürscheid, Christa (2007): "Private, nicht-öffentliche und öffentliche Kommunikation im Internet". *Neue Beiträge zur Germanistik* 6 (4): 22–41.
- Dürscheid, Christa (2011): "Medien in den Medien, Szenen im Bild. Eine pragmatische Kommunikat-Analyse". In: Stöckl, Hartmut/Schneider, Jan Georg (eds.) (2011):



- Medientheorien und Multimodalität. Ein TV-Werbespott – Sieben methodische Beschreibungsansätze.* Köln, Halem: 88–108.
- Ess, Charles/the Association of Internet Researchers (2002): *Ethical decision-making and Internet research: Recommendations from the AoIR ethics working committee.* Available at [www.aoir.org/reports/ethics.pdf](http://www.aoir.org/reports/ethics.pdf), accessed July 9, 2012.
- Hampton, Keith et al. (2011): *Social networking sites and our lives.* Available at <http://pewinternet.org/Reports/2011/Technology-and-social-networks.aspx>, accessed November 10, 2012.
- Herring, Susan C. (2007): "A Faceted Classification Scheme for Computer-Mediated Discourse". *Language@Internet* 4: 1–37. Available at <http://www.languageatinternet.org/articles/2007/761>, accessed November 10, 2012.
- Herring, Susan C. (2011): "Grammar and electronic communication". In: Chapelle, Carol A. (ed.) (2011): *Encyclopedia of Applied Linguistics.* Hoboken, NJ: Wiley-Blackwell. Available at <http://ella.slis.indiana.edu/~herring/e-grammar.2011.pdf>, accessed November 10, 2012.
- Herring, Susan C. (forthc.): "Discourse in Web 2.0: Familiar, reconfigured, and emergent". In: Tannen, Deborah/Trester, Anna Marie (eds.) (forthc.): *Georgetown University Round Table on Languages and Linguistics 2011: Discourse 2.0: Language and new media.* Washington, DC: Georgetown Univ. Press. Available at <http://ella.slis.indiana.edu/~herring/GURT.2011.prepub.pdf>, accessed November 10, 2012.
- Herring, Susan C./Stein, Dieter/Virtanen, Tuija (eds.) (forthc. a): *Pragmatics of Computer-Mediated Communication.* Berlin/New York: Mouton de Gruyter (= *Handbooks of Pragmatics* 9).
- Herring, Susan C./Stein, Dieter/Virtanen, Tuija (forthc. b): "Introduction to the pragmatics of computer-mediated communication". In: Herring, Susan C./Stein, Dieter/Virtanen, Tuija (eds.) (forthc.): *Pragmatics of Computer-Mediated Communication.* Berlin/New York: Mouton de Gruyter (= *Handbooks of Pragmatics* 9).
- Jenkins, Henry (2006): *Convergence Culture: Where Old and New Media Collide.* New York: New York University Press.
- JIM-Study (2011): *Jugend, Information, (Multi-) Media. Basisstudie zum Medienumgang 12- bis 19-Jähriger in Deutschland.* Medienpädagogischer Forschungsverbund Südwest (ed.) (2011): Stuttgart. Available at <http://www.mpfs.de/fileadmin/JIM-pdf11/JIM2011.pdf>, accessed November 10, 2012.
- Koch, Peter (1999): "Court records and cartoons: Reflections of spontaneous dialogue in Early Romance texts". In: Jucker, Andreas H./Fritz, Gerd/Lebsanft, Franz (eds.) (1999): *Historical Dialogue Analysis.* Amsterdam/Philadelphia, John Benjamins: 399–429. (= *Pragmatics & Beyond New Series* 66).
- Koch, Peter/Oesterreicher, Wulf (1985): "Sprache der Nähe – Sprache der Distanz: Mündlichkeit und Schriftlichkeit im Spannungsfeld von Sprachtheorie und Sprachgeschichte". *Romanistisches Jahrbuch* 36: 15–43.
- Kress, Gunther (2010): *Multimodality. A social semiotic approach to contemporary communication.* London: Routledge.
- Landert, Daniela/Jucker, Andreas H. (2011): "Private and public in mass media communication. From letters to the editor to online commentaries". *Journal of Pragmatics* 43: 1422–1434.
- Lee, Carmen K. M. (2011): "Micro-Blogging and Status Updates on Facebook: Texts and Practices". In: Thurlow, Crispin/Mroczeck, Kristine (eds.) (2011): *Digital Discourse. Language in the New Media.* Oxford/New York: Oxford University Press: 110–128. (= *Oxford Studies in Sociolinguistics*).
- Ong, Walter H. (1982): *Orality and Literacy: The Technologizing of the Word.* London: Methuen.

- pearanalytics (2009): *Twitter Study – August 2009*. <http://www.pearanalytics.com/blog/wp-content/uploads/2010/05/Twitter-Study-August-2009.pdf>, accessed July 7, 2012.
- Sperber, Dan/Wilson, Deidre (1995): *Relevance. Communication and Cognition*. Second edition. Oxford: Basil Blackwell.
- Stöckl, Hartmut (2004): "Typographie: Gewand und Körper des Textes – Linguistische Überlegungen zu typographischer Gestaltung". *Zeitschrift für Angewandte Linguistik* 41: 5–48.
- Thurlow, Crispin/Mroczek, Kristine (2011a) (eds.): *Digital Discourse. Language in the New Media*. Oxford/New York: Oxford University Press. (= *Oxford Studies in Sociolinguistics*).
- Thurlow, Crispin/Mroczek, Kristine (2011b): "Fresh Perspectives on New Media Sociolinguistics". In: Thurlow, Crispin/Mroczek, Kristine (eds.) (2011): *Digital Discourse. Language in the New Media*. Oxford/New York, Oxford University Press: xix-xliv. (= *Oxford Studies in Sociolinguistics*). Available at <http://faculty.washington.edu/thurlow/papers/thurlow-mroczek%282011%29-intro.pdf>, accessed November 10, 2012.
- Thurlow, Crispin/Poff, Michele (forthc.): "Text Messaging". In: Herring, Susan C./Stein, Dieter/Virtanen, Tuija (eds.) (forthc.): *Pragmatics of Computer-Mediated Communication*. Berlin/New York: Mouton de Gruyter. (= *Handbooks of Pragmatics* 9). Available at <http://faculty.washington.edu/thurlow/papers/thurlow&poff%282010%29.pdf>, accessed November 10, 2012.
- Yus, Francisco (2011): *Cyberpragmatics. Internet-mediated Communication in Context*. Amsterdam/Philadelphia: John Benjamins. (= *Pragmatics & Beyond New Series* 213).