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Digital privacy – metaphorical conceptualization
of the 'right to be forgotten'

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Foreword

I would like to express my sincere gratitude to my supervisor Lars Anders Kulbrandstad who provided me not only with useful comments and remarks, but also with enormous support and motivation throughout entire process. I also would like to thank my loved ones who believed in me and encouraged me all that time.

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1. Introduction

1.1 Background and research problem

Having appeared only three decades ago, the Internet has become an important part of our life. Today it is impossible to imagine our everyday routine without having Skype conferences, chatting with friends on Facebook, sending work-related e-mails, reading newspapers or doing shopping online. Nevertheless, the appearance of the Internet has brought not only benefits but also such dangers as privacy problems. Experts point out that privacy issues have been one of the major ethical concerns in the context of digital communication since the computer systems first started being used as public utilities in 1960s (Hoffman, 1969). The development of digital communication and Internet has only aggravated the situation: Identity theft, exposure of personal information, and insecure electronic transmissions are only some of the risks Internet users face daily.

The problem of digital privacy has become one of the most widely discussed topics both among the common public and in academic circles. However, there is relatively little research done in the sphere of metaphorical conceptualization of digital privacy issues. One of the most influential works devoted to this problem is *The Digital Person: Technology and Privacy in the Information Age* by Daniel J. Solove (2004), which focuses on the issues connected with digital dossiers and gives an outline of the most widespread privacy conceptions. Thus, Solove speaks about three main traditional conceptions of privacy: (1) Orwell's Big Brother, (2) the secrecy paradigm, and (3) the invasion conception.

While Solove's work has produced much valuable insight into the most popular metaphors in information privacy discourse, there is a need for studies that have a more defined focus of the analyzed topic. This thesis is a contribution to this as it is aimed at studying metaphorical conceptions about digital privacy in a media discourse dedicated to a specific aspect of digital privacy, namely the "right to be forgotten".

The aim of this Master's project is to identify conceptions of digital privacy and explore issues concerning this subject by analyzing metaphorical language used in the series of articles "Internet privacy – the right to be forgotten" published on the website of the British

newspaper *The Guardian*. The research problem can thus be stated as follows: How is privacy in digital contexts conceived metaphorically?

To answer this problem the following research questions have been developed:

1. What systematic metaphors are used while speaking about different aspects of digital privacy: personal data, data subjects, data controllers, data protection regulation, and the Internet as a platform for personal data disclosure and dissemination?
2. What can established systematic metaphors reveal about the conception of current issues of digital privacy as presented in media?

1.2 The “right to be forgotten”

At the moment, data protection in the European Union is regulated by the Data Protection Directive 95/46/EC which concerns protection of individuals with regard to the processing of personal data and the free movement of such data. However, having been enacted in 1995 before the Internet became commonplace, Directive 95/46/EC has become outdated. Thus, the Directive does not consider such important technological developments as social networks and cloud computing. As a result, in 2012 the European Commission proposed a new set of legislation, General Data Protection Regulation, aimed at replacing Directive 95/46/EC and giving new guidelines for data protection and privacy.

One of the key changes proposed by Data Protection Regulation is the introduction of “the right to be forgotten” which can be defined as “the right of the individuals to have their data no longer processed and deleted when they are no longer needed for legitimate purposes” (European commission, 2010, 2.3.1.). In other words,

The concept of the right to be forgotten is based on the fundamental need of an individual to determine the development of his life in an autonomous way, without being perpetually or periodically stigmatized as a consequence of a specific action performed in the past, especially when these events occurred many years ago and do not have any relationship with the contemporary context. (Mantelero, 2013, p. 230)

After its introduction, the “right to be forgotten” has become one of the most controversial and discussed topics among privacy experts. While some of them consider it as a

fundamental right, others question the technical feasibility of implementing this right (e.g. European Union Agency for Network and Information Security, 2012) and its impact on the right to freedom of expression (Fazlioglu, 2013; Larsen, 2013). The controversial character of the “right to be forgotten” has caused heated discussion and extensive media coverage, and has made it a perfect topic for this project.

1.3 Theory and methods

This thesis is aimed at understanding conceptions of the “right to be forgotten” and explore issues concerning this subject by analyzing metaphorical language. Metaphors are thus seen as powerful research object that can reveal much about the way people think and feel: “People use metaphor in constructing analogies and to make connections between ideas”, people also use it “in explaining ideas or to find indirect but powerful ways of conveying feelings and emotions” (Cameron & Maslen, 2010b, p. vii).

Such an approach to the metaphor is rooted in the conceptual metaphor theory proposed by Lakoff and Johnson in 1980. Before the second half of the 20th century, the metaphor was considered exclusively as a rhetoric device. Lakoff and Johnson’s contribution was to bring to the forefront a cognitive approach towards the metaphor where the metaphor is first of all considered as a matter of thought (Lakoff & Johnson, 2003). However, traditional conceptual theory focuses only on the cognitive dimension of the metaphor and in this way underplays the functions of metaphor in language and the importance of the specifics of the language use situation in which metaphors occur.

Therefore, this thesis adopts the discourse dynamic framework to metaphor as the main theoretical framework: The discourse dynamics framework, although based on the conceptual metaphor theory’s assumption that metaphor is an important tool for understanding people’s conceptualizations, studies metaphor in the dynamics of language use. Such an approach was elaborated upon by Lynne Cameron and her colleagues and allows seeing the metaphor as a multi-faceted phenomenon which is influenced by different factors.

Using metaphor as a research tool within the discourse dynamic framework includes the following steps: (1) identifying metaphors in relevant discourse, (2) revealing the discourse

functions of metaphors, (3) finding patterns in metaphor use and function, and (4) making inferences about the people using these metaphors (Cameron, 2010a).

The core concept of the discourse dynamic framework is a *systematic metaphor*, which can be defined as “an emergent discourse activity that is produced when discourse participants, over a discourse event or a longer period of time, use a particular set of linguistic metaphor vehicles in talking about a particular topic, or closely connected topic” (Cameron, 2010b, p. 91). Systematic metaphors are established by the researcher on the basis of linguistic metaphors identified in the analyzed discourse data.

Linguistic metaphor identification thus is an important part of the metaphor analysis. There are several developed tools for identifying linguistic metaphors. However, given that this thesis employs the discourse dynamic framework as the main theoretical perspective, Metaphor Identification through Vehicle Terms suggested by Cameron has been chosen as the method for metaphor identification in the discourse data.

1.4 Structure of the thesis

This thesis consists of six chapters. This introductory chapter has presented the choice of topic and given insight into the background of the research problem. Furthermore, it has given an outline of employed theoretical framework and methods. Chapter 2 covers previous research relevant to the research questions in this thesis. Chapter 3 presents the theoretical framework within which the thesis is elaborated and introduces main theoretical concepts used in order to answer the research questions. Chapter 4 presents methods used during the analysis of the material, that is, methods of linguistic metaphor identification and methods of metaphor analysis. Chapter 5 presents the analyzed material and the results of the analysis, while chapter 6 focuses on the discussion of results and conclusions based on them.

2. Previous research

This chapter covers previous research which is considered relevant for this thesis. The main areas I have decided to focus on include metaphors about the Internet, Internet privacy concerns and metaphors about digital privacy. Internet privacy issues are closely connected with the emergence of new technologies. Thus, in order to understand metaphors about Internet privacy, it is first of all important to examine previous research dedicated to metaphorical conceptions of the Internet itself.

2.1 Metaphors about the Internet

Before approaching the problem of metaphorical conceptualization of the Internet, it is necessary to give a short introduction to the history of the Internet. Although the Internet seems to have appeared in our everyday life not so long ago, its roots go back to the Cold War period. The Internet has emerged from the US military project aimed at developing effective military communication under the threat of a possible nuclear attack from the USSR. In the end of 1950s, the Advanced Research Project Agency (ARPA) was created within the US Department of Defense (Ruthfield, 1995). In the 1960s, ARPA became interested in developing a way for computers to communicate with each other and started funding programs in universities and corporations which could develop a network that “would both advance American technological development and provide a secure command and control over information during wartime” (Ruthfield, 1995). As a result of the conducted research, ARPANET, one of the world’s first operational packet switching networks and the Internet’s predecessor, was created¹.

The Internet as we know it today appeared in 1983 with the switch from the old networking protocol NCP (network control protocol) to the TCP/IP (Transmission Control Protocol/Internet Protocol). It was, however, only in the 1990s that the Internet became

¹ More detailed information on the further development of ARPANET and packet switching technique it used can be found in a wide range of works (see Congressional Digest, 2007; Leiner et al., 1999; Ruthfield, 1995 etc.).

available to the general public, and it was only then that most scholars in metaphor studies took interest in the phenomenon. When the term “Internet” became current in scholarly and public discourse, it was still a notion only vaguely known to the ordinary person, and this raised the issue of metaphorical conceptualization of this phenomenon. The growing popularity of the Internet resulted in numerous studies dedicated to the language which is used while speaking about the Internet.

The focus of research on metaphorical conceptualization of the Internet varies greatly due to the complex character of the subject matter: Some studies describe Internet metaphors in general (Ratzan, 2000), while others pay more attention to different contexts of usage such as the educational context (Amernic & Craig, 1999; Palmquist, 2001; Saban, 2010; Taniguchi, 2003 etc.) or the sphere of law (see Blavin & Cohen, 2002; Cumbow, 1997; Yen, 2002 etc.).

Despite having focus on different aspects of the Internet, researchers agree on the fact that metaphors about the Internet play an important role in our conceptualization of the new technologies. Some of these metaphors are so pervasive that they influence the way we see the reality. As Saban (2010) argues, “the metaphors can help us grasp the nature of the internet and communicate it to others”. In this way, all previous studies about the metaphorical conceptualization of the Internet are carried out within the framework of cognitive-linguistic theory of metaphor suggested by Lakoff and Johnson (2003).

While metaphors help to grasp some aspects of the Internet and better understand its nature, scholars also warn of the limits of popular Internet metaphors. Some metaphorical representations may cause certain misconceptions regarding properties of the Internet and the opportunities it offers to users. Thus, Taniguchi (2003) and Saban (2010) argue that the majority of Internet metaphors used in educational context (“Web”, “Global Village”, “Internet Superhighway”, “surfing the Net”) may be misleading as they suggest that “it is possible to capture everything” on the Internet, while “like any other source, the Internet has its limitations” (Taniguchi, 2003, p. 17). In other words, Internet metaphors often conceptualize the Internet as the best source of information without highlighting its limitations.

Some of the early studies on the topic (see Amernic & Craig, 1999, Cumbow, 1997, Taniguchi, 2003, Yen, 2002) are characterized by the description of the most widespread Internet metaphors and their implications without any empirical evidence on how often these metaphors are actually used in real discourse. Such metaphors seem to be taken for granted and as a rule just defined as “so prevalent and recognizable, and so deeply ingrained in our minds, that it is difficult not to slip into using one of them” (Taniguchi, 2003, p.14). These studies mainly concern such metaphors as “Superhighway” (Taniguchi, 2003), “Cyberspace” (Cumbow, 1997), “Frontier” (Yen, 2002), and “Surfing the Net” (Taniguchi, 2003).

Other studies are based on surveys carried out among different groups of respondents. These studies can be divided into two categories based on the way the survey is carried out:

1. Deductive: The participants are given a limited set of metaphoric categories and asked to pick the ones that best correspond to their idea of the Internet. Palmquist (2001), for example, gives the respondents nine possible metaphoric categories to choose from (“Outer space”, “Highway”, “Frontier”, “Waterscape”, “Political space”, “Marketplace”, “Social space”, “Living organism”, “Other”).
2. Inductive: The participants are asked to describe their metaphoric conceptualization of the Internet using their own words and categories, and the researcher comes up with more general metaphoric groups based on the data obtained (e.g. Ratzan, 2000, Saban, 2010). In this case, the analysis may result in different types of metaphor categories depending on the chosen degree of generalization.

As we can see, even studies based mainly on inductive approach get their results from surveys; that is, the participants are explicitly asked about their preferences in metaphoric conceptualization of the Internet. Thus, the respondents need to think over their choice and reflect on the language they use. There are not so many studies based on analysis of linguistic data which are obtained in natural settings, i.e. when participants speak about a certain topic without necessarily being aware of why they use particular linguistic means. Examples of works based on this principle include Johnston (2009) and Maglio and Matlock (1998).

Maglio and Matlock (1998) discuss the nature of people’s metaphorical conceptions of the Internet, as gathered from interviews with Internet users who describe their experience after

being online. During the analysis, the researchers discovered a number of metaphoric categories: outside actions, trajectory actions ((1) user as an agent and (2) Web as an agent), container metaphors, info actions, and miscellaneous. These results show the importance of spatial metaphors in the conceptualization of the Internet.

Johnston (2009), in turn, focuses the analysis on the corpus of USA editorials over a three month period from September 2008 to November 2008. The author singles out the following metaphors used in the analyzed material: physical space, physical speed, destruction, and salvation. Although the data of this study is consistent in terms of the genre of the analyzed material, the editorials represent a wide scope of topics ranging from economical to political issues, and the Internet is generally a secondary matter.

2.2 Internet privacy concerns

Privacy issues have been one of the major ethical concerns in the context of digital communication since the computer systems first started being used as public utilities in 1960s (Hoffman, 1969). Although such concerns still are among the most discussed topics in media and politics, there is no unified account of privacy yet.

As Post (2001) argues, “privacy is a value so complex, so entangled in competing and contradictory dimensions, so engorged with various and distinct meanings, that I sometimes despair whether it can be usefully addressed at all” (p. 2087). Due to the variety of approaches, privacy is often seen as a multidimensional phenomenon (Paine, Reips, Stieger, Joinson, Buchanan, 2007, p. 526). Thus, Burgoon, Parrot, LePOire, Kelley, Walther and Perry mark out four dimensions of privacy: physical, interactional, psychological and informational (as cited in Paine et al., 2007, p. 526). Dritsas, Gritzalis, and Lambrinouidakis (2006), in turn, speak about the following aspects of privacy:

1. *Territorial privacy*: The protection of the physical area surrounding a person.
2. *Bodily privacy*: The physical protection of a person against undue interference.
3. *Informational privacy*: The awareness and control of whether and how personal data can be gathered, stored, processed and communicated.
4. *Privacy of communications*: The protection of data communicated among persons, which prevents the monitoring of the transmitted data by third parties.

If the multidimensional approach towards privacy is considered, privacy concerns in the context of digital communication are mainly connected with informational privacy. Privacy issues in digital environment are, first of all, associated with the problem of large computer-based data banks or “digital dossiers” (Solove, 2004). Solove (2004) defines digital dossier as “a collection of detailed data about an individual” stored in massive computer databases (p. 1). Although the problem of ubiquitous computerized records has always accompanied the development of digital communication, it has especially been widely discussed in recent years due to growing popularity of social networking websites. As de Hurt and Papakonstantinou (2012) argue,

Particularly the advent of social networking websites has accentuated the problem, because by now, through extensive “tagging” and other mass personal data uploading in hundreds of millions of individuals’ profiles, the amount of information collected on any individual has increased exponentially. All this information is readily available, through the effective use of internet search engines. (p. 137)

In other words, digital technologies bring changes in understanding of privacy issues. As a result, new privacy concerns appear together with new approaches and suggestions as to their regulation.

2.3 Metaphors about digital privacy

Growing awareness of privacy concerns has resulted in a large number of works dedicated to this issue. However, while there are studies dedicated to perceptions of both data protection and privacy (see Hallinan, Friedewald & McCarthy, 2012) and of “privacy concerns” and “privacy actions” (see Paine et. al., 2007), there is relatively little research done in the sphere of metaphorical conceptualization of digital privacy issues.

One of the most influential works which focuses on the topic of metaphorical conceptions of privacy is *The Digital Person: Technology and Privacy in the Information Age* by Daniel J. Solove (2004). Solove concentrates on the problem of digital dossiers collected and stored by governmental institutions and small businesses. The author points out that in the digital information age privacy issues change at a rapid pace and our old conceptions of privacy are not relevant anymore.

Solove (2004) mentions three main traditional conceptions of privacy: (1) Orwell's Big Brother, (2) the secrecy paradigm, and (3) the invasion conception. The author claims that although all three conceptions are relevant for some privacy issues they do not account for key aspects of digital privacy problems.

The Big Brother metaphor comes from George Orwell's novel *1984* and describes the totalitarian government and a society of absolute control. Although this metaphor prevails in the discourse of information privacy, it ignores some important dimensions of privacy issues in the age of digital dossiers. Solove (2004) emphasizes the following problems of Big Brother metaphor:

1. While the metaphor accentuates the matter of absolute power and total control, the aim of businesses constructing digital dossiers is not to oppress and threaten, but to "get us to buy new products and services" (p. 7).
2. The metaphor implies centralized authoritarian power, while data in digital dossiers as a rule are not controlled by any central power but are constructed by and distributed among numerous businesses.
3. The metaphor emphasizes fear, punishment and threat as the main mechanisms of society control. However, in a society of digital dossiers information is gathered in a manner that it passes unnoticed by the people concerned.
4. While Big Brother aims at control of the most intimate details of people's life, digital dossiers usually do not contain intimate or unusual information as it is of a little use for business purposes.

As for two other traditional conceptions of privacy, the invasion conception and the secrecy paradigm, they also are not completely sufficient in the context of digital dossiers. The invasion conception assumes that "privacy is violated by invasive actions of particular wrongdoers who cause direct injury to victims" (ibid., p. 8). Storage of information in digital dossiers does not, however, necessarily lead to any direct or obvious injury (ibid.).

The secrecy paradigm implies that "privacy is invaded by disclosure of the concealed information", which can lead to "embarrassment, self-censorship, and damage of one's reputation" (Solove, 2004, p. 8). However, Solove argues that privacy issues concern not only secret but also quite common information such as the individual's name, age etc. In that

way, protection of privacy should apply not only to disclosure of information, but also to uses and practices associated with information that is not normally considered as secret.

The secrecy paradigm is related to conceptualizing privacy problems in terms of visibility, which is examined by Julie E. Cohen (2008). Cohen focuses on problems of surveillance and argues that metaphoric mapping to visibility is problematic as it implies that surveillance is simply passive observation. In this case, the aspect of “the active production of categories, narratives, and norms”, i.e. information-creating activities, is ignored (Cohen, 2008, p. 181).

Since old conceptualizations of privacy are not relevant for the society of digital dossiers, it is necessary to find new metaphors which can account for digital privacy problems. As an alternative, Solove (2004) suggests the metaphor of bureaucracy as it is described in Franz Kafka’s novel *The Trial*. The Kafkian metaphor is more relevant as it captures “individual’s sense of helplessness, frustration, and vulnerability when a large bureaucratic organization has control over a vast dossier of details about one’s life” (Solove, 2004, p. 9). The Kafkian metaphor reveals that the main problem is not loss of control over personal information but bureaucratic processes which are uncontrolled. The individual does not know how private information was gathered, where it is now and how it is processed.

Solove’s work gives an outline of the most widespread privacy conceptions. However, he speaks about modern privacy discourse in general without being specific about when different conceptions prevail. Such an approach is quite ambitious and can be overgeneralizing in a sense that conceptions are given with no specified context of use.

As we have seen, the research on metaphorical conceptions of digital privacy has been dominated by a fairly generalized approach to the analyzed metaphors. While this research has produced much valuable insight into the most popular metaphors in information privacy discourse, there is a need for studies that have a more defined focus of the analyzed topic. My thesis is a contribution to this as it is aimed at studying metaphorical conceptions about digital privacy in a media discourse dedicated to a specific aspect of digital privacy, namely the “right to be forgotten”. Thus, the research has a more distinct focal point that allows for a more detailed description of metaphorical conceptions of internet privacy emerging from a set of specific discourse events.

3. Theoretical framework

This chapter presents the theoretical framework within which this thesis is elaborated and introduces the main theoretical concepts used in order to answer the research questions. Since this thesis is aimed at revealing metaphorical conceptualizations of digital privacy, theory of metaphor studies is chosen as the main area of work.

3.1 Conceptual metaphor theory

Metaphor studies can be regarded as one of the most dynamic and ever-changing fields in modern science. Being for a long time considered exclusively as a rhetoric device, new insight into the metaphor was gained in the second half of the 20th century. One of the most influential works that has drawn the attention of the scholarly community to the metaphor and has given it a new interpretation within a cognitive paradigm is *Metaphors We Live By*, written by the cognitive linguists George Lakoff and Mark Johnson in 1980.

In their work, Lakoff and Johnson bring to the forefront a cognitive approach towards the metaphor, pointing out that the metaphor is not a characteristic of language alone, but that it is first of all a matter of thought. This approach to the metaphor has become known as conceptual metaphor theory (hereinafter CMT). The essence of the metaphor is stated as “understanding and experiencing one kind of thing in terms of another” (Lakoff & Johnson, 2003, p. 6). Thus, the metaphor is seen as a mapping in the conceptual system between two domains: *the target domain* and *the source domain*. *The target domain* is “constituted by the immediate subject matter” while *the source domain* is the one “in which important metaphorical reasoning takes place and that provides the source concepts used in that reasoning” (ibid, p.266).

As a rule, the target domain tends to be abstract and reasoned in terms of a more concrete source domain (for example, TIME IS MONEY) (ibid.). Apart from being more concrete, the source domain also tends to be more familiar. Thus, it might be better to say that metaphorical mapping helps to understand not only the abstract in terms of the concrete, but also the unfamiliar in terms of the familiar.

Lakoff and Johnson underline that our conceptual system is grounded in our bodily experience (Lakoff & Johnson, 2003). Therefore, “metaphor allows conventional mental imagery from sensorimotor domains to be used for domains of subjective experience” (Lakoff & Johnson, 1999, p. 46). At the same time, direct correspondence between our bodily experience and metaphors is evident only in *primary metaphors*, i.e. metaphors that constitute simple patterns that “map fundamental perceptual concepts onto equally but not directly perceptual ones” and that “arise directly from experience” (Grady, 2010, p. 192). Examples of primary metaphors include MORE IS UP, INTIMACY IS CLOSENESS, CHANGE IS MOTION etc.

The assumption that the locus of the metaphor is situated in concepts and not words allows us to speak about the *conceptual nature* of the metaphor. Lakoff and Johnson distinguish between a *metaphor*, which in their terminology means a metaphorical concept, and a *metaphorical expression*, which is a linguistic expression (ibid.).

3.1.1 Properties of the conceptual metaphor

The main properties of the conceptual metaphor include the following: (1) systematicity, (2) an ability to highlight and hide aspect of the concept in question, (3) a partial character of metaphorical structuring, (4) asymmetrical directionality, and (5) an ability to create our perception of the reality (Grady, 2010; Lakoff, 1993; Lakoff, 2008; Lakoff & Johnson, 2003).

Systematicity as one of the basic features of metaphorical concept implies that “the language we use to talk about that aspect of the concept is systematic” as well (Lakoff and Johnson, 2003, p. 8). Thus, systematicity allows the researchers to analyze linguistic metaphors in our language use to access functioning conceptual metaphors and to study their nature. In other words, linguistic metaphors can be analyzed as explicit manifestations of conceptual metaphors.

Systematicity also results in the ability of the metaphor to highlight certain aspects of the concept while hiding those which are inconsistent with the given metaphor. In this way, the metaphor is not simply used to describe a concept, but it forms the way we think about this concept. Lakoff and Johnson give an example of how the metaphor ARGUMENT IS WAR

shapes our understanding of the concept “argument” by focusing on its “win-lose” nature and ignoring the cooperative aspects of arguing (ibid.). This feature of the metaphor can also explain the presence of several metaphors used to structure one concept: such a variety is possible because different metaphors focus on different aspects of the given concept.

However, metaphorical structuring is not total, but partial. As Lakoff and Johnson put it, “if metaphorical structuring were total, one concept would actually *be* the other, not merely be understood in terms of it” (ibid., p. 14). At the same time the researchers underline that the metaphorical structuring can be extended, but the ways the extension can be carried out are constrained.

Asymmetrical directionality is another feature of the metaphor emphasized by cognitive linguists. It implies that, as a rule, the target domain is structured and reasoned in terms of the source domain, while the opposite process is impossible (Grady, 2010; Lakoff, 1993). For example, while the linguistic metaphor *foundations of a theory* is completely understandable, the linguistic expression *postulates of the building* is regarded as uninterpretable, although it is created within the same metaphor THEORIES ARE BUILDINGS.

The power of the metaphor lies in its ability to “create realities”, i.e. our perception of reality. Metaphors can be based on isolated similarities, but at the same time they can create similarities as the result of cross-domain correlations. Thus, the metaphor can in a significant way influence the understanding of our experience. Our attitudes and future actions can be guided by the metaphor. As Lakoff and Johnson put it: “Because we reason in terms of metaphor, the metaphors we use determine a great deal about how we live our lives” (2003, p. 245). Therefore the metaphor can be regarded as one of the basic mechanisms of human cognition.

3.1.2 Further development of conceptual metaphor theory

Proposed more than 30 years ago, CMT has been further developed and revised by Lakoff, Johnson and a number of researchers inspired by the original work (Gibbs, 1999; Kövecses, 2002; Lakoff, 1993; Lakoff and Johnson, 1999 etc.). CMT has also given rise to a number of

theories developed within the framework of the cognitive approach towards the metaphor, each with its own focus on particular aspects of metaphor studies.

Thus, the neural theory of metaphor which has been elaborated in recent years by Lakoff is aimed at giving a better understanding of the neural processes underlying the functioning of the conceptual metaphor (Lakoff, 2008). The career of metaphor hypothesis suggested by Gentner and Bowdle focuses on the question of how metaphors are processed and how they establish mapping between concepts from different domains (Bowdler & Gentner, 2005, 2008).

However, many researchers argue that nowadays the cognitive approach to metaphor is not sufficient to address all the issues emerging in the field of modern metaphor research (Cameron, 2010; Deignan, 2010; Steen, 2011 etc.). As Steen points out, the cognitive-linguistic view of the metaphor “is losing ground” (Steen 2010, p. 94). Now there is a need to create an interdisciplinary approach to the metaphor which goes beyond the scope of the traditional CMT.

The latest tendencies in modern metaphor studies include, first of all, a shift of attention from metaphor in thought to metaphor in use, and analysis of metaphors in real discourse. As Steen (2010) puts it: “The assumption of a direct connection between metaphor in language, thought and communication has been replaced by a more tentative approach in which the question is raised how metaphors in language, thought and communication are related to each other in specific situations of use” (p. 95). In other words, one can observe a growth of the discourse-analytical approach to metaphor studies that treats the metaphor as a more complicated phenomenon influenced by a number of different factors.

3.2 Discourse dynamic framework for metaphor research

3.2.1 Main assumptions of the discourse dynamic framework

One of the most prominent theoretical frameworks that has appeared within the discourse-analytical approach to metaphor is the discourse dynamic framework suggested by Lynne Cameron. The discourse dynamic framework to the metaphor can be regarded as an

extension of CMT. Traditional CMT focuses only on the cognitive dimension of the metaphor and in this way underplays the functions of the metaphor in language and the importance of the specifics of the language use situation in which the metaphors occur. The discourse dynamics framework, although based on CMT's assumption that the metaphor is an important tool for understanding people's conceptualizations, studies the metaphor in the dynamics of language use.

Cameron acknowledges CMT as the source of inspiration, but at the same time points out that CMT is not necessarily accepted as "the truth" or as the only basis for theorizing" (2010a, p. 5). Metaphors are not merely manifestations of underlying conceptual metaphors but rather can themselves become "resources in the negotiation of social reality" (Ritchie, 2010, p. 60). As Cameron and her colleagues participating in Metaphor Analysis Project put it:

Our 'discourse dynamics' approach addresses this by developing a theoretical framework that places metaphor centrally in the dynamics of dialogic discourse, and uses complex adaptive systems theory (Cameron, 2003; Cameron & Deignan, 2005). Discourse dynamics metaphor theory has the task of incorporating ideas from cognitive metaphor theory with socio-cultural and social interactional factors to produce descriptions and explanations of metaphor use that fit empirical findings, and that offer sound methodological procedures for inferencing between language and thinking. (Cameron et al., n.d., last para.)

Discourse is defined as "language use in social interaction", while "specific instances of social interaction involving language" are called *discourse events* (Cameron, 2010a, p. 4). Thus, the object of concern and the source of data is metaphor in active language use.

In this way, the discourse dynamics approach sees metaphors as "emerging from social interaction over different timescales" (ibid., p. 6). The emphasis on the fact that social interaction can occur over different timescales might imply that technically this approach can be used in the analysis not only of conversations where social interaction can be directly observed, but also in cases where there is so-called imaginary social interaction which is realized, for example, with the help of written texts within the same language community. As Cameron argues, a written text can also be seen as "a trace of activity in the discourse event that was the composition of the text by the writer" since while composing the text the writer has potential readers in mind (2010c, p. 148). In this way, this approach is considered

as relevant for the research presented in the current thesis, since the material for analysis is drawn from written texts, namely articles.

The dynamic nature of metaphor is also emphasized within the discourse dynamic approach:

As text and talk proceed, linguistic metaphors are selected, adapted and built on with subsequent metaphors. Metaphor dynamics may result from the process of interaction, as one participant in conversation responds to another, or from development of ideas, as a speaker or a writer builds an argument, clarifies a position, or constructs a description. Our object of concern are not isolated linguistic metaphors but strings of connected metaphors and the patterns of meaning that they produce or reflect. (Cameron, 2010a, p. 6)

The dynamic nature of metaphor is best revealed in conversations, since metaphors are built online during the process of interaction. However, written texts can also show the dynamics of the metaphor development in the sense that the author introduces, extends or stops using metaphors in compliance with the development of ideas in the text. At the same time, a problem might occur if relatively short texts are analyzed. It might be difficult to speak about the dynamics of a metaphor since the length of discourse event does not allow researchers to trace the development of metaphors. However, the statement about metaphor dynamics can be interpreted in such a way that it can be applied to development of metaphor in a number of discourse events over a certain period of time. In this case, the attention is shifted from the single discourse event to a number of different events.

All in all, the linguistic metaphor in discourse is seen as a research tool which can reveal people's socio-cultural conventions and something about the speakers' emotions, attitudes and values. Cameron suggests the following algorithm for using metaphor as a research tool: (1) identifying metaphors in relevant discourse, (2) revealing the discourse functions of metaphors, (3) finding patterns in metaphor use and function, and (4) making inferences about the people using these metaphors (*ibid.*). Finding systematicity in the use of linguistic metaphors in the discourse leads to establishing systematic metaphors.

3.2.2 Properties of the systematic metaphor

Cameron adopts Burke's description of metaphor as "a device for seeing something in terms of something else" (Cameron, 2010a, p. 3, quotation from Burke). This description and the CMT perception of metaphor as "understanding and experiencing one kind of thing in terms of another" (Lakoff & Johnson, 2003, p. 6) can be considered as a repetition of the same idea in different words. Here it is important to point out that the terminology used in CMT and the discourse dynamic framework to describe metaphors are different. While in CMT the terms source and target domains are used, the discourse dynamic framework employs the terms *metaphor vehicle* and *topic* correspondingly. If we return to Burke's description of metaphor, we can say that the metaphor topic is seen in terms of metaphor vehicle.

The discourse dynamic approach regards metaphor as a multi-faceted phenomenon which is studied in different aspects: cognitive, affective, sociocultural, dynamic, and embodied (in case data of gesture and physical movements during social interaction is available for analysis).

Linguistic metaphors are defined as "metaphors found in language use" (Cameron, 2010a, p. 4). In this way a linguistic metaphor is not restricted to be seen only as a manifestation of a conceptual metaphor. Thus, Cameron and her colleagues suggest the idea of *systematic metaphors* which are regarded as systematic topic-vehicle connections.

Cameron (2010b) defines systematic metaphors in the following way:

A systematic metaphor is an emergent discourse activity that is produced when discourse participants, over a discourse event or a longer period of time, use a particular set of linguistic metaphor vehicles in talking about a particular topic, or closely connected topic. (p. 91)

Both systematic and conceptual metaphors claim to reflect metaphorical patterns of thinking. However, they are different in theoretical aspects. CMT implies pre-existence of conceptual metaphors underlying how people think. In this way metaphorical expressions in language are seen as manifestations of a conceptual metaphor. Cameron (2010b) underlines that within CMT conceptual metaphors are considered to be prior in three aspects: (1) in thought

as prior to language, (2) across speech communities as prior to individuals, and (3) in more general forms as prior to specific instantiations.

While the discourse dynamic framework regards people's language and cognitive resources as prior to participation in discourse events and while these resources may include conventionalized ways of thinking-and-talking, no priority is given to thought over language or to the general over the specific (Cameron, 2010b, p. 91). Metaphors are shaped during discourse events while being influenced by many factors, not just by pre-existent conceptual structures.

The present thesis adopts the discourse dynamic approach as it seems to be more relevant than early CMT. The discourse dynamic approach is appealing to this research in the following aspects:

1. It does not make "big" claims about the existence of pre-determined conceptual structures based on the analysis of discourse data. First of all, the issue of transition from linguistic metaphor to conceptual metaphor as seen by CMT still needs to be resolved. Second, it does not seem reliable to establish conceptual mappings typical for all members of a particular language community merely on the basis of the analysis of a small corpus, which is the case of the given study. In other words, the present research focuses on metaphor analysis at the individual level and in this way it seems to be more reasonable to speak about systematic metaphors.
2. It recognizes metaphor as a multi-faceted phenomenon which is influenced by different factors. The discourse context plays an important role in shaping metaphors, which is important to acknowledge while the present research analyzes metaphors which emerge from texts of a specific genre.

However, not all aspects of the discourse dynamic approach are seen as equally relevant to the present research because of the character of analyzed material. Thus, for example, the present study does not employ the whole procedure of discourse activity analysis suggested by Cameron (2010c) because it does not correspond with the data the analysis is focused on.

As an example of applying the given approach, Cameron and her colleagues present an analysis of a reconciliation talk and focus group discussion on the threat of terrorism where

social interaction is evident. Cameron also presents an analysis of one of the former UK Prime Minister Tony Blair's speeches, which, although it does not show direct social interaction, still originally belongs to the spoken genre. However, since the present study is focused on the analysis of relatively short written texts, it might not always be practical to follow all the procedures applied to texts of different genres.

4. Methodology

While speaking about methodology, it is important to consider methods to be used during the different phases of analysis. Methods for selecting the material for analysis alongside the methods for preparing the material for analysis are described in the chapter *Material*. The present chapter covers methods for analysis of the data: namely, methods for metaphor identification and for finding systematicity in metaphor usage.

4.1 Methods for metaphor identification

One of the most recent lines of work within metaphor research is focused on identifying and studying metaphoric language in real discourse. Thus, there is an obvious tendency to shift from introspection suggested by early CMT studies to observation as the main research method. Today the development of precise tools for metaphor identification in real discourse has become one of the main concerns for metaphor scholars as the analysis of metaphors in real discourse demands establishing clear criteria of what constitutes a metaphoric word or phrase (Gibbs, 2013; Pragglejaz Group, 2007; Steen, 2010).

As Tony Berber Sardinha (2012) points out, metaphor identification involves two distinct phases: (1) retrieval and (2) analysis. Retrieval indicates the process when “occurrences of potentially metaphorical strings are extracted and stored”, while during analysis “these occurrences are actually evaluated in terms of whether they are cases of metaphor or not” (Sardinha, 2012, p. 21).

Sardinha (2012) distinguishes two types of retrieval procedures: sampling techniques and census techniques. A sampling technique for corpus-based metaphoric research involves “selecting a pool of units to represent the totality of words in corpus”, while census techniques mean that “the researchers would have to analyze each token in the corpus” (ibid., p. 22). As the corpus of texts for analysis is quite small, the present study adopts the census technique. Census techniques include the Metaphor Identification Procedure (MIP) developed by Pragglejaz Group, its variant MIPVU and Metaphor Identification Procedure through Vehicle Terms (MIV) suggested by Cameron.

As mentioned above in the chapter Theoretical Framework, this thesis employs the discourse dynamic approach to metaphor developed by Cameron and her colleagues. Therefore, Metaphor Identification through Vehicle Terms is chosen as the method for metaphor identification in discourse data. However, this method is to a large extent based on MIP. Thus, it is essential to explain the basic ideas of MIP in order to show difference between MIP and MIV.

4.1.1 Metaphor identification procedure (MIP)

MIP has been developed by the Pragglejaz group, which consists of researchers working in the field of metaphor studies. The procedure has been developed as a response to the demand for precise tools for metaphor identification in real discourse and is described as “an explicit, reliable, and flexible method for identifying metaphorically used words in spoken and written language” (Pragglejaz Group, 2007, p.2).

The Pragglejaz group (2007) defines MIP as consisting of the following steps:

1. Read the entire text–discourse to establish a general understanding of the meaning
2. Determine the lexical units in the text–discourse
3.
 - a. For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation, or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit
 - b. For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context
 - c. If the lexical unit has a more basic current–contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it
4. If yes, mark the lexical unit as metaphorical

MIP provides guidelines for identification of metaphorical language in natural discourse. Thus, members of the Pragglejaz Group (2007) underline that the procedure neither makes any implications about postulated conceptual metaphors which may underlie use of conventional linguistic metaphors, nor deals with the process of metaphor understanding by

readers or listeners. However, MIP is seen as a reliable tool for identifying linguistic metaphors in discourse, giving results which can serve as a basis for the subsequent metaphor grouping and analysis.

4.1.2 Metaphor identification procedure through vehicle terms (MIV)

Metaphor identification in discourse data

MIV suggested by Cameron and her colleagues in *Metaphor Analysis: Research Practice in Applied Linguistics, Social Sciences and Humanities* can be regarded as an adapted MIP. According to Cameron and Maslen (2010a), MIV as an adapted version of MIP includes the following steps:

1. The researcher familiarizes her/himself with the discourse data
2. The researcher works through the data looking for possible metaphors
3. Each possible metaphor is checked for:
 - (a) its meaning in the discourse context
 - (b) the existence of another, more basic meaning
 - (c) an incongruity or contrast between these meanings, and a transfer from the basic to the contextual meaning
4. If the possible metaphor satisfies each of the criteria above, it is coded as metaphor

Looking for possible metaphors requires an operational definition of a linguistic metaphor. Cameron and Maslen argue that there are two essential elements of linguistic metaphors: (1) two meanings of a word or a phrase that are incongruous in some way, and (2) a transfer of meaning within the discourse context that enables the incongruous word or phrase to be made sense of (2010a, p. 103).

The basic meaning of the word can be established with the help of external resources, such as dictionaries and other corpus materials, “which can be used as a frame of reference to check individual intuitions” (Pragglejaz Group, 2007, p. 25). Following the Pragglejaz Group, the present study uses the Macmillan English Dictionary as the main external source to support the individual analyst’s intuition. The Macmillan Dictionary provides a description of current English based on an extensive database containing millions of

examples of real use of the English language. As the developers of the website MacmillanDictionary.com put it, “extensive analysis of this corpus of real spoken and written text, using state-of-the-art software, has allowed the dictionary writers to reveal fresh information about how and when words are used” (Macmillan Dictionary Online, n.d.).

The main difference between MIP and MIV is that instead of identifying metaphorically used words, MIV identifies metaphorically used words or phrases as metaphor vehicle terms. MIP works at **word** level. Cameron and Maslen argue that “when people use the language to express their thoughts and ideas”, they “soft assemble” words and phrases, “adjusting them as they go for effective communication of meaning” (Cameron & Maslen, 2010a, p. 105). A metaphor may extend beyond a single word to the surrounding language, although it may also be constituted by one word only. Therefore the discourse dynamic framework implies looking for **stretches of language** that might be metaphorical, i.e. *metaphor vehicle terms*.

Identifying metaphor vehicle terms instead of words with metaphorical meaning has two main implications: (1) the researcher has to decide where a vehicle term begins and ends, and (2) the units that are counted are different from those counted during MIP – metaphor density is calculated as the number of metaphors (metaphorical vehicles) per thousand words.

Challenges in applying MIV

Although the steps constituting MIV seem clear, identifying metaphors in discourse data might be challenging. Namely, some cases require clarification before the metaphor identification begins. Thus, the researcher has to decide in which way the following cases are treated: (1) similes, (2) very common verbs and nouns, (3) prepositions, (4) the shared language of subgroups, and (5) personification (Cameron & Maslen, 2010a). This thesis adopts the following decisions concerning these cases:

1. *Similes* are taken into account as direct metaphoric expressions. This concerns, however, only metaphorical similes, i.e. those where there is incongruity or contrast between two notions. Non-metaphorical similes which are literal comparisons, with no “alien” metaphorical term, are not considered by the MIV procedure.

In cases of metaphorical similes, the whole phrase is labeled as a vehicle term including the marker of metaphoricity *like*.

2. *Very common verbs and nouns* such as *make, do, give, have, get, put, thing, part* can be very frequent in the analyzed material and thus can cause some technical problems in the analysis if the researcher has limited time available. However, as long as the present study is focused on the analysis of a small corpus of texts, it is decided that very common verbs and nouns should be included in the identification stage with physical meanings taken as their basic meanings.
3. *Prepositions* can be divided in two groups: (1) those with basic concrete, physical meaning (e.g. *in, on, up, down, within, between, out of, from, through, into, over, behind*), and (2) those without such clear basic meanings (e.g. *by, for, of, with*). In compliance with the recommendation suggested by Cameron and Maslen (2010a), the former are included in the identification stage, while the latter are ignored.
4. *The shared language of subgroups* might have some conventionalized expressions that seem metaphorical to outsiders. However, the potential metaphoricity still remains, although it might be reduced for the members of a particular sociocultural group. Thus, such conventionalized expressions are included in the identification stage.
5. Cases of *personification* i.e. a process where “something non-human becomes animate” (Cameron & Maslen, 2010a, p. 113) are considered metaphors and are included in the metaphor identification stage, since they correspond to the operational definition of metaphor.

Finding systematicity in metaphor use

The transition from identified metaphor vehicle terms to systematic metaphors can be described in two steps:

1. Sorting out identified metaphor vehicle terms into larger groupings
2. Identifying topics which are repeatedly expressed by metaphors within a vehicle grouping

Establishing groupings of metaphor vehicles

The current study is based on an inductive way of working with data. Thus, the establishing of groupings of vehicle metaphors as well as of systematic metaphors later is based directly on work with the analyzed material, rather than on assumptions about what might be found or on previous metaphoric studies dedicated to the specified topic. However, as Cameron, Low and Maslen point out, the grouping process is not completely inductive as the researcher is already familiar with the material and frequently occurring linguistic metaphors as a result of the metaphor identification stage (Cameron, Low & Maslen, 2010). It is also important to emphasize that although previous research is not used as basis for grouping, the analyst is still aware of its results.

During the procedure of grouping, metaphor vehicles are sorted out based on the semantics of the basic meaning. The main principles while grouping metaphor vehicles are described by Cameron, Low and Maslen (2010) as following:

1. The analyst should avoid overgeneralization while labeling groupings in order not to be over-inclusive or over-interpretive. Systematic metaphors are connected to the specific discourse events, thus, labels should be as specific as data allow them to be.
2. Grouping metaphor vehicles together is a flexible process where the results can be revised with each new addition to the grouping. Thus, the decisions remain open until the later stages of analysis.
3. Grouping metaphor vehicles together is an interpretive process. There are not any “right answers” as the analyst relies on her own judgments and interpretation. Therefore the best option is when there are several analysts working on the project, comparing their results, and taking collaborative decisions. However, this research does not give such an opportunity because it is an individual project of a single analyst.
4. Grouping metaphor vehicles together should follow “rigorous assessment of the quality, and limits, of the discourse evidence for that decision” (p. 120). In other words, all the decisions taken should conform with the same principles.

Identifying the topics of metaphors

Identifying the topics of metaphors in real discourse can be quite problematic. This is connected with the fact that the topics can be hidden. There are metaphors where both a vehicle term and a topic are explicitly expressed in the discourse. However, these cases are mostly regarded as rare. As a rule, in natural discourse the topic of a metaphor is not expressed but implied.

As Cameron, Maslen and Low (2010) emphasize, sometimes it can also be quite difficult to decide on a clear topic label for each metaphor vehicle. Thus, in the initial stage of analysis, it is more convenient to set up a refined set of topics related to the research questions which then can be assigned to a particular vehicle. In later stages of the analysis, the topics can be more granulated so that systematic metaphors are more specific and connected with particular discourse events.

When the topic labels are assigned to the metaphor vehicles, there is enough information for establishing systematic metaphors that consist of the linguistic metaphors that belong to the same vehicle grouping and relate to the same topic.

4.2 Metaphor-led discourse analysis.

Cameron (2010c) points out that although in many cases metaphors in discourse may not necessarily directly reflect people's ideas, attitudes and values, they are still chosen and adapted to fit their environment of use, "reflecting ideas, attitudes and values through the prism of the discourse event in which they are expressed" (p. 147). Therefore Cameron emphasizes the necessity to integrate metaphor analysis within analysis of discourse activity. Analysis of discourse activity includes: (1) segmenting discourse activity and then a more detailed examination of local discourse actions, and (2) identifying discourse topics.

At the same time, it seems that such a detailed analysis of discourse activity is suitable for the analysis of a *single* discourse event. Therefore it may not be so relevant for the present research, which is aimed at analyzing multiple texts. The analysis in the current work is focused on a specialized corpus and investigates language use within a specific genre. Therefore it is seen as sufficient to give a short description of the discourse context within

which all the analyzed texts appear rather than to make a detailed analysis of every single discourse activity.

5. Data presentation and analysis

This chapter gives a detailed presentation of the material used for analysis and covers the main stages of the metaphor analysis process, which was used to produce the list of systematic metaphors relevant for the present research.

The first part of the analysis description is devoted to metaphor identification process with the help of MIV. Since MIV principles are given comprehensive description in the Methodology chapter, the present chapter focuses mainly on the challenges the analyst faced at this stage of the work. The second part of the analysis description considers further analysis of the obtained linguistic metaphors and finding systematicity in their usage based on the principles of the discourse dynamic approach to metaphor.

5.1 Selection and preparation of the material

As stated above, this thesis aims to explore metaphorical conceptualizations of privacy in digital contexts. However, the topic of digital privacy is quite broad. So, the main research problem is narrowed down to metaphorical conceptions of the issues of Internet privacy in the media discussion about the “right to be forgotten”.

In recent years the “right to be forgotten” has become one of the most burning issues within digital privacy concerns discussed in the media. *The Guardian*, one of most read British national daily newspapers, dedicated a series of articles to the issues connected with this aspect of digital privacy. This series of articles was chosen as the material for this research, since it allows for greater consistency in the analysis on the grounds that all of the analyzed articles cover the same topic.

The series *Internet privacy - the right to be forgotten* published on guardian.co.uk consists of 13 posts: 11 articles, one video, and one note which gives an outline of the approach guardian.co.uk applies while managing online profiles of its users. For the purposes of the research, only the articles were considered as proper material for analysis. Further examination of the articles showed that one of them is a webchat with David Drummond, Google's senior vice president of corporate development and chief legal officer, who answers

readers' questions about internet security, privacy and surveillance. This post cannot be fully considered as an article. Consequently, it was eliminated from the material for analysis.

As a result, 10 articles of the series *Internet privacy - the right to be forgotten* were chosen as the material for further analysis. Each article is given a brief description which contains its title, the code name used in the process of analysis (given in parentheses), URL, the name of its author, the date of publishing, and a short summary of its contents:

- **Title:** Who's more evil – Facebook or Google? (Who's more evil)
URL: <http://www.theguardian.com/commentisfree/2013/oct/25/evil-facebook-google-beheading-email-abuse>
Date of publishing: 25 October 2013
Author: Holly Baxter
Summary: The article covers cases of Internet companies challenging parameters of morality: Facebook allowing graphic video footage of beheadings, Google scanning contents of private emails, and Ask.fm and Twitter facilitating cyberbullying and abuse.
- **Title:** Identity theft fears as a faulty laptop is resold on eBay (Identity theft)
URL: <http://www.theguardian.com/money/2013/sep/28/identity-theft-fears-faulty-laptop-resold>
Date of publishing: 28 September 2013
Author: Miles Brignall
Summary: The article discusses the problem of identity theft and gives tips on how this can be avoided.
- **Title:** Your online freedom is worth fighting for, isn't it? (Online freedom)
URL: <http://www.theguardian.com/commentisfree/2013/apr/05/online-freedom-worth-fighting-for>
Date of publishing: 5 April 2013
Author: Tom Chatfield
Summary: The article discusses dangers of data accumulation and problems of the current situation where data controllers have more power than data subjects. The article underlines the necessity of finding a means of realigning this balance.

- **Title:** How easy is it to delete yourself from the web – your experiences (Delete yourself)
URL: <http://www.theguardian.com/technology/2013/apr/04/delete-online-profile-readers-panel>
Date of publishing: 4 April 2013
Author: Guardian readers
Summary: The article presents 10 stories by Guardian readers who share their experiences of attempts to delete an unwanted online presence.

- **Title:** Right to erasure protects people's freedom to forget the past, says expert (Right)
URL: <http://www.theguardian.com/technology/2013/apr/04/right-erasure-protects-freedom-forget-past>
Date of publishing: 4 April 2014
Author: Kate Connolly
Summary: The article discusses the importance of the “right to be forgotten” based on an interview with Viktor Mayer-Schönberger who can be considered as a founder of the idea of protecting people’s freedom to be forgotten.

- **Title:** How to delete your digital life (Digital life)
URL: <http://www.theguardian.com/technology/2013/apr/04/delete-your-digital-life-advice>
Date of publishing: 4 April 2013
Author: Charles Arthur
Summary: The article gives practical advice on how successfully delete information from the Internet.

- **Title:** Do below-the-line commenters have the right to remove their own comments? (Below-the-line)
URL: <http://www.theguardian.com/commentisfree/2013/apr/04/commenters-right-to-remove-comments>
Date of publishing: 4 April 2013
Author: Tim Gough

Summary: The article covers specific cases of applying the “right to be forgotten”. Namely, it raises the question of when individuals have the legal right to remove their own comments published online.

- **Title:** Forget me not: campaigners fight for control of online data (Forget me not)
URL: <http://www.theguardian.com/technology/2013/apr/04/right-forgotten-internet-campaign>
Date of publishing: 4 April 2013
Author: Giles Tremlett
Summary: The article describes how the movement for the “right to be forgotten” has been launched.
- **Title:** Caught in the web: case histories of people whose digital past haunts them (Caught)
URL: <http://www.theguardian.com/technology/2013/apr/04/web-case-histories-digital-past>
Date of publishing: 4 April 2013
Author: Giles Tremlett, Owen Bowcott
Summary: The article presents several stories of people suffering from not being able to delete information about them from the Internet.
- **Title:** Britain seeks opt-out of new European social media privacy laws (Opt-out)
URL: <http://www.theguardian.com/technology/2013/apr/04/britain-opt-out-right-to-be-forgotten-law>
Date of publishing: 4 April 2013
Author: Owen Bowcott
Summary: The article tells about the conflict between British government and European commission caused by the debates of the “right to be forgotten”.

All the articles were published as written texts, which made preparation of the material for further analysis relatively simple: Each article was copied to a Word document with added line numbers so that it was easier to find the location of the identified metaphor in the text.

5.2 Challenges at the metaphor identification stage

The process of linguistic metaphor identification was governed by the MIV principles described in the Methodology chapter. However, these principles are quite general, so the researcher still faced challenges during the identification stage. The analysis thus required a more specific list of decisions and explanations made at the early stages of the coding process. These decisions included the following cases: (1) computer and Internet terms, and (2) borderline cases.

5.2.1 Computer and Internet terms

Computer and Internet terms which are initially metaphoric were included in the initial stage of the metaphor identification procedure. However, they were not considered at the further stage due to their tenuous relevance to the specific research questions formulated for this thesis: these terms are quite often the only way to speak about the subject matter and they do not reflect any specific values and opinions of the speaker. Thus, computer and Internet terms were excluded from further analysis as they do not give any new insight into the research problem. These terms include the following: *an account, the web, to tag, to follow, a platform, a site (a web site), a search engine etc.*

Names of Internet services and web sites can also to a certain degree be considered metaphoric as they are initially based on metaphors. For example, the word *twitter* has a basic meaning of a succession of sounds made by a bird: This metaphor is also supported on the visual level by the company's logo. As for Facebook, a *face book* is initially a printed directory with people's photographs and names distributed at the U.S. universities in the beginning of the academic year so that the students can get to know each other faster. However, being proper names, they were not included in the identification stage.

5.2.2 Borderline cases: Verbs with the basic meaning of physical deletion or removal

Due to the subject under discussion, namely "the right to be forgotten", the analyzed material proved to contain a considerable number of linguistic expressions comprising verbs with the basic meaning of physical deletion and removal. Some of these linguistic expressions can be

considered as clear cases of metaphors while others can be more problematic, constituting peripheral or borderline cases. Therefore, it was necessary to take a closer look at these words and phrases and establish certain criteria that could help in identifying them as either metaphoric or not.

Verbs with the basic meaning of physical deletion or removal that proved to be most problematic during the process of metaphor identification include, first of all, the following: *to delete*, *to erase*, and *to remove*. According to the operational definition of the metaphor employed in this thesis, there are two essential elements of linguistic metaphors: (1) two meanings of a word or a phrase that are incongruous in some way, and (2) a transfer of meaning within the discourse context that enables the incongruous word or phrase to be made sense of (Cameron & Maslen, 2010a, p. 103).

Consequently, the decision on whether the verbs in question should be considered as used metaphorically depends on the contextual meaning they have and its relation to the basic meaning. Thus, if the verb with the basic meaning of physical deletion or removal is used when speaking about a physical entity, it is used non-metaphorically, but if this verb is used when speaking about a non-physical entity, it is used metaphorically.

Physical and non-physical entities

This approach requires establishing criteria for what can be considered physical and non-physical. Macmillan English Dictionary defines *physical* as something “able to be seen, touched, or felt” (Macmillan Dictionary Online, n.d.). Similar definitions are given by standard reference works like Longman Dictionary of Contemporary English (“relating to real objects that you can touch, see, or feel”) (Longman English Dictionary Online, n.d.) and Britannica Online Encyclopedia (“having material existence: perceptible especially through the senses and subject to the laws of nature”) (Britannica Online Encyclopedia, n.d.). Since I deal with entities connected with computing, this thesis adopts the two following criteria for distinguishing between physical and non-physical objects: (1) visibility and (2) ability of direct interaction with this object with the help of computer commands.

In this case the difference between physical and non-physical entities can be shown in the following way:

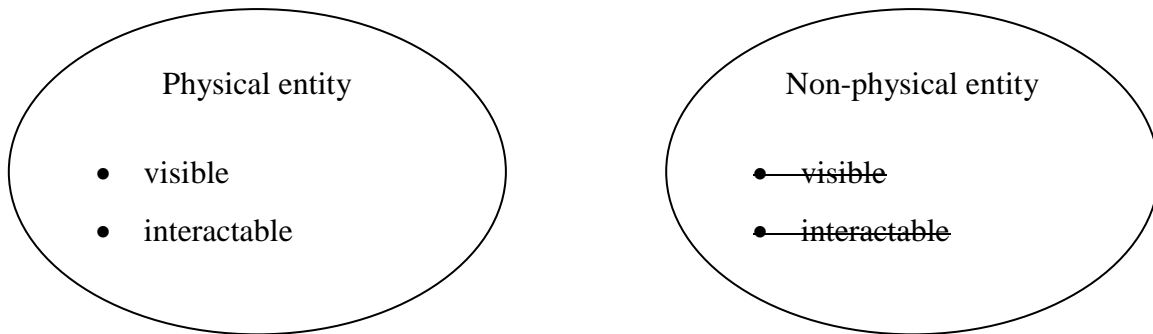


Figure 1. *Criteria for distinguishing between physical and non-physical entities*

The established criteria needed to be applied to collocations with the verbs whose basic meaning is physical deletion or removal. For the purpose of convenience, the table below shows in what collocations the verbs in question are used based on the examples found in the analyzed material.

Verb	Nouns used in collocations
To delete	<ul style="list-style-type: none"> • Information: <i>the right to <u>delete</u> your information.</i> • Data: <i>a right to <u>delete</u> your data, certain types of data for deletion.</i> • Account: <i>have a Gmail account and feel ethically torn about it but way too lazy to <u>delete</u>.</i> • Profile: <i><u>delete</u> my ancient myspace profile.</i> • Page: <i>get the page <u>deleted</u>.</i> • Details: <i>enabling anyone to <u>delete</u> their personal details.</i> • Yourself: <i><u>delete</u> yourself from the web.</i> • Presence: <i><u>delete</u> their online presence.</i> • Life: <i><u>delete</u> your digital life.</i> • Pictures, comments etc.: <i><u>deleting</u> false or embarrassing profiles, pictures and comments.</i>
To erase	<ul style="list-style-type: none"> • Information: <i>a request had been made to <u>erase</u> information, the absolute <u>erasure</u> of information</i>

	<p><i>about them.</i></p> <ul style="list-style-type: none"> • Data: <i>tech companies that can achieve <u>erasure</u> of data.</i>
To remove	<ul style="list-style-type: none"> • Information: <i>information that cannot be <u>removed</u>.</i> • Profile: <i><u>remove</u> these profiles.</i> • Page: <i><u>remove</u> these pages.</i> • Presence: <i><u>removing</u> my online presence.</i> • Article, pictures, comments etc.: <i>I wanted the article <u>removed</u>, have the right to <u>remove</u> their own comments.</i>

Table 1. Verbs with the basic meaning of physical deletion or removal and nouns used in collocations with them

Applying the established criteria of visibility and interactability to the collocations shown in the table above, it is possible to single out:

- Clearly physical entities (*articles, comments (meant as written comments), pictures, profiles, pages, accounts*) → the linguistic expression is non-metaphoric.
- Clearly non-physical entities (*yourself, presence, life*) → the linguistic expression is metaphoric.

However, it is also possible to speak about less clear instances which include (1) borderline cases where the criterion of physical/non-physical is blurred, and (2) ambivalent cases which cannot be completely explained with the help of this criterion.

Solution for borderline cases

Borderline cases include collocations of the verbs with the basic meaning of physical deletion or removal and the nouns *information* and *data*. The question is whether information and data can be seen as physical entities. The problem is that information can be considered both interactable and non-interactable. On the one hand, when we delete, erase or remove information from a computer or a website, we interact with it. On the other hand, this interaction concerns only its physical representation while information itself cannot be directly interacted with.

In other words, the process of applying the criteria of visibility and interactability depends on the focus the researcher chooses to have: focus on physical representation or focus on the notion of information itself as knowledge and facts. In this thesis, I decided to focus on information as knowledge and facts, which means that information is seen as a non-physical entity. Thus, borderline cases consisting of collocations of the verbs with the basic meaning of physical deletion or removal and the noun *information* are considered as metaphoric.

As for the term *data*, it has two meanings: (1) facts or information used for making calculations or decisions, and (2) information in a form that a computer can use (Macmillan Dictionary). If the second meaning is considered, the term *data* refers to some entity with more distinct physical property than information. However, in the discussion of Internet privacy in general and “the right to be forgotten” in particular the terms *data* and *information* are quite often used interchangeably. Since the analysis is material-based, this thesis also adopts an approach where data and information are seen as similar notions. That allows considering data as non-physical entity together with information. Therefore, borderline cases consisting of collocations of the verbs with the basic meaning of physical deletion/removal and the noun *data* are also considered as metaphoric.

5.2.3 Ambivalent cases

If the decisions concerning borderline cases depend on the focus of the researcher, the ambivalent cases are harder to explain with the help of the criterion physical/non-physical. Ambivalent cases include linguistic expressions with verbs with the basic meaning of physical deletion or removal and the noun *details*. The problem with these cases rests on their ambivalence: details can mean both clear physical representation of the information when they are written and the knowledge itself. This ambivalence can be solved with the help of the context. However, the context does not always provide necessary information to decide whether we speak about details in a physical or non-physical sense. Therefore, these cases remain ambivalent without any resolution and cannot be considered as metaphorical.

5.3 From the metaphor identification stage to systematic metaphors

When the decisions and explanations about problematic cases were clearly stated, the metaphor identification procedure could be carried out completely. This resulted in a list of linguistic metaphors used in the analyzed material. The list was made with the help of Excel software which ensured clear presentation of obtained data. In addition, Excel spreadsheets made further work with the data easier. Figure 2 shows the use of Excel software in the presentation of the linguistic metaphors found in the analyzed material: the direct context in which the metaphor appears is displayed in column A, column B shows the line number where the metaphor appears so that it is easier to find it in the discourse data, and column C is dedicated to the metaphor itself taken out of the context of use.

	A	B	C	D
	Text	Line	Metaphor	
1				
2	Your online freedom is worth fighting for	1	freedom	
3	Your online freedom is worth fighting for	1	worth	
4	Your online freedom is worth fighting for	1	fighting	
5	means of realigning the balance	2	realigning the balance	
6	the balance between	2	between	
7	who profits from personal information and who loses	3	profits	
8	who profits from personal information and who loses	3	loses	
9	part-time publicists, social secretaries, agents and ambassadors	9	part-time publicists	
10	part-time publicists, social secretaries, agents and ambassadors	9	social secretaries	
11	part-time publicists, social secretaries, agents and ambassadors	9	agents	

Figure 2. Linguistic metaphors found in an extract of the article “Your online freedom is worth fighting for, isn’t it?”

As stated in Methods chapter, the transition from identified metaphor vehicle terms to systematic metaphors suggested by Cameron, Low and Maslen (2010) can be described in two steps:

1. Sorting out identified metaphor vehicle terms into larger groupings
2. Identifying topics which are repeatedly expressed by metaphors within a vehicle grouping

This procedure can be presented in a more detailed way:

1. Sorting out identified metaphor vehicle terms into preliminary vehicle groupings
2. Further work with preliminary vehicle groupings through splitting, combining and renaming
3. Assigning topic codes to the metaphor vehicles
4. Collecting all the linguistic metaphors within each vehicle grouping that relate to a particular topic into one set

However, there might be some technical problems in applying this procedure to the material used for the present analysis. The data obtained after the linguistic metaphor identification stage showed that a considerable number of metaphors found in the analyzed material might have metaphor topics not relevant for the research questions. Thus, further work with larger vehicle groupings might prove to be unnecessary for a substantial amount of data.

In order to avoid inconvenience and unnecessary work, it was decided to assign a metaphor topic to each linguistic metaphor right after assigning a preliminary metaphor vehicle grouping. In this way, identified linguistic metaphors which were not relevant for the present research could be eliminated from the further analysis at the earlier stage.

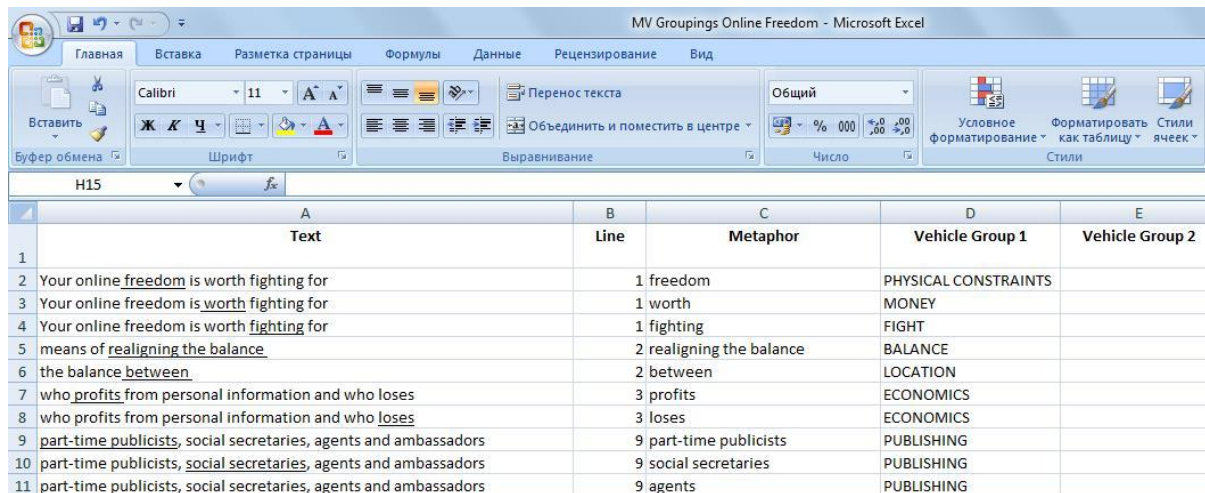
The adjusted version of the procedure suggested by Cameron, Low and Maslen can be shown in the following way:

1. Sorting out identified metaphor vehicle terms into larger preliminary groupings
2. Assigning topic codes to the metaphor vehicles
3. Eliminating metaphors with metaphor topics not relevant for the present research from further analysis
4. Further work with preliminary vehicle groupings which now consist only of metaphor vehicles relevant for the present research
5. Collecting all the linguistic metaphors within each vehicle grouping that relate to a particular topic into one set

Each of these steps is given detailed description in the sections below.

5.3.1 Assigning larger vehicle groupings to metaphor vehicles

As stated in the previous section, further work with linguistic metaphors began with assigning a vehicle group to every linguistic metaphor (Figure 3).



	A	B	C	D	E
	Text	Line	Metaphor	Vehicle Group 1	Vehicle Group 2
1					
2	Your online <u>freedom</u> is worth fighting for	1	freedom	PHYSICAL CONSTRAINTS	
3	Your online freedom is <u>worth</u> fighting for	1	worth	MONEY	
4	Your online freedom is worth <u>fighting</u> for	1	fighting	FIGHT	
5	means of <u>realigning the balance</u>	2	realigning the balance	BALANCE	
6	the balance <u>between</u>	2	between	LOCATION	
7	who <u>profits</u> from personal information and who loses	3	profits	ECONOMICS	
8	who profits from personal information and who <u>loses</u>	3	loses	ECONOMICS	
9	<u>part-time publicists</u> , social secretaries, agents and ambassadors	9	part-time publicists	PUBLISHING	
10	<u>part-time publicists</u> , <u>social secretaries</u> , agents and ambassadors	9	social secretaries	PUBLISHING	
11	part-time publicists, social secretaries, <u>agents</u> and ambassadors	9	agents	PUBLISHING	

Figure 3. Preliminary metaphor vehicle groups assigned to linguistic metaphors in an extract of the article “Your online freedom is worth fighting for, isn’t it?”

Vehicle groups assigned to linguistic metaphors are preliminary at this stage of analysis: Later, the metaphor vehicles can be rearranged and get included in vehicle groupings different from those assigned initially. As Cameron, Low and Maslen (2010) point out, grouping metaphor vehicles together is a flexible process whose results can be revised with each new addition to the grouping. Figure 3 shows that there are two columns which display vehicle groups: Vehicle Group 1 and Vehicle Group 2. That gives more flexibility in the process of assigning: the researcher has the opportunity to come up with more than one possible vehicle group and choose between the two options later.

5.3.2 Assigning topic codes to identified metaphor vehicles

The discussion of Internet privacy issues in the material covers the following key topics:

1. Personal data or information, including online persona, and activities connected with personal information

The website of the European Commission (2013) defines *personal data* as “everything that identifies an individual, from a person's name to telephone numbers, date of birth and photographs”.

In the discussion of Internet privacy in general and “the right to be forgotten” in particular, the terms data and information are quite often used interchangeably. Since the present analysis is material-driven, it has been decided to use these terms as synonyms as well.

This topic category also includes the notion of *online persona* which can be defined as an identity which an individual establishes with the help of Internet communities and websites. Online persona is included in the category *personal data/information* because it is created with the help of the information that the individual puts online.

2. Parties involved in operations with personal data: (a) data controllers, (b) data subjects

Data controllers and *data subjects* are two main terms used when discussing data protection and data protection legislation. The Opt-4 Data Protection Dictionary defines these terms in the following way:

- a. *Data controller* is “a person who (either alone or jointly or in common with other persons) determines the purposes for which and the manner in which any personal data are, or are to be, processed” (Opt-4 Data Protection Dictionary, n.d.). In the case of discussion of Internet privacy, data controllers as a rule include Internet companies and websites, such as search engines (e.g. Google) and social networking websites (e.g. Facebook, Twitter).
- b. *Data subject* is “a living individual to whom personal data relates” (Opt-4 Data Protection Dictionary, n.d.). In other words data subjects are individuals whose personal data are collected, held or processed.

3. Relationship between data controllers and data subjects.

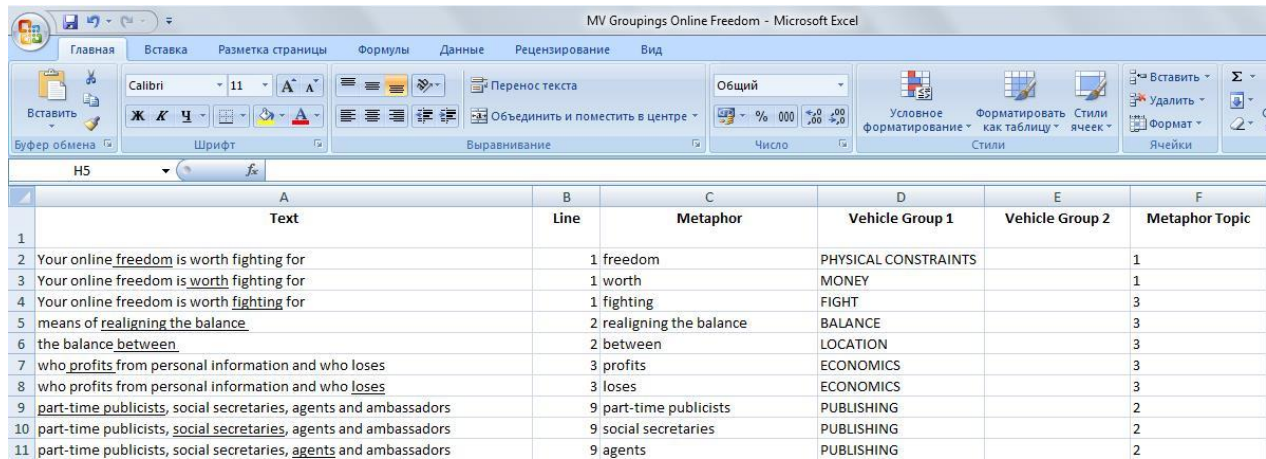
4. The Internet as a platform for personal data disclosure and dissemination.

5. Data protection regulation.

The metaphors that belong to any of the topic categories mentioned above were considered relevant for the research questions raised in the thesis. Each metaphor vehicle was given a code number of the related metaphor topic category so that it would be easy to orient oneself in the findings (Figure 4).

Metaphors that do not belong to any of the topic categories described above were considered as being outside the main areas of interest of this thesis. These metaphors were given topic

code *other* and were not examined during further metaphor analysis. Some examples of such metaphors include the following: *a faith that is hard to maintain in the light of the consequences*, *Jaron Lanier puts it in his recent book “Who Owns the Future”, unrealistic expectations will be created etc.*



	A	B	C	D	E	F
	Text	Line	Metaphor	Vehicle Group 1	Vehicle Group 2	Metaphor Topic
1						
2	Your online freedom is worth fighting for	1	freedom	PHYSICAL CONSTRAINTS		1
3	Your online freedom is worth fighting for	1	worth	MONEY		1
4	Your online freedom is worth fighting for	1	fighting	FIGHT		3
5	means of realigning the balance.	2	realigning the balance	BALANCE		3
6	the balance between	2	between	LOCATION		3
7	who profits from personal information and who loses	3	profits	ECONOMICS		3
8	who profits from personal information and who loses	3	loses	ECONOMICS		3
9	part-time publicists, social secretaries, agents and ambassadors	9	part-time publicists	PUBLISHING		2
10	part-time publicists, social secretaries, agents and ambassadors	9	social secretaries	PUBLISHING		2
11	part-time publicists, social secretaries, agents and ambassadors	9	agents	PUBLISHING		2

Figure 4. Linguistic metaphors found in an extract of the article “Your online freedom is worth fighting for, isn’t it?” with assigned topic codes and vehicle groupings

5.3.3 Work with preliminary vehicle groupings

After linguistic metaphors not relevant for the research question had been eliminated from the further analysis, the rest of the metaphor vehicles were collected into larger groupings. These groupings are the result of the first stage of work with the metaphor vehicles. Therefore, they might need further revision and should be considered as preliminary. The groupings are arranged according to the number of metaphor vehicles which allows the analyst to see which groups are most numerous and might need further refinement and which groups can be ignored in the further analysis due to their small size (Table 2).

Vehicle grouping	Number of metaphor vehicles	Metaphor vehicles collected into the grouping
<i>PHYSICAL ACTION</i>	131	<i>delete (11), deleted (10), erasure (7), remove (5), removed (4), held (4), hidden (3), erase (3), deletion (2), taken down (2), given (2), providing (2), fiddling (2), processed (2), deleted (2), share (2), unlock (2),</i>

		<i>retention (2), lifted (2), keep (2), hide (2), taken, taken away, gather, craft, collect, connected, cyberbullying, bowed, sifting through, gathered, applaud, get rid of, getting rid of, getting in touch, store, finds, dig up, expunging, uncover, suppressed, removing, look back, sharing, reinvented, giving, refurbished, crack, composed of, accumulates, crunch, putting, stand, rest on, mishandling, retain, handle, extend, make, stay, support, deliver, stick, taking down, kept, corroded, hold on to, linked, collecting, storing, process, made, twist, replicated, creating, eradicated, removal, dug up</i>
<i>MOVEMENT</i>	62	<i>from (17), misleading (3), come, fly, navigate safely, go back, spreading, widely spread, comes up, visit sites, crawl, through, taken the more extensive move, goes down, pops up, comes up, going back, navigate, came up, haunt, crawler, destinations, move, spreads, spread, lead, mislead, steps, far-reaching, emerged, escaping, come, approach directly, across, crosses, crossed, lead to, going in the right direction, go as far as, go, moves, haunts, migrated on, came back</i>
<i>LOCATION</i>	43	<i>on (34), between (5), around (2), under, elsewhere on</i>
<i>MEMORY</i>	33	<i>forgotten (23), memories (4), long memory (2), forgetfulness, sort of a diary, remember, forget</i>
<i>CONTAINER</i>	26	<i>in (16), into (2), outside, a repository, take out of, getting into, contained in, going into, went into, big repositories</i>
<i>PHYSICAL CONSTRAINTS</i>	24	<i>freedom (11), access (5), outlet, gain access, openness, free, open, available, block, caught in the web</i>
<i>PROTECTION</i>	23	<i>protection (12), protect (2), security (2), watchdog (2), noble protector, protections, protects, protected,</i>

<i>protecting</i>		
<i>FIGHT</i>	14	<i>enemies, struggled, fighting, resisting, the clash, conflicting, fight for, taking the fight, championed, defending, battling, an attack, take on, ammo</i>
<i>SPACE</i>	11	<i>presence (4), cyberworld, out there, take place, accessible in one single place, elsewhere, centralized</i>
<i>MATERIAL</i>	10	<i>material (5), layer (2), gaping holes, torn, layers</i>
<i>CLEANING</i>	9	<i>wipe (3), wipe out, wiping away, wiped clean, wipe clean, wiping, cleansing</i>
<i>EVIL</i>	9	<i>evil (6), vengeful, malicious, demonised</i>
<i>THING</i>	9	<i>things (3), anything (2), nothing, everything, items, something</i>
<i>ECONOMICS/COMMERCE</i>	8	<i>the most valuable asset, sold, disposal of assets, profits, loses, merchants, the one-stop shop, marketing</i>
<i>CONTROL</i>	8	<i>control (7), controls</i>
<i>MACHINE</i>	7	<i>mechanisms (5), driven, automatic</i>
<i>PHYSICS</i>	6	<i>pressure, reflects, tensions, impact, diluted, refined</i>
<i>WATER</i>	6	<i>stream (2), drowning, sources, outpouring, leak</i>
<i>BALANCE</i>	6	<i>realigning balance (2), shift the balance, rebalance, unbalanced, redress the balance</i>
<i>LIFE/DEATH</i>	6	<i>life (3), live on, short-lived, the afterlife,</i>
<i>MONEY</i>	5	<i>worth (4), valuing</i>
<i>TRACKING</i>	5	<i>track (2), silently tracked, tracked, tracking</i>
<i>BUILDING</i>	4	<i>constructing online facades, built a platform, founder, on the grounds</i>
<i>PUBLISHING</i>	4	<i>part-time publicists, social secretaries, agents, publicists</i>
<i>RELATIONSHIP</i>	4	<i>friends, enamoured, community, betray</i>
<i>NATURE</i>	4	<i>tweetstorm, the rock, erupted, goldmine</i>
<i>TRACE</i>	4	<i>footprint (3), the traces you've left</i>
<i>EVERYDAY OBJECT</i>	4	<i>in the same boat, grist to its mills, set red flags</i>

		<i>waving across, grid</i>
<i>PERSONIFICATION</i>	4	<i>who(2), into the hands of, in its infancy</i>
<i>VISION</i>	4	<i>left visible, revealed, visible, display</i>
<i>POWER</i>	3	<i>power (3)</i>
<i>PRODUCT</i>	3	<i>expiration-date, like a supermarket use-by date, the product that's being sold</i>
<i>THEFT</i>	3	<i>theft, theft, stolen</i>
<i>TRIAL</i>	3	<i>detention, verdicts, tribunals</i>
<i>PLAYGROUND</i>	3	<i>playmates, playground, a scary playground populated with powerful bullies</i>
<i>TARGET</i>	3	<i>aiming, targeted at, aimed at</i>
<i>TIME</i>	3	<i>past (3)</i>
<i>GAME</i>	3	<i>game worth playing, the game plan, major players</i>
<i>PAIN</i>	2	<i>suffered, suffered</i>
<i>PAINTING</i>	2	<i>airbrush, pictures easy to paint</i>
<i>PROPERTY</i>	2	<i>the property, possession</i>
<i>MILITARY</i>	2	<i>a losing battle, a battle worth fighting</i>
<i>INSTRUMENT</i>	2	<i>instrument, tools</i>
<i>FOREIGN AFFAIRS</i>	2	<i>ambassadors, ambassadors</i>
<i>ALARM</i>	2	<i>a klaxon attached to it, alarm bells started ringing</i>
<i>DAMAGE</i>	2	<i>damage (2)</i>
<i>AGRICULTURE</i>	1	<i>fodder</i>
<i>GIFT</i>	1	<i>gifts</i>
<i>KAFKA</i>	1	<i>like Kafka</i>
<i>MENTAL HEALTH</i>	1	<i>crazy</i>
<i>OBJECT</i>	1	<i>form</i>
<i>POLICE</i>	1	<i>policing</i>
<i>SHADOW</i>	1	<i>shadows</i>
<i>STRENGTH</i>	1	<i>stronger</i>
<i>TERRAIN</i>	1	<i>slippery slope</i>
<i>DANGER</i>	1	<i>danger</i>
<i>STIGMA</i>	1	<i>a kind of stigma</i>

<i>BIG</i>	1	<i>giant</i>
Total number of metaphor vehicles relevant for the research project: 545		

Table 2. Preliminary vehicle groupings with collected metaphors vehicles

Table 2 displays preliminary vehicle groupings assigned to the metaphor vehicles found in the discourse data. The vehicle groups vary both in the number of metaphor vehicles they contain and in the degree of refinement. Further work with preliminary groupings can include different processes such as combining several groupings into one, renaming of the groupings, creating new groupings, sub-dividing already existing groupings etc.

Table 2 shows that the vehicle group *PHYSICAL ACTION* contains a variety of metaphors that can be further subcategorized. Thus, within the group *PHYSICAL ACTION* it is possible to single out two more subcategories: *PHYSICAL DELETION OR REMOVAL* and *GIVING/TAKING* (Table 2.1).

<i>PHYSICAL ACTION</i> (69 vehicles)	<i>held (4), hidden (3), processed (2), unlock (2), fiddling (2), retention (2), lifted (2), hide (2), gather, craft, collect, connected, cyberbullying, bowed, sifting through, keep things, gathered, applaud, getting in touch, store, finds, uncover, suppressed, reinvented, refurbished, crack, composed of, accumulates, crunch, putting, stand, rest on, mishandling, retain, handle, extend, make, stay, support, deliver, stick on, kept, stick, dig up, look back, hold on to, linked, corroded, collecting, storing, process, made, keep, twist, replicated, creating, dug up</i>
<i>PHYSICAL DELETION OR REMOVAL</i> (51 vehicles)	<i>delete (11), deleted (10), erasure (7), remove (5), removed (4), deletion (2), taken down (2), erase (3), get rid of, getting rid of, expunging, removing, taking down, eradicated, removal</i>

<i>GIVING/TAKING</i> (11 vehicles)	<i>given (2), share (2), providing (2), taken away, taken, giving, shared, sharing</i>
---------------------------------------	----------------------------------------------------------------------------------------

Table 2.1. *Refined PHYSICAL ACTION grouping*

However, the refined version of the *PHYSICAL ACTION* grouping needed further processing. For example, the vehicles *uncover, dig up, dug up, look back, hide* and *hidden* were moved to the *VISION* grouping as their basic meanings are closely connected with the possibility of seeing an object. The vehicle *unlock* was moved to the grouping *PHYSICAL CONSTRAINTS* as it expresses the idea of getting rid of physical constraints.

Other changes in preliminary vehicle groupings included the following:

- The *MILITARY* grouping was merged with the *FIGHT* grouping.
- The grouping *ECONOMICS/COMMERCE* together with the grouping *PRODUCT* formed one grouping *SALE*.
- The grouping *EVIL* was retitled to *MALICIOUS* as it includes metaphors that express the idea of being unkind and showing a strong feeling of wanting to hurt someone.
- The groupings *PUBLISHING* and *FOREIGN AFFAIRS* were merged into a new grouping *PUBLIC RELATIONS* since metaphors that belong to these two groups express the idea of managing the spread of information between an individual or an organization and the public.
- *TRACKING* was merged with *TRACE* as these groupings are related: traces left by someone can be used to track this person.

Significance of minor vehicle groupings

As mentioned earlier, the established vehicle groupings vary greatly in a number of collected metaphors. While the largest groupings such as *PHYSICAL ACTION, MOVEMENT, LOCATION, PHYSICAL DELETION OR REMOVAL* contain more than 30 metaphors each, there are vehicle groupings that contain only one or two metaphors. However, the significance of the metaphor is determined not only by the size of the vehicle grouping it belongs to, but also by its possible connection with other, bigger groupings.

Some of the minor groupings can have connection with bigger ones and are therefore taken into consideration while establishing systematic metaphors. This concerns for example the grouping *POLICE*: Although this grouping includes only one metaphor, this metaphor can be considered as complimentary to *TRIAL* grouping.

However, there are a significant number of minor vehicle groupings that were excluded from further consideration on the basis of being irrelevant in relation to other vehicle groupings and not contributing to the development of possible systematic metaphors. The excluded groupings include the following: *SHADOW*, *BIG*, *STIGMA*, *DANGER*, *GIFT*, *TERRAIN*, *AGRICULTURE*, *KAFKA*, *TARGET*, *STRENGTH*, *TIME*, and *MENTAL HEALTH*.

5.3.4 Establishing Systematic Metaphors

Establishing Systematic Metaphors within One Vehicle Grouping

When the work with the vehicle groupings was carried out, each metaphor was assigned to a vehicle grouping and given a topic code. Therefore, all the necessary parameters for finding systematic metaphors in the discourse data were in place. Cameron, Low and Maslen (2010) define a systematic metaphor as “a set of linguistic metaphors in which connected vehicle words or phrases are used metaphorically about a particular topic” (p. 127). Thus, a systematic metaphor is supposed to emerge within one vehicle group. The process of emergence of systematic metaphors within one vehicle grouping is shown below by using the vehicle grouping *FIGHT* as an example.

Systematic *FIGHT* metaphors

Figure 5 gives exhaustive information on linguistic metaphors that are included in the grouping *FIGHT*: their immediate discourse context, articles in which they are used, and the metaphor topic codes. This information is enough to establish metaphor patterns used in the analyzed discourse data. Figure 5 shows that there can be singled out two systematic metaphors within the *MILITARY GROUPING* group: *THE RELATIONSHIP BETWEEN DATA SUBJECTS AND DATA CONTROLLERS IS FIGHTING* and *DISCUSSING DATA PROTECTION REGULATION IS FIGHTING*.

	A	B	C	D	E
388			FIGHT		
389	Topic Code	Metaphor	Text	Article	Line
390	3	enemies	any of us need <u>enemies</u>	Who's more evil	70
391	3	struggled	has since <u>struggled</u> to explain	Identity theft	48
392	3	fighting	Your online freedom is worth <u>fighting</u> for	Online freedom	1
393	3	a losing battle	it's <u>a losing battle</u>	Online freedom	30
394	3	a battle worth fighting	<u>a battle</u> eminently <u>worth fighting</u>	Online freedom	56
395	5	resisting	So why is Britain <u>resisting</u> ?	Opt-out	3
396	5	the clash	<u>The clash</u> between Brussels and the Ministry of Justice	Opt-out	11
397	5	conflicting	27 <u>conflicting</u> rules	Opt-out	37
398	3	battled	who <u>battled</u> Facebook for months	Opt-out	81
399					

Figure 5. Linguistic metaphors contributing to the FIGHT vehicle group

Establishing systematic metaphors with the help of several vehicle groupings

Although the analysis showed that systematic metaphors quite often emerged within one vehicle grouping, it was also found that systematic metaphors could be established with the help of interaction of several vehicle groupings. Thus, the systematic metaphor *INTERNET IS SPACE* was established as a result of work with the vehicle groupings *SPACE*, *LOCATION* and *MOVEMENT*. All three groupings are connected by the meaning of physical space. That means that linguistic metaphors that belong to these groupings and have the same metaphor topic *THE INTERNET* could be processed together.

5.4 Results of the metaphor analysis

The section above gave an example of how a systematic metaphor emerges from working with metaphor vehicle groupings and topic codes. The present section gives a list of all the systematic metaphors that arose from the analysis of the discourse data. Table 3 shows systematic metaphors grouped under metaphor topics. Systematic metaphors within each topic group are arranged according to their size. The complete sets of connected linguistic metaphors in their direct context are presented in the Appendix.

The systematic metaphor	Number of connected linguistic metaphors
The Internet	
<i>THE INTERNET IS SPACE</i>	68
<i>THE INTERNET HAS MEMORY</i>	32
<i>THE INTERNET IS A CONTAINER WHITH INFORMATION</i>	18
<i>THE INTERNET IS MALICIOUS</i>	8
<i>THE INTERNET IS A PLAYGROUND</i>	3
Data controllers and data subjects	
<i>THE RELATIONSHIP BETWEEN DATA SUBJECTS AND DATA CONTROLLERS IS FIGHTING</i>	14
<i>DATA SUBJECTS AND DATA CONTROLLERS HAVE COMMERCIAL RELATIONS</i>	11
<i>DATA CONTROLLERS ARE INDIVIDUALS' REPRESENTATIVES AND PR-AGENTS</i>	6
<i>DATA CONTROLLERS AND DATA SUBJECTS ARE IN STATE OF BALANCE</i>	6
<i>THE RELATIONSHIP BETWEEN DATA SUBJECTS AND DATA CONTROLLERS IS A GAME</i>	3
<i>DATA SUBJECTS ARE ON TRIAL</i>	3
Information	
<i>INFORMATION IS A PHYSICAL OBJECT</i>	145
<ul style="list-style-type: none"> • <i>INFORMATION CAN BE PHYSICALLY DELETED OR REMOVED FROM THE INTERNET</i> • <i>INFORMATION CAN BE PHYSICALLY CONSTRAINED</i> 	<ul style="list-style-type: none"> • 52 • 22

<i>TO DISCLOSE PERSONAL INFORMATION IS TO MAKE IT VISIBLE</i>	13
<i>TO DELETE INFORMATION IS TO CLEAN UP</i>	9
<i>INFORMATION IS A TRACE THE INDIVIDUAL LEAVES</i>	9
<i>INFORMATION IS WATER</i>	6
<i>INFORMATION IS A LIVING CREATURE</i>	3
Data protection regulation	
<i>DATA PROTECTION REGULATION IS A MECHANISM</i>	7
<i>DSCUSSING DATA PROTECTION REGULATION IS FIGHTING</i>	4
Number of systematic metaphors: 21	Total number of collected linguistic metaphors: 368

Table 3. *Systematic metaphors emerged from the analyzed discourse data*

Table 3 shows that the systematic metaphors that emerge vary in the number of connected linguistic metaphors. However, the size is not the only criteria for judging the significance of the systematic metaphor. First of all, the number indicated for connected linguistic metaphors is not the number of unique linguistic metaphors but the number of uses of these linguistic metaphors in the discourse data. Thus, the same metaphor can be counted several times depending on its frequency in the analyzed data. For example, the systematic metaphor *TO DELETE INFORMATION FROM THE INTERNET MEANS TO BE FORGOTTEN* consists of 32 connected metaphors 23 of which are instances of the linguistic metaphor *the right to be forgotten*.

Moreover, as Cameron, Low and Maslen (2010) point out, “the size of the set does not automatically relate to its importance, since a small set may include really powerful metaphors and a large set may collect together conventionalized and not very relevant metaphors” (p. 129). Table 3 shows that the discussion of digital privacy issues contain both

highly conventionalized (e.g. *THE INTERNET IS SPACE*, *INFORMATION IS A PHYSICAL OBJECT*) and more novel systematic metaphors (e.g. *DATA CONTROLLERS AND DATA SUBJECTS ARE IN STATE OF BALANCE*, *INFORMATION IS A TRACE THE INDIVIDUAL LEAVES* etc.).

Conventionalized systematic metaphors are more general, while novel systematic metaphors tend to be more specific. In some cases it is technically possible to include specific metaphors into more generalized groups. Thus, *INTERNET IS A PLAYGROUND* can be considered as a constituent of the systematic metaphor *INTERNET IS SPACE* because it expresses the idea of social space. Such generalization can be found in some previous studies dedicated to Internet metaphors. For example, Johnston (2009) establishes a large metaphorical category “physical space” which includes various types of physical structures such as “bridges, libraries, harbors, pathways, real estate, corners, luncheons, and even sewers”.

However, the present thesis is mainly based on dynamic discourse framework which implies that overgeneralization during the metaphor analysis should be avoided. Specific metaphors might be valuable in revealing speakers’ attitudes and values. Therefore, consideration of specific systematic metaphors rather than a small number of generalized systematic metaphors might make a bigger contribution in answering the research questions of this thesis. Consequently, it was decided that if it is possible to single out a more specific systematic metaphor from a larger set, this systematic metaphor should be examined separately.

At the same time, that does not mean that conventionalized systematic metaphors should not be considered in the light of the research questions of the present thesis. Conventionalized systematic metaphors should also be examined as they give a general framework within which novel metaphors can emerge. For example, the existence of a novel systematic metaphor *INFORMATION IS A TRACE* is to a large extent conditioned by the metaphor *INTERNET IS SPACE* because the meaning of *trace* needs to be supported by the meaning of physical *space* where this trace can be left.

6. Discussion

This chapter is devoted to the discussion of the results obtained during the metaphor analysis of the discourse data. The established systematic metaphors are examined in a detailed way that allows the researcher to see what they reveal about the conception of current issues of digital privacy as presented in media.

As stated in the previous chapter, the systematic metaphors emerged from the discourse data can be divided into two groups: (1) conventionalized metaphors and (2) more specific metaphors. The Discussion chapter examines both groups of systematic metaphors.

6.1 Conventionalized Systematic Metaphors

Cameron, Low and Maslen (2010) underline that systematicity exists on different levels: from very specific topic-vehicle connections to more generalized cognitive models (p. 145). If such an approach is employed, conventionalized systematic metaphors belong to generalized cognitive models and therefore are not particularly valuable in revealing speakers' attitudes and values. Such conventionalized systematic metaphors found in the analyzed discourse include:

- *THE INTERNET IS SPACE*
- *THE INTERNET IS A CONTAINER WITH INFORMATION*
- *INFORMATION IS A PHYSICAL OBJECT*

A high degree of conventionalism and generalization of these metaphors can be explained with the help of the conceptual metaphor theory: The metaphors *SPACE*, *CONTAINER* and *OBJECT* are closely connected with our bodily experience. These metaphors are fundamental since they emerge from our interaction with physical environment. They are based on simple physical concepts without which “we could not function in the world” (Lakoff & Jonson, 2003, p. 57). In that way, although the mentioned systematic metaphors do not reveal much about specific conceptualization of digital privacy issues, they are underlying our understanding of them. Therefore, all three systematic metaphors are examined below.

6.1.1 THE INTERNET IS SPACE

The analysis of the discourse data showed that this metaphor is most used while speaking about the Internet in the context of digital privacy issues. Such a result is not surprising: The previous research on Internet metaphors has demonstrated that spatial metaphors are among the most widespread conceptualizations of the Internet. Thus, Palmquist's (2001) exploratory study carried out among undergraduate students shows that respondents' three most preferred conceptualizations of the Internet are "frontier" (boundaries, explore, guides etc.), "highway" (roads, maps, travel etc.) and "outerspace" (cyberspace, hyperspace etc.). "Cyberspace" and "travelling" metaphors are also highlighted by Cumbow (1997) who speaks about dangers that thinking about the Internet in spatial terms implies for copyright law enforcement.

Although both Palmquist and Cumbow speak about separate metaphor categories, they are connected by the idea of space and can be considered as specific examples of SPACE metaphor. The broader category of "space" metaphors is explicitly established in works by Markham (2003) and Johnston (2009). While Johnston (2009) speaks about the category of physical space that includes various types of physical structures, Markham (2003) discusses the metaphor Internet as Place that includes place-oriented metaphors such as frontier, community and cyberspace.

The systematic metaphor *THE INTERNET IS SPACE* established as a result of the discourse data analysis is highly conventionalized. The linguistic metaphors that belong to the *SPACE* metaphor include, as a rule, (1) prepositions with the meaning of location (*on the Internet*, *on your timeline*; *on Google+*; *you're tagged in on Facebook*; *draw notice to around the internet*), (2) prepositions with the meaning of direction of movement (*from dban.org*; *from online service providers*; *from Google's database*; *no power to remove it from third parties*; *material is taken down from other accounts on the site*; *across websites*), and (3) verbs with the meaning of movement (*then visit those sites*; *the only way to navigate it safely*; *go back and see if you can delete your posts*). The "space" itself is not given any distinct characteristic and remains quite abstract. Thus, due to its high degree of conventionalism, this metaphor does not contain any information about individuals' emotions, attitudes or values.

However, the *SPACE* metaphor is important as it creates important general framework within which we see the Internet and online processes. As Markham (2003) underlines,

Although computer-mediated social spaces have no literal physical substance, they can be perceived as having dimension, comprising meaningful, structured places where things happen that have genuine consequences. In this frame, the Internet is not so much a prosthetic for the senses but a separate environment where the self can interact, move, travel and exist. (p.7)

Thus, the *SPACE* metaphor creates an image of the Internet as the arena where all the operations with personal information take place. Understanding the Internet in terms of space is essential as it is important on a cognitive level and creates a framework for our general understanding of computer mediated communication.

6.1.2 THE INTERNET IS A CONTAINER WITH INFORMATION

The *CONTAINER* metaphor is another conventionalized perception of the Internet. This metaphor focuses on “the notion of the internet as a thing with objective properties, versus a process” (Markham, 2003, p. 5).

Markham (2003) points out that “container metaphors tend to highlight the shape of the container, the way the container is best utilized, entry/access and exit points, or the stuff being contained” (p. 5). However, in the analyzed discourse data the Internet is simply shown as an abstract container where the information is kept (*in the cybersphere; in forums; searching on your name in Google Images; live on in the Internet Archive etc.*). As well as spatial metaphors, container metaphors found in the discourse data seem to give only a general framework within which manipulations with personal information take place, without containing any evaluation or attitudes.

6.1.3 INFORMATION IS A PHYSICAL OBJECT

Discussing information in terms of physical object is widespread as it is connected with our tendency to see abstract things as physical entities. In terms of the conceptual metaphor theory, the systematic metaphor *INFORMATION IS A PHYSICAL OBJECT* belongs to *ontological*

metaphors, that is, “ways of viewing events, activities, emotions, ideas, etc., as entities and substances” (Lakoff & Johnson, 2003, p. 26).

The analysis showed that the discourse data, as a rule, uses two ways of conceptualizing information as a physical object:

1. By a direct reference to information as some sort of *thing* or *material* (*anything that you've posted; it can remember things long after everyone else has forgotten them; impossible to remove anything; material is taken down from other accounts on the site; material on a blog hosted on one of its platform etc.*)
2. By using verbs with the meaning of physical action

Although viewing information as the physical entity in general does not allow us to comprehend very much about information itself, we can analyze actions connected with information to see how it is presented in the discourse data.

As a physical object, information can undergo various manipulations by the main actors: data subjects and data controllers. However, the role of data subjects is, as a rule, limited to *sharing, providing* and *giving* personal information (*the spirit of sharing; share your story; someone providing their opinion; the opinion is given to a journalist etc.*). The discourse data presents data subjects as having no influence on further destiny of their personal information. All the control of personal information after its disclosure is transferred to data controllers who, first, *gather, collect* and *store* data and then can start *process* it (*every opinion they gather; collect email data; store what it finds; personal data is being processed etc.*).

Metaphors describing operations with information normally have a neutral meaning: as a physical object, personal information can be *controlled, held, retained, kept, lifted* etc. At the same time, there are metaphors that carry additional meaning of damage. Thus, information in hands of data controllers can be *cracked* and *crunched*. Information can also be *stolen* (*fear of identity theft; risk having your identity stolen*) and *mishandled* (*the mishandling of their data*) which underlines risks it is exposed to.

It is possible to single out smaller systematic metaphors within the *PHYSICAL OBJECT* metaphor that emerge from the idea of information having physical properties:

- *INFORMATION CAN BE PHYSICALLY DELETED OR REMOVED FROM THE INTERNET*
- *INFORMATION CAN BE PHYSICALLY CONSTRAINED*

INFORMATION CAN BE PHYSICALLY DELETED OR REMOVED FROM THE INTERNET

The idea of possible deletion or removal of personal information from the online world is one of the central issues in the discussion of Internet privacy. Speaking of information on the Internet in terms of *removal*, *deletion* and *erasure* implies that these actions are possible to execute. However, as experts point out, such a conceptualization of information on the Internet does not correspond to reality.

Thus, European Union Agency for Network and Information Security (ENISA) report emphasizes that enforcing the “right to be forgotten” is impossible in an open global system of the Internet:

In a completely open system like the (vast) public portion of today’s world-wide web, anyone can make copies of a public data item and store them at arbitrary locations. Moreover, the system does not account for the number, owner or location of such copies. In such an open system it is not generally possible for a person to locate all personal data items (exact or derived) stored about them; it is difficult to determine whether a person has the right to request removal of a particular data item; nor does any single person or entity have the authority or jurisdiction to effect the deletion of all copies. (2012, p. 8)

The same opinion is presented in the analyzed material, namely, in the article *Britain seeks opt-out of new European social media privacy law*:

The UK's chief objection to the EU move is that unrealistic expectations will be created by the right's expansive title because the controls proposed will be relatively modest in their impact on the way data spreads, or is traded, across websites. (Bowcott, 2013)

In that way, the metaphor of *PHYSICAL DELETION OR REMOVAL* is deceiving as it creates major misconception of how information on the Internet exists and what limitations individuals have in relation to it.

INFORMATION CAN BE PHYSICALLY CONSTRAINED

PHYSICAL CONSTRAINTS metaphors include such conventionalized metaphors as *freedom of information* and *access to information*. Both these metaphors are connected with the idea of information being in some sort of place. While the *freedom* metaphor suggests that there is nothing physically stopping information from moving around, the *access* metaphor has the basic meaning of the means by which you can get to the place. In that way it implies that information might be surrounded by some physical obstacles that need to be overcome in order to get to it.

Some of these physical constraints are deliberately put on by individuals who *lock up* their personal information in order to protect it from possible threats. In the analyzed discourse data, the action of *unlocking* is associated with undesirable intrusion in the individual's information space (*it still had my profile on it and he asked for my password to allow him to unlock it; consider using full hard disk encryption on the next computer you own, meaning no one will be able to unlock your data*).

6.2 More specific systematic metaphors

Although, the conventionalized systematic metaphors proved to be the most frequent in the analyzed data, less generalized systematic metaphors were also found. These systematic metaphors include the following:

- *THE INTERNET HAS MEMORY*
- *THE INTERNET IS A PLAYGROUND*
- *THE INTERNET IS MALICIOUS*
- *DATA SUBJECTS AND DATA CONTROLLERS HAVE COMMERCIAL RELATIONS*
- *DATA CONTROLLERS ARE INDIVIDUALS' REPRESENTATIVES AND PR-AGENTS*
- *THE RELATIONSHIP BETWEEN DATA SUBJECTS AND DATA CONTROLLERS IS FIGHTING*
- *DATA CONTROLLERS AND DATA SUBJECTS ARE IN STATE OF BALANCE*
- *DATA SUBJECTS ARE ON TRIAL*
- *TO DELETE INFORMATION IS TO CLEAN UP*

- *TO DISCLOSE PERSONAL INFORMATION IS TO MAKE IT VISIBLE*
- *INFORMATION IS A TRACE THE INDIVIDUAL LEAVES*
- *INFORMATION IS WATER*
- *INFORMATION IS A LIVING CREATURE*
- *DATA PROTECTION REGULATION IS A MECHANISM*
- *DSCUSSING DATA PROTECTION REGULATION IS FIGHTING*

Although the systematic metaphors listed above are more specific than generalized systematic metaphors examined in the first part of the chapter, not all of them can equally contribute to revealing how current issues of digital privacy are conceived. However, in order to make conclusions about relevance of a particular systematic metaphor to the project's aim, it is, first, necessary to examine all of them.

For the sake of convenience, the systematic metaphors listed above are further grouped and considered according to their topics: the Internet, data controllers and data subjects, personal information, operations with personal information, and data protection regulation.

6.2.1 Systematic metaphors about the Internet

THE INTERNET HAS MEMORY

The analyzed material showed that the Internet can be conceptualized as having *a long memory* which allows it *remembering things long after everyone else has forgotten them*. The *MEMORY* metaphor has proven to be one of the most numerous in the discourse data. Such a high frequency of occurrence is mostly explained by the fact that the title of legislative initiative “the right to be forgotten” is repeated throughout the analyzed texts. At the same time *MEMORY* metaphor is also supported by other linguistic metaphors collected in this set. Thus, information put online is quite often conceptualized as *digital memories* with the Internet being *sort of a diary* where these *memories* are recorded.

Thinking of personal information on the Internet in terms of memory implies that digital and human memories have the same properties. However, in reality the destiny of information in the Internet and human memory is completely different: While human memories tend to fade away with time, digital memories are stored in the Internet archives without any changes. Therefore, it is not possible to be completely *forgotten* by the Internet as well as it is

impossible to physically delete information from the Internet: Both these metaphors ignore properties of the Internet as an open system where it is impossible to track all the manipulations done to information once it is put online.

THE INTERNET IS MALICIOUS

This systematic metaphor is a particular case of personification where the Internet is not just animated, but also presented as malicious: It can have a *malicious* memory that leads to information being caught in a *vengeful eternity of quotation and misquotation*. This metaphor presents the Internet as some sort of villain in contrast to its users.

However, it is not the Internet itself, but Internet companies that are *malicious* and *evil* (*who's more evil – Facebook or Google; Google is evil; how evil your email account is* etc.). In that way, the Internet *must not be demonized* since it is just a medium and the way it is used is defined by data controllers.

THE INTERNET IS A PLAYGROUND

Although the *PLAYGROUND* metaphor contains considerably less connected linguistic metaphors than other Internet metaphors, it is quite interesting in relation to the research problem raised in this thesis. If in the context of digital privacy issues the Internet is seen as a playground, that means that actors engaged in manipulations with personal information (data subjects and data controllers) are playmates that meet there (*pick your playmates carefully in the internet playground*).

The *PLAYGROUND* metaphor is closely connected with the concept *childhood* and might be expected to carry a complementary message of carelessness and enjoyment. However, the Internet turns out to be not just a playground, but *a scary playground populated with a lot of powerful bullies*. The *scary playground* metaphor combines quite conflicting meanings of an area for children to play and threat: The Internet is full of dangers hidden by the decisive appearance of the playmates who in reality prove to be abusive bullies.

6.2.2 Systematic metaphors about data subjects and data controllers

DATA SUBJECTS AND DATA CONTROLLERS HAVE COMMERCIAL RELATIONS

Internet privacy issues are quite often discussed in terms of economics where personal information is conceptualized as *valuable assets* an individual has (*the most valuable asset you have; the secure disposal of assets*). Seeing information as assets underlines mercenary approach to personal information and its handling. Seen in economic terms, personal information loses its individual characteristics and become only a subject of trade between data subjects and data controllers where the latter normally *profit* and the former *lose*.

Personal information is conceived as *a product that's being sold* and that after the purchase is left in hands of *online merchants* for as long as they wish. Conceptualization of personal information as a product of sales allows data protection enthusiasts to suggest implementing an "*expiration date*" for personal data which is *a little like a supermarket use-by date*. In that way, the product (personal information) purchased by buyers (data controllers) will have to be thrown away (deleted) on the basis of the use-by date.

DATA CONTROLLERS ARE INDIVIDUALS' REPRESENTATIVES AND PR-AGENTS

Another way of presenting data controllers is rather connected with the sphere of public relations than economics: Data controllers are described as *part-time publicists, social secretaries, agents* and *ambassadors*. In other words, data controllers are seen as individuals' representatives who are responsible for maintaining and managing the reputation of their clients and for quality of information their clients make public. This metaphor implies that the information individuals put on the Internet is a tool for creating a certain image or identity. It also suggests a professional approach to this image making.

THE RELATIONSHIP BETWEEN DATA SUBJECTS AND DATA CONTROLLERS IS FIGHTING

While the *ECONOMICS* and *PUBLIC RELATIONS* metaphors describe the relationship between data controllers and data subjects in terms of civilian interaction, the *FIGHT* metaphor

highlights the conflict between these two parties. The military metaphor is strong as it evokes meaning of hostility and violence. Data subjects and data controllers are presented as enemies that fight for the control of personal information. Although the collected metaphors (*struggling, fighting and battling*) suggest that the struggle between data controllers and data subjects is at its height, the metaphor *a losing battle* shows that the odds are not in favour of the latter.

The fight between data subjects and data controllers can be presented not only as a fight for control of information, but also as a fight for freedom of speech. Such a conceptualization is normally used by data controllers who contend that they are *battling censorship* and *defending freedom of expression* which is *under attack*.

DATA CONTROLLERS AND DATA SUBJECTS ARE IN STATE OF BALANCE

The BALANCE metaphor creates the image of data controllers being on one end of a scale, and data subjects being on the other end. The weight of the scale is determined by the degree of control of personal information: the stronger control is, the more weight is put on a particular scale. Although data controllers and data subjects are described as being in a state of balance, that does not mean that their influences exist in an equal amount. Rather, *balance* here means that data controllers have invariably more power when Internet privacy issues are concerned:

As they stand, most free and open online business models rest on *a grotesque inequality* between what is given by the many – detailed, constantly updated personalised data – and what is taken by the few: profit, knowledge, and the indefinite and largely unaccountable possession of both. (Chatfield, 2013)

That inequality leads to the necessity to *realign* and *shift the balance*, that is, to give data subjects more control of their personal information.

THE RELATIONSHIP BETWEEN DATA SUBJECTS AND DATA CONTROLLERS IS A GAME

As well as the *FIGHT* and *BALANCE* systematic metaphors, the *GAME* metaphor is based on showing data controllers and data subjects as opposing sides. This systematic metaphor highlights rivalry as the main aspect of relationship between individuals and Internet companies. Facebook and Google are described as *major players*. Collecting and accumulating information, data controllers patiently wait for the opportunity to use it in the future. For them this anticipation is *a game worth playing*. However, the legislative initiative of the “right to be forgotten” changes *the game plan* giving more rights to data subjects in terms of control of their personal information.

DATA SUBJECTS ARE ON TRIAL

Although the *TRIAL* metaphor does not contain many linguistic metaphors, it creates a powerful image of what might happen when the individual puts personal information online without having any influence on its further destiny. Once published, information stays on the Internet and can be used against the data subject at any moment. In that way, the data subject is doomed to *indefinite detention* and *unappealable verdicts of unseen tribunals*. The fact that possible *verdicts* cannot be appealed only underlines the strictness of the sentence. The invisibility of tribunals creates atmosphere of fear and constant anxiety because data subjects never know by whom and at what moment they will be accused. The *TRIAL* metaphor also has semantic connections with the *POLICE* metaphor: to be put on trial, the individual must first be arrested by police who check the individual’s activity (*someone policing what you write*).

6.2.3 Systematic metaphors about information

INFORMATION IS A TRACE THE INDIVIDUAL LEAVES

The analysis of the discourse data showed that information is quite often conceptualized in terms of *trace* and *footprint*. The *TRACE* metaphor is closely connected with spatial conceptualization of the Internet because the idea of trace suggests existence of surface where it can be left. In that way, discussing information in terms of *TRACE* creates the image of the individual wandering around the Internet and leaving traces behind.

The footprint and traces metaphors are described in the analyzed material as negative and undesirable consequences of putting information online. That is connected with the fact that your digital footprint can be used for tracking you down by data controllers (*it was possible to track me; can be tracked to them*). In that way, data subjects are put in the position of being followed by data controllers, often without even knowing that (*you don't want to be (silently) tracked by Google*). Therefore, *digital footprint* and *traces* are normally discussed as something harmful that needs to be eliminated (*what other tips, links and suggestions do you have for reducing your digital footprint; getting rid of the traces you've left*).

INFORMATION IS WATER

The WATER metaphor is more elaborated than the PHYSICAL SUBJECT metaphor, because conceptualization of information in terms of water gives it more distinct characteristics than describing it simply as some sort of physical object or substance. However, this systematic metaphor can also be considered as quite conventionalized. Water metaphors found in the discourse data include the *stream* metaphor (*stream of updates; stream of boring people*) as well as some other metaphors with mainly neutral meaning (*sources of information; online outpourings*). At the same time information can be also conceived as dangerous because it is possible to *drown* in it (*your own drowning in commercial fodder*).

INFORMATION IS A LIVING CREATURE

Seeing information as a living creature suggests more independence and self-sufficiency than the PHYSICAL OBJECT metaphor: after being put online, the information starts living its own life (*live on in the Internet Archive; which would otherwise be short-lived; the afterlife of our words*). In that way, this metaphor might express the idea of data subjects not having control of information after it is published. At the same time, such an inference might seem forced considering the small size of the set.

6.2.4 Systematic metaphors about operations with personal information

Given that the discussion of the “right to be forgotten” mainly concerns processes of deletion and disclosure of personal information, these two operations are subjects to metaphorical conceptualization.

TO DELETE INFORMATION IS TO CLEAN UP

The process of deletion of information is also quite often conceptualized in terms of cleaning (*wipe all of the data; wiping a PC's data; single wipe of your drive's data; for cleansing online information* etc.). However, *wiping* and *cleaning* are quite conventionalized ways of talking about deletion of information in digital context. Therefore, this systematic metaphor does not contribute much in revealing any specific aspects of the “right to be forgotten”.

TO DISCLOSE PERSONAL INFORMATION IS TO MAKE IT VISIBLE

The discourse data has shown that concealment of information is, as a rule, discussed in terms of *hiding* it from others' eyes (*to have your details hidden by; have the information hidden; nothing to hide* etc.). Consequently, disclosure of information is conceptualized with the help of such metaphors as *revealing*, *uncovering*, and others (*uncover my full date; you've left too much visible; able to dig up your past through leftover postings; I have revealed myself*). In that way, to disclose information means to show it to others, make it visible.

This systematic metaphor is related to a more general paradigm of conceptualizing privacy problems in terms of visibility. As Cohen (2008) argues, “visibility is an important determinant of harm to privacy” and “an implicit linkage between privacy and visibility is deeply embedded in privacy doctrine” (p.181). Cohen points out that such a pervasive conceptualization of privacy is connected with cultural importance of visibility: “within Western culture, vision is linked metaphorically with knowledge and power” (2008, p. 184). If this broader understanding of vision is applied to the systematic metaphor *TO DISCLOSE PERSONAL INFORMATION IS TO MAKE IT VISIBLE*, it means that by making information visible, we give power to people who see it.

6.2.5 Systematic metaphors about data protection regulation

DATA PROTECTION REGULATION IS A MECHANISM

The MECHANISM metaphor is a conventionalized way of speaking about some system that is intended to achieve something or deal with a problem. Although there are several instances of data protection regulation being conceptualized in terms of mechanism (*our users like the mechanism; a mechanism for the whole continent; the controls proposed etc.), that metaphor does not bring anything new in the discussion of the “right to be forgotten”.*

DSCUSSING DATA PROTECTION REGUALTION IS FIGHTING

Debates about data protection regulation are conceptualized in terms of fight when it concerns disagreement between British government and European commission on the “right to be forgotten”: Britain *resists* accepting the decisions of the European commission and, by this, causes the *clash* with Brussels. At the same time, the existing data protection regulation is also seen as consisting of *27 conflicting* rules. Using *FIGHT* metaphors while speaking about the “right to be forgotten” underlines the contradictory character of this legislative initiative.

6.3 Concluding discussion

The strictly defined topic focus of this thesis and a limited amount of the analyzed material has ensured an in-depth analysis of the metaphorical conceptualization of digital privacy issues connected with the “right to be forgotten”.

The analysis of the discourse data has shown that there are two main types of systematic metaphors used while speaking about different aspects of digital privacy within the “right to be forgotten” topic: (1) conventionalized systematic metaphors, and (2) more specific systematic metaphors.

Further consideration has demonstrated that each of these two groups has its own functions in the conceptualization of privacy issues. Thus, conventionalized systematic metaphors underlie our understanding of digital privacy issues without revealing any specific aspects of

their conceptualizations. More specific systematic metaphors, on the contrary, contribute in revealing attitudes and evaluations about current digital privacy issues as presented in media.

Closer examination of more specific systematic metaphors found in the discourse data showed that according to the degree of relevance to the current project this group of metaphors can be further subdivided into two subgroups:

1. Systematic metaphors that are more conventionalized and do not contribute much in understanding of digital privacy issues (*TO DELETE INFORMATION IS TO CLEAN UP; INFORMATION IS WATER; INFORMATION IS A LIVING CREATURE; DATA PROTECTION LEGISLATION IS A MECHANISM*)
2. Systematic metaphors that reveal people's socio-cultural conventions and emotions, attitudes and values regarding the "right to be forgotten" issues

The most interesting systematic metaphors in terms of showing attitudes and evaluations are the *PLAYGROUND*, *COMMERCIAL RELATIONS*, *PUBLIC RELATIONS*, *FIGHT*, *TRIAL*, *GAME* and *BALANCE* metaphors, because they reveal how the relationship between data subjects and data controllers is presented in the media. Although these systematic metaphors highlight different aspects of information and relationship between data subjects and data controllers, they are united by conceptualizing data subjects and data controllers as opposing sides. However, some of the mentioned systematic metaphors express this idea more explicitly than others. Thus, the *FIGHT*, *GAME* and *BALANCE* metaphors clearly present data controllers and data subjects as being in constant confrontation, while the *COMMERCIAL RELATIONS* and *PUBLIC RELATIONS* convey the same thought in a more subtle way. Although *COMMERCIAL* and *PUBLIC RELATIONS* might seem to carry the meaning of cooperation and collaboration between two sides, they still place the as opposing sides.

Careful analysis of the discourse data also demonstrated that all of the mentioned metaphors are united by conceptualizing data controllers as a stronger party: Data controllers are bullies, judges, those who profit, and those who are winning the fight, those who decide to play the game, and those who are responsible for maintaining individuals' online reputation. Data subjects are left with the role of the weaker side that has to accept the decisions of data controllers and follow them. Another problem is that data controllers are not only powerful, but that their power can also be combined with bad intentions. Data controllers can be *EVIL*, and this raises concerns among data subjects.

The analysis of the data demonstrated the existence of another systematic metaphor specific for debates about the “the right to be forgotten” - *THE INTERNET HAS MEMORY*. Although conceptualizing data storage in terms of memory (*computer memory, random access memory*) is quite conventionalized in our speech, the development of the *MEMORY* metaphor is connected with the introduction of the “right to be forgotten” initiative. However, this systematic metaphor gives wrong expectations from the data protection legislation, since Internet memory is not the same as human one. It is impossible to be completely “forgotten” by the Internet.

Another systematic metaphor that creates misunderstanding about the possibility of certain operations with personal information on the Internet is the metaphor of *PHYSICALLY DELETION OR REMOVAL*. Both the *PHYSICAL DELETION OR REMOVAL* and *MEMORY* metaphors underlie the understanding of information in “the right to be forgotten” initiative. That creates major misconceptions of how information on the Internet exists and what limitations individuals have in relation to it.

6.4 Results of the analysis within the framework of previous research

As stated above, the previous research on metaphorical conceptions of digital privacy has been dominated by the approach that considered modern privacy discourse in general. The current thesis challenged this approach by providing a more defined focus of the analyzed topic. As a result, the thesis gave a more detailed description of metaphorical conceptions of Internet privacy emerging from a set of specific discourse events.

One of the most interesting findings is that three main traditional conceptions of privacy discussed by Solove (2004) ((1) *Orwell's Big Brother*, (2) *the secrecy paradigm*, and (3) *the invasion conception*) were not found in the analyzed data. That means that the general framework might not always be reflected in discussing particular privacy issues and further examination of more specific aspects of digital privacy might give unexpected results.

6.5 Limitations of the thesis and further investigation

This thesis was initially designed as an exploratory study as it is based on the analysis of a quite limited amount of material. Thus, there is a need for further investigation of the topic with a larger amount of analyzed data which would allow obtaining more statistically reliable results.

Another limitation of the current research is that it is an individual project. Thus, it was carried out by an individual analyst who relied on her own judgments and interpretation. Since this thesis did not give an opportunity of collaboration with other researchers, further research on the topic could be carried out by several analysts working on the project and comparing their results. Carrying out the research with the group of researchers would allow obtaining more reliable results since all the decisions would be taken after collective discussion.

There are several possible areas of further research. One of them is a comparative analysis of metaphorical conceptualization of digital privacy issues presented in articles published online and in comments on these articles. That would allow showing interaction between readers' metaphorical conceptualization of digital privacy issues and the one presented in media. In other words, it would be possible to see whether readers support and develop metaphors suggested in media or reject them.

Another possible direction of further research is comparative multilingual studies of metaphors about digital privacy. That would allow revealing similarities and differences in metaphorical conceptualization of digital privacy issues in different languages.

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Norsk sammendrag

Selv om digitalt personvern er et av de mest diskuterte spørsmålene i dag, er det relativt lite forskning på området metaforisk konseptualisering av digitalt personvern. Dessuten er den eksisterende forskningen preget av en generell tilnærming til metaforene som analyseres: Det moderne personvernet blir diskutert allment og uten et spesifikt fokus på temaet.

Målet ved denne oppgaven er å undersøke metaforiske begreper om digitalt personvern i en medial diskurs om et spesielt aspekt ved digital personvern, nemlig «retten til å bli glemt». De metaforiske begrepene er undersøkt innenfor rammen av en diskurs-dynamisk tilnærming som ser metaforen som et viktig verktøy til å forstå menneskers konseptualiseringer, og som studerer metaforen i språkbruksdynamisk perspektiv. Avhandlingen har fokus på identifisering av lingvistiske metaforer og avdekking av systematikk i bruken av dem i 10 avisartikler om «retten til å bli glemt».

Resultatene av metaforanalysen viser at det er to hovedtyper av systematiske metaforer som blir brukt om forskjellige aspekter ved digitalt personvern når temaet er «retten til å bli glemt»: (1) konvensjonelle systematiske metaforer som ligger til grunn for vår forståelse av digitalt personvern, og (2) mer spesifikke systematiske metaforer som avdekker holdninger og vurderinger knyttet til aktuelle temaer som gjelder digitalt personvern. Det viser seg at de mest interessante systematiske metaforene avdekker hvordan forholdet mellom datasubjekter («data subjects») og datakontrollører («data controllers») er presentert i mediene. Disse metaforene har det til felles at de konseptualiserer datasubjekter og datakontrollører som motparter, og at de konseptualiserer datakontrollører som den sterkeste parten.

Resultatene avdekker også at noen av metaforene som ligger til grunn for forståelsen av informasjon innenfor «retten til å bli glemt»-temaet, skaper store misfortåelser om hvordan informasjon eksisterer på nettet, og hvilke begrensninger individer har i forhold til den.

Ingen av de tradisjonelle begrepene om personvern omtalt i tidligere forskning ble funnet i det analyserte datamaterialet. Konklusjonen er at det er mulig at det generelle rammeverket ikke alltid gjenspeiles i diskusjoner om spesielle spørsmål innenfor personvern. Dermed vil videre forskning på mer spesifikke aspekter ved digitalt personvern kunne gi uventede resultater.

English abstract

Although the problem of digital privacy is one of the most discussed issues today, there is relatively little research done in the sphere of metaphorical conceptualization of digital privacy. Moreover, the previous research on the topic is characterized by a generalized approach to the analyzed metaphors: Modern privacy discourse is discussed in general without a more defined focus of the analyzed topic.

The aim of this thesis is to investigate metaphorical conceptions about digital privacy in a media discourse dedicated to a specific aspect of digital privacy, namely the “right to be forgotten”. The metaphorical conceptions are examined within the framework of the discourse dynamic approach which sees metaphor as an important tool for understanding people’s conceptualizations and studies metaphor in the dynamics of language use. The thesis focuses on identifying linguistic metaphors and finding systematicity in their usage in 10 newspaper articles dedicated to the topic of “the right to be forgotten”.

The results of the metaphor analysis indicate that there are two main types of systematic metaphors used about different aspects of digital privacy within the “right to be forgotten”: (1) conventionalized systematic metaphors that underlie our understanding of digital privacy, and (2) more specific systematic metaphors that reveal attitudes and evaluations about current digital privacy issues. It is found that the most interesting systematic metaphors reveal how the relationship between data subjects and data controllers is presented in the media: These metaphors are united by conceptualizing data subjects and data controllers as opposing sides and by conceptualizing data controllers as a stronger party.

The results also reveal that some of the metaphors which underlie the understanding of information in “the right to be forgotten” initiative, create major misconceptions of how information on the Internet exists and what limitations individuals have in relation to it.

It is also discovered that none of the traditional conceptions of privacy discussed in previous research was found in the analyzed data. The conclusion is that the general framework might not always be reflected in discussing particular privacy issues. Thus, further examination of more specific aspects of digital privacy might give unexpected results.

Appendix

Systematic metaphors

THE INTERNET

THE INTERNET IS SPACE (68 connected metaphors)

In today's cyberworld; information about me out there; in this internet world; on the internet; on the social network ; on your timeline; on Google+; you're tagged in on Facebook; draw notice to around the internet; on the internet ; on the internet; from elsewhere on the web ; on the Internet ; get on the Web; on a forum; on an annoyous chat room; published some opinions on my Facebook profile; appeared on numerous 'crawler' based sites; resold on eBay; on social media sites; a kid may stick something on Facebook; material on a blog hosted on one of its platforms; everything about us is kept on internet databases; to delete yourself from the internet; expunging yourself from the internet; to delete yourself from the web; pictures and comments from websites; delete yourself from the web; from dban.org; from online service providers; from Google's database; no power to remove it from third parties; material is taken down from other accounts on the site; across websites; then visit those sites; the only way to navigate it safely; go back and see if you can delete your posts; found myself going back; look up people who interest them on Google; on the internet; from French sites; you can be deleted from Google's database; look her name up on search engines; on social media sites; on a traditional music discussion site; outspoken on the web forum; lifted from elsewhere and photoshopped; my name to be on the website; when my name is searched on Google; from that photography website; appeared on other websites; on your Facebook page; still online on photographers' websites; it WILL be on Facebook; Spreading what you don't want; the pictures were more widely spread; see what comes up; everything that comes up in a search result; the response came up in the archive section; you do pop up on the grid; sources or destinations of information; the way data spreads; images had spread to a third party; can be crossed from various sources; other data crosses; some of the shots had migrated on.

THE INTERNET HAS MEMORY (32 connected metaphors)

Sort of a diary; forgetfulness is equally impossible; 'right to be forgotten'; the right to be forgotten; a power known as the "right to be forgotten"; the right to be forgotten; the right to be forgotten; the new right to be forgotten; the right to be forgotten; digital memories will only remind us; the idea of the right to be forgotten; but digital memories will only remind us; if you have digital memories; digital memories; approve of the right to be forgotten; the right to be forgotten; right to-be-forgotten legislation; to implement the right to be forgotten; right to be forgotten advocates; It can remember things long after; the internet's long memory can be misleading; the "right to be forgotten"; the right to be forgotten; "right to be forgotten" requests; the "right to be forgotten" online; complaints over the right to be forgotten; concerned the right to be forgotten; many right to be forgotten cases; the right to be forgotten online; right to be forgotten legislation; the right to be forgotten; forget me not.

THE INTERNET IS A CONTAINER WHITH INFORMATION (18 connected metaphors)

In the cybersphere; in forums; searching on your name in Google Images; outside Facebook; Blogger or Wordpress; live on in the Internet Archive; they're in its index; a repository of the web; your ideas and views in the thread; in the first 4 google results; everything that comes up in a search result; a number of years in a birth club; take the article out of their online database; in this internet world; to the big repositories of personal data; might be in Google's back-up; enter her name in Google's search engine; first things to appear in search engines; so I went into the site

THE INTERNET IS MALICIOUS (8 connected metaphors)

Who's more evil; google is evil; who is most evil; google is evil too; how evil your email account is; a vengeful eternity of quotation and misquotation; the internet must not be demonized; the internet's long memory can be misleading, malicious or plain wrong.

THE INTERNET IS A PLAYGROUND (3 connected metaphors)

Pick your playmates carefully in the internet playground; a scary playground populated with a lot of powerful bullies;

DATA CONTROLLERS AND DATA SUBJECTS***THE RELATIONSHIP BETWEEN DATA SUBJECTS AND DATA CONTROLLERS IS FIGHTING*** (14 connected metaphors)

Any of us need enemies; has since struggled to explain; your online freedom is worth fighting for; it's a losing battle; a battle eminently worth fighting; who battled Facebook for months; campaigners fight for control of online data; they are taking the fight; was protected by freedom of speech; it is defending freedom of expression; battling censorship; an attack on freedom of expression; going to be able to take on big outfits; to have verbal ammo against me

DATA SUBJECTS AND DATA CONTROLLERS HAVE COMMERCIAL RELATIONS (11 connected metaphors)

Standing as the most valuable asset you have; music taste may well be gathered, analysed and sold; the secure disposal of assets; who profits from personal information and who loses; provide your personal details to online merchants; like the one-stop shop; form the product that's being sold; an "expiration date"; a little like a supermarket use-by date; practices of collecting and marketing users' personal data.

DATA CONTROLLER ARE INDIVIDUALS' REPRESENTATIVES AND PR-AGENTS (6 connected metaphors)

Part-time publicists, social secretaries, agents and ambassadors; one thing that publicists and ambassadors alike.

DATA CONTROLLERS AND DATA SUBJECTS ARE IN STATE OF BALANCE

(6 connected metaphors)

Realigning this balance, means of realigning the balance, aims to rebalance the relationship, will shift the balance; a totally unbalanced mediation; time to redress the balance.

THE REALTIONSHIP BETWEEN DATA SUBJECTS AND DATA CONTROLLERS IS A GAME (3 connected metaphors)

This doesn't mean anticipation isn't a game worth playing; it changes the game plan; other major players, such as Facebook and Google.

DATA SUBJECTS ARE ON TRIAL (3 connected metaphors)

Indefinite detention; unappealable verdicts of unseen tribunals.

INFORMATION***INFORMATION IS A PHYSICAL OBJECT*** (145 connected metaphors)

Personal data is being processed; every opinion they gather; opportunity to craft their own words; collect email data; is being corroded by outdated; sifting through so much material; music taste may well be gathered, analysed and sold; store what it finds; to have this information suppressed; the profiles lifted pictures; personal information held; they would first be refurbished and wiped clear; unlock your data unless they can crack your password; data only accumulates; can crunch this information; at the mishandling of their data; retain and handle information, its data-retention policies; you wouldn't like them to keep your data; withdrawn for information being held; a kid may stick something on Facebook; everything about us is kept on internet databases; governments will hold on to it; whether providing an opinion; the opinion is given to a journalist; someone providing their opinion; readers share their stories; have taken this information; the spirit of sharing; share your story; what is given by the many; what is taken by the few; who have shared the data; if a company has given it; able to delete personal data held online; practices of collecting and marketing users'

personal data; held 1,200 pages of personal data; changes to data retention; company storing his personal data; did not process or control personal data; that had to be made public; that we want to keep; instantly be replicated; lifted from elsewhere and photoshopped; I had control of it; taking back control of your online life; we cannot control the afterlife of our words; giving users – rather than services such as Facebook – control; campaigners fight for control of online data; lack of control over pictures; control personal data; identity theft fears; was in fear of identity theft; risk having your identity stolen; everything that comes up in a search result; anything you posted; one of the first things; to delete items; nothing to hide; it can remember things long after; people with something to hide; impossible to remove anything; so much material; the volume of reported material; the gaping holes in your data; material to be removed; material is taken down from other accounts on the site; material on a blog hosted on one of its platforms.

INFORMATION CAN BE PHYSICALLY DELETED OR REMOVED FROM THE INTERNET (52 connected metaphors)

Expunging yourself from the internet; delete your digital life; how to get rid of your digital past; getting rid of the traces you've left; to delete yourself from the web; delete their online presence; delete yourself from the web; to delete an unwanted online presence; my personal information taken down; removing my online presence; you can't erase yourself; data is never deleted; to delete yourself from the internet; A complete erasure of the hard disk's contents; similar secure deletion; information that cannot be removed; can request deletion; to erase information; no power to remove it from third parties; the absolute erasure of information; impossible to remove information from the internet; the right to erasure is essential; the right to delete your information; a right to delete your data; remove it as well; third-party erasure; there should be a way of taking it down; can achieve erasure of data; to delete your personal data; data that needs to be removed; material to be removed; material is taken down from other accounts on the site; the right to erasure; right to erasure; that it can be deleted; but if you can be deleted; you have effectively been deleted; able to delete personal data held online; he had deleted much of it; certain data has to be deleted; to erase personal data; ensuring all data therein is deleted; for data to be eradicated; to remove such content; and websites to delete items; for information to be removed; for data to be deleted, the removal of incorrect data; be able to delete them; impossible to remove anything; you can be deleted from Google's database; you have effectively been deleted.

INFORMATION CAN BE PHYSICALLY CONSTRAINED (22 connected metaphors)

Noble protector of freedom of information; allow him to unlock it, unlock your data; he had access to his personal profile; a Windows 8 profile can access; can be used to access; cannot gain access to all kinds of settings; your online freedom is worth fighting for; that openness is; guarantee our own freedom; freedom from lies; freedom of expression and privacy; freedom of expression; on the grounds of freedom of expression; freedom of expression; invalidates freedom of speech; population don't have access; should be publicly available; to block search engines; not against freedom of expression; an attack on freedom of expression; 99% of the population don't have access to it

TO DISCLOSE PERSONAL INFORMATION IS TO MAKE IT VISIBLE (13 connected metaphors)

You've left too much visible; able to dig up your past through leftover postings; uncover my full date; to have your details hidden by; have the information hidden; nothing to hide; I have revealed myself; you're hidden; I can look back; people with something to hide; is all too visible; the local paper dug up the old story; to display his pictures online.

TO DELETE INFORMATION IS TO CLEAN UP (9 connected metaphors)

Wiping away your digital life wipe out your online past; they would first be refurbished and wiped clear; to wipe all data; how to wipe it clean; wipe all of the data; wiping a PC's data; single wipe of your drive's data; for cleansing online information.

INFORMATION IS A TRACE THE INDIVIDUAL LEAVES (9 connected metaphors)

Getting rid of the traces you've left; your digital footprint; for reducing your digital footprint; airbrush their digital footprint; you don't want to be (silently) tracked by Google; won't track you; it was possible to track me; can be tracked to them, internet "tracking" software.

INFORMATION IS WATER (6 connected metaphors)

Stream of updates; stream of boring people; your own drowning in commercial fodder; sources or destinations of information; our online outpourings; private information can leak.

INFORMATION IS A LIVING CREATURE (3 connected metaphors)

Live on in the Internet Archive; which would otherwise be short-lived; the afterlife of our words.

DATA PROTECTION REGULATION***DATA PROTECTION REGULATION IS A MECHANISM*** (7 connected metaphors)

Our users like the mechanism; have an automatic right; the controls proposed; a mechanism for the whole continent; consequences of a mechanism; a social reporting mechanism; a centralised online complaints mechanism.

DISCUSSING DATA PROTECTION REGULATION IS FIGHTING

(4 connected metaphors)

So why is Britain resisting; the clash between Brussels and the Ministry of Justice; 27 conflicting rules; are being championed by the EU justice commissioner.