



universität
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DIPLOMARBEIT / DIPLOMA THESIS

Titel der Diplomarbeit / Title of the Diploma Thesis

„Media literacy in the EFL classroom:
Exploring Austrian EFL learners' ability to identify fake
news“

verfasst von / submitted by

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angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of
Magistra der Philosophie (Mag. phil.)

Wien, 2019 / Vienna, 2019

Studienkennzahl lt. Studienblatt /
degree programme code as it appears on
the student record sheet:

A 190 353 344

Studienrichtung lt. Studienblatt /
degree programme as it appears on
the student record sheet:

Lehramt UF Spanisch UF Englisch

Betreut von / Supervisor:

Univ. Prof. Mag. Dr. Christiane Dalton-Puffer

Acknowledgement

First and foremost, I would like to thank my supervisor, Mag. Dr. Christiane Dalton-Puffer, for her inspiration, guidance and patience.

Also, I would like to say thank you to Mag. Mag. Petra Ederer and her students for participating in the research.

Special thanks go to my fellow mates and friends, Alexandra, Eva, Thomas and Lisa, who have been supporting me in the process of writing this thesis. And to Clemens, for always being there.

Finally, I would like to say thank you to Brigitta, who inspired me to follow my dreams, and my father, Joachim, who supported me during my studies.

Danksagung

Zu allererst möchte ich mich bei meiner Betreuerin, Mag. Dr. Christiane Dalton-Puffer, bedanken, die mich beim Verfassen dieser Arbeit geduldig begleitet, mit Orientierungshilfe unterstützt, und mit Inspiration versorgte.

Weiters gilt mein Dank Mag. Mag. Petra Ederer und ihren Schüler*innen, die ihre Zeit opferten um an meiner Studie teilzunehmen.

Ein besonderer Dank gilt meinen Freunden Alexandra, Eva, Thomas und Lisa, die mich während des Schreibprozesses begleitet haben. Und Clemens, der immer für mich da war.

Abschließend danke ich noch Brigitta, die mich inspirierte diesen beruflichen Weg einzuschlagen, und meinem Vater, Joachim, der mir dieses Studium ermöglicht hat und mich immer unterstützt.

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List of abbreviations

EFL	English as a foreign language
VOICE	Vienna-Oxford International Corpus of English
ICT	Information and communication technology
IT	Information technology

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Glossary

algorithms	“a procedure for solving a mathematical problem (as of finding the greatest common divisor) in a finite number of steps that frequently involves repetition of an operation”, or to be more precise, an “[a]lgorithm is often paired with words specifying the activity for which a set of rules have been designed. A search algorithm, for example, is a procedure that determines what kind of information is retrieved from a large mass of data.” (see <i>Merriam-Webster Dictionary</i> , s.v. <i>algorithm</i>)
clickbait	“something (such as a headline) designed to make readers want to click on a hyperlink especially when the link leads to content of dubious value or interest” (see <i>Merriam-Webster Dictionary</i> , s.v. <i>clickbait</i>)
cookies	“a small file or part of a file stored on a World Wide Web user's computer, created and subsequently read by a website server, and containing personal information (such as a user identification code, customized preferences, or a record of pages visited” (see <i>Merriam-Webster Dictionary</i> , s.v. <i>cookies</i>)
filter bubble	“an environment and especially an online environment in which people are exposed only to opinions and information that conform to their existing beliefs” (see <i>Merriam-Webster Dictionary</i> , s.v. <i>filter bubble</i>)
hashtags	“a word or phrase preceded by a hash sign (#), used on social media websites and applications, especially Twitter, to identify messages on a specific topic.” (see <i>Oxford Dictionaries</i> , s.v. <i>hashtag</i>)
hypertext	“a database format in which information related to that on a display can be accessed directly from the display” (see <i>Merriam-Webster Dictionary</i> , s.v. <i>hypertext</i>)
wikis	“a website that allows visitors to make changes, contributions, or corrections” (see <i>Merriam-Webster Dictionary</i> , s.v. <i>wiki</i>)

1. Introduction

Ever since the presidential elections in the United States in 2016, the issue of fake news has been dominating the headlines. However, it is only gradually that people realise the impacts fake news had and still has on politics, society and democracy. Due to new technologies like the internet, algorithms and social media, the process of news production and consumption is changing. Consequently, those channels which obtain the prerogative of interpretation also control public opinion. Bearing in mind this idea, one might interpret the results of the Brexit referendum or the presidential election in the U.S. differently. In this sense, it has to be acknowledged that while the underlying idea of fake news, namely message manipulation has been present for many centuries, understanding its present-day production and dissemination processes, as well as its global ramifications has never been more relevant.

However present this topic might be in the media, popular science and in certain fields of research like information technology and political science, it has not been analysed from the viewpoint of literacy education. Particularly, there is a genuine lack of scientific expertise about fake news in the second language learning context. Apart from the English lessons at school, more and more students engage with the anglophone world in their private lives – be it via watching YouTube videos, reading blogs or different websites. This not only fosters their language skills, but also, due to its digital nature, requires certain skills, which traditional literacies and EFL classes frequently fail to address. Since the modern-day reading experience differs immensely from former approaches, the multileveled nature of online reading is particularly interesting when it comes to reading fake news in the foreign language context.

In the light of these assumptions, the present paper seeks to understand how learners of English as a foreign language cope with reading and evaluating fake news online. Based on the theory of multiple literacies and literacy education, the present research aims at describing and defining the ability of detecting fake news in the English as a foreign language (EFL) context. Since there is relatively little research dedicated to this particular field, the study conducted appears as a pilot project, since it addresses fake news and its consumption by young users of the internet from the point of digital literacy in the EFL context. From this starting point, the aim is to understand the relation between the learners' underlying source evaluation skills in the foreign language, and eventually, the abilities, skills and strategies used in order to expose fake news.

In this sense, this thesis is based on the assumption that via the application of certain skills, readers are able to discriminate between reliable and unreliable sources, enabling them to verify a message's legitimacy. It can be assumed that readers use a set of strategies in the process of evaluating sources online. Thus, the research addresses these assumptions by examining the participants' general habits and experiences regarding online reading and subsequently, on the basis of a selected number of participants, explores the ability of second language learners to evaluate messages' credibility, and strategies applied to detect fake news. The results obtained can offer vital insights into online reading and general competences concerning media and news literacy. Furthermore, the developed tool for analysis could serve for future, extended research in the field of second language learning and online reading competences. Consequently, the research questions which will be addressed in this paper are as follows

(Q1) What characteristics do the participants show regarding media habits, social media use and fake news experiences?

(Q2) How do Austrian EFL learners evaluate the credibility of content encountered when reading online?

(Q3) When presented with sample, real life texts in an online reading context, which strategies do EFL learners apply to discriminate between fake news and real news?

In order to answer these three questions adequately, the present paper will be divided into two main parts, the theoretical and empirical part, which each includes a number of subchapters. While the first part aims at providing the necessary theoretical basis for understanding the matter, the second part then is a description of the research conducted, its development, performance and results obtained. Thus, the first chapter of this paper will present different theoretical approaches towards understanding modern-day literacy. Starting with traditional ideas of literacy, this chapter sets out to review more recent theories like media literacy, news literacy and digital literacy. This will be followed by an examination of reading in the online context in chapter 3, which includes a discussion of the key terminology and different strategies for mastering online reading. The following chapter of the theoretical part of this paper will then provide an in-depth analysis of the phenomenon of fake news, its definition and classification, as well as suggest strategies to cope with message manipulation when reading online. Before shifting the focus to the research part of the paper, chapter 5 will comment on the current state of literacy education in the Austrian school context.

The second part of the paper is divided into five sections which will focus on the empirical research conducted. Thus, chapter 6 describes the research design and the method used. The following chapter focuses on the research setting and participants, followed by a description of the data editing process in chapter 9. Concluding the theoretical part of the paper, a description of the results obtained in the two stages of the research process will be provided. In chapter 11, an interpretation of the results will be approached, discussing them in the light of the current state of the art in literacy education, and will explore the implications of the findings for future research and literacy education. To conclude, the very last chapter of this paper will provide a brief summary of the general findings and revisit the insights in relation to the research questions posed and give an outlook on future research in this field.

2. Literacy theory - From the traditional notion of literacy towards a broader understanding

The concept of literacy goes beyond simply being able to read; it has always meant the ability to read with meaning, and to understand. It is the fundamental act of cognition.
(Gilster 1997: 2)

Starting with prehistoric signs on cave walls, over to textualization of oral societies, to the invention of the printing press; from a phenomenon enjoyed by a few to becoming a tool for promoting democratic participation – the concept of literacy so far has had many definitions. The term literacy in the sense we understand it today, appears in dictionaries from the year 1924 onwards (Barton 1994: 20). According to Lankshear & Knobel (2006), the term literacy only recently became used in the realm of education. In former times, literacy was only seen in relation to the issue of illiterate people, who needed to learn how to read and write (2006: 5). Therefore, it can be assumed that literacy in the sense it is used in this paper was not present in former times, until its meaning broadened in the 1970s, where it came to denote a “formal education ideal” (Lankshear & Knobel 2006: 8), which led to the evolution of numerous sub-branches occupied with literacy.

The turning point was in the 1970s, when the assumption that there exists a correlation between the economic development of a society and its literacy-level entered the general discussion about literacy. Ever since, literacy is seen as “symbolic capital”, with which one can achieve goals, and consequently, literacy became a “symbolic marker” for being educated (Cope & Kalantzis 2000: 121). Further, it is assumed that through literacy, humans can personally, professionally and socially advance (Leu et al. 2004: 1577). Not only is literacy a core element in education, it is also a means for approaching equity amongst different members of society (Cope & Kalantzis 2000: 123). Or how Courts (1991) finds, literacy is a tool which empowers people to lead content, fulfilled lives, via “[...] a set of capabilities through which the literate individual is able to utilize the interior world of self to act upon and interact with the exterior structures of the world around him, in order to make sense of self and other” (Courts 1991: 4).

When new technology and new media evolved, the definition of literacy changed. Similarly, the requirements for the modern-day reader were altered. However new the modalities of the present-day literacy might seem, it needs to be acknowledged that traditional literacy skills are still relevant, as they constitute the base for the actual, broader definition of literacy. As in

previous times, it is crucial to understand information research processes, to check a text's reliability and to read different information, before drawing a conclusion (Jenkins 2009: 30). Still, the new environment of literacy, which evolved from page to screen, adds different perspectives to the reading process, which are required in order to fully comprehend a text's message.

Based on this multilayer nature of reading, different theories emerged. Amongst others, the multiliteracies movement, which will be described in detail later in this thesis, emerged. These theories address today's multimedia realities, in which the internet and other information and communication technologies (ICT) like instant messaging, real time video calls or social networks are increasingly present in the working world and private lives. Since new technologies emerge at a fast pace, also the perception of what a coherent definition of literacy needs to cover, is susceptible to change. Concerning this issue, it is Leu et al. who provide a rather progressive definition of literacy, which incorporates the nature of this phenomenon when they suggest that modern day literacy is

[...] a moving target, continually changing its meaning depending on what society expects literate individuals to do. As societal expectations for literacy change, and as the demands on literate functions in a society change, so too must definitions of literacy change to reflect this moving target. (Leu et al. 2004: 1584)

As a consequence of these assumptions, researchers like Coiro (2007), Lankshear & Knobel (2006) or Leu et al. (2004) conclude that the meaning of literacy today supersedes the traditional notion of being able to read, as it is a more complex phenomenon. Hence, "the new media literacies should be seen as social skills, as ways of interacting within a larger community and not simply as individualized skills to be used for personal expression" (Jenkins 2009: 32). Numerous researches therefore propose that literacy combines the processes of reading and writing and is necessarily set in a social context (Lankshear & Knobel 2006: 14-15). Embarking on this notion, researchers like Scollon & Scollon (1981), Street (1988) or Barton (1994) founded *The New Literacy Studies*.

2.1. The New Literacy Studies

The main difference between traditional definitions of literacy and the *New Literacies* comprehension of the term consists in the social aspect of the latter. While traditional notions of literacy understand the term as denoting a cognitive, or rather technical, ability, the new interpretation comprehends literacy "as a metaphor for competence [and] proficiency"

(Lankshear & Knobel 2006: 21) in a social context. Especially since the process of meaning-creation cannot be analysed in isolation but demands the examination of the social background it occurs in – particularly, regarding the “social interests” and “operation[s] of power” at stake (Buckingham 2007: 38-39).

On the basis of the *New Literacy Studies*’ theory, numerous specialised sub-branches developed under the term *New Literacies*, which is therefore deliberately used in its plural form, as there is a considerable number of different literacy practices connected with it. Hence, the term *New Literacies* encompasses different “families of practices” (Lankshear & Knobel 2006: 66), such as *Digital Literacies*, *Media Literacy*, *Multiliteracies* and *Critical Literacy*, which will be addressed in the following chapters. The initial term *New Literacies*, which serves as an umbrella term in literacy studies, was first used by David Buckingham in 1993 (Knobel & Lankshear 2013: 1) and denotes the rather new developments in this field, which relate literacy practices to new modes of communication. These ‘new modes’ embrace technological innovations, as well as new media and require “broad-based competence[s]” on behalf of the reader (Buckingham 2007: 4). In this respect, Lankshear & Knobel (2006) draw attention to the fact that due to technological change and the changing socio-economic situation of “post-industrial” times, the “mindsets” of humans are necessarily subject to modification. Therefore, also the concept of literacy needed to keep abreast of these developments, resulting in the emergence of *New Literacies* (Lankshear & Knobel 2006: 30).

With regard to the definition of *New Literacies*, Lankshear & Knobel (2006: 25) understand the term as referring to literacy “practices that are mediated by post-typographic forms of text”, which optionally use new technology and include “new mindsets” involving participation, collaboration and change in distribution in its process. Or, expressing this notion in their own words, *New Literacies* encompass “socially recognized ways of generating, communicating and negotiating meaningful content through the medium of encoded texts within contexts of participation in Discourses (or as members of Discourses)” (Lankshear & Knobel 2006: 64). In this sense, the notion of literacy as defined by proponents of *New Literacies* exceeds the traditional idea of being able to read and write, since it includes a broad variety of interaction formats in the light of different media, technologies and discourses. Further, the difference between traditional and recent definitions of literacy necessarily needs to encompass “new ethos” elements present in today’s digital world: distribution, participation and collaboration (Lankshear & Knobel 2006: 240). Leu et al. argue that “[n]ew forms of strategic knowledge are

central to *New Literacies*”, in order for the users to resist temptations of being distracted and constantly diverted while browsing the vast amount of information online (2004: 1596).

In this respect, it is Leu et al. who suggest that *New Literacies* are “deictic” (Leu et al. 2004: 1591), as the practices necessarily depend not only on the social but on the temporal context. Based on the argument that role of new technologies changes quickly, the significance of speed is of fundamental importance. Not only do *New Literacies* require adaptive capacity by its users, the users must also manage to use these technologies in a fast way. Readers who can manage to detect, evaluate and process information quickly, will be regarded as successful users of new media (Leu et al. 2004: 1597). Furthermore, it is argued that technology influences literacy practices and vice versa, and that *New Literacies* necessarily need to incorporate multiple literacies as the present situation requires numerous new interaction formats (Leu et al. 2004: 1594-1596).

Summarizing the described facts, it can be argued that the newly developed practices present in the *New Literacies* approach exceed the traditional notion of literacy in numerous ways, as described in the preceding section. Given the fact that there are more and more layers to the concept of literacy, it is inevitable to multiply the skills which are necessary to comprehend content in these new contexts. In this sense, it is not only important to acknowledge the fact that a present-day reader needs to be familiar with new technology on the practical side, but also it is crucial to acquire meta-level communicative skills to proficiently handle the communicative moment. In each case, it is vital to understand the interrelation of the different approaches and modalities, which only in combination will lead to successful literacy education.

2.2. Multiliteracies

The term multiliteracies was coined by *The New London Group* in the 1990s. *The New London Group*, consisting of experts in the field of pedagogy and literacy education, among others Gunther Kress, Bill Cope or Mary Kalantzis, also formed in this time to address a revision of literacy pedagogy from a sociolinguistic perspective. Essentially, their approach consisted in two changes to the traditional notion of literacy education, or how they called it “twin-goals” (New London Group 1996: 60). Firstly, it was aspired to include cultural and linguistic diversity into the concept of traditional literacy, and secondly, their goal was to incorporate a broad range of text types, which emerged due to innovations like information-technology and multimedia

(New London Group 1996: 60). In sum, their overall objective can be best concluded in their own words, by stating that the multiliteracies project aspires “creating access to the evolving language of work, power, and community [...] fostering the critical engagement necessary for them to design their social futures and achieve success through fulfilling employment” (New London Group 1996:60).

Similar to the arguments outlined previously, also The New London Group diagnosed that due to technological advance and globalization, language use and reading comprehension need to change. Thus, The New London Group identified three realms, in which this change was particularly notable, namely in the working world, in the public and in private, personal lives (New London Group 2000: 10). With regard to the world of work, new technology effected a change in the required language, or also, for example, one needed to adapt one’s way of communicating with others (e.g. e-mail, video-conferences). Concerning the private and public sphere, it can be said that both realms gradually converge, making cultural and linguistic diversity more perceptible (New London Group 2000: 12-16). As a consequence, in order to engage in these three realms, it was found that new strategies of reading, interacting and communicating were required.

Furthermore, according to the group of researchers, traditional literacy education was a “careful[ly] restricted” venture, which supported social segregation. In this sense, the expert group aimed at overcoming socioeconomic disparities via approaching literacy education from a new perspective, which incorporated not only new media, but most importantly acknowledged the fact that learners come from culturally and linguistically diverse backgrounds. Furthermore, the researchers understood that new media were essentially different to traditional print texts, as there now was a plurality of different modes. So, it became prerequisite to approach literacy education in view of the fact that “languages and other modes of meaning are dynamical, representational resources, constantly being remade by their users” (New London Group 1996: 64). In this respect, acknowledging the fact that society changes, it is only natural that the conception of literacy needs to adapt, in order to fit the multiplied realities. The expert group concludes that

Language, discourse, and register differences are markers of lifeworld differences. As lifeworlds become more divergent and their boundaries more blurred, the central fact of language becomes the multiplicity of meanings and their continual intersection. Just as there are multiple layers to everyone’s identity, there are multiple discourses of identity and multiple discourses of recognition to be negotiated. We have to be proficient as we negotiate the many lifeworlds each of

us inhabits, and the many lifeworlds we encounter in our everyday lives. This creates a new challenge for literacy pedagogy. (New London Group 2000: 17)

As a result of the discussion, New London Group introduces the concept of *Design* and proposes a four-step framework for teaching multiliteracies, with the aim of addressing the alternating nature of the core variable in literacy education. Regarding the idea of *Design*, it is vital to understand that there was no available metalanguage to explain the processes present in multiliteracies. The term *Design* refers to the “structures of complex systems”, which are at the centre of comprehending a text (New London Group 2000: 20). According to Cope & Kalantzis (2000: 211), *Designs* have different “dimensions”, amongst others, the “representational, social, organisational, contextual [and] ideological” dimension. Based on this assumption, the New London Group developed a structural model, which can be used to describe the underlying mechanisms. The model consists of three elements, *Available Designs*, *Designing* and *The Redesigned*. According to the New London Group, it is assumed that meaning making is the constant compilation and reorganisation of *Available Designs*, which are understood and shared by members of a social group. Thereby, the process of compiling and reorganising is referred to as *Designing*, and eventually, the result is a new meaning, which the researchers refer to as the *Redesigned* (New London Group 2000: 20).

With respect to the 4-step model of teaching multiliteracies, the New London Group (2000: 31) proposes the following steps:

- 1) Situated Practice
- 2) Overt Instruction
- 3) Critical Framing
- 4) Transformed Practice

The framework focuses on the learners’ experiences using multiliteracy texts and intends to create an interactive, dynamic learning context rather than exercising drills. Via “Situated Practice” and “Overt Instruction”, which aim at elaborating “available designs” and the necessary metalanguage to describe the processes, students are guided towards relating the encountered meaning to the broader, social context (“Critical Framing”). Eventually, after the completion of the three steps, students will be empowered to transform their knowledge (“Transformed Practise”) obtained onto other contexts and situations (New London Group 2000: 33-34).

In this sense, the ideas and theories provided by The New London Group do not only constitute a breakthrough in literacy theory, but also indicate a paradigm shift in the field of education. No longer was literacy education the unidimensional teaching of the ability to cognitively process written texts but became to be contextualised as a socially dependent activity, which engages senders and receivers in a multimodal meaning making process. By establishing the multiliteracies framework, an important step towards a broader understanding of literacy could be made and thus, The New London Group still serves as a basis for literacy education and theory.

2.3. Media Literacy

The framework provided by The New London Group already alluded to the multidimensional nature of present-day literacy contexts in which readers encounter themselves. Thus, the next approach presented encompasses the idea under the term media literacy, which is best explained by Kress (2006) who differentiates between two types: “reading the world as told”, which is organised according to the traditional notion of literacy and the system of written and spoken language, and “reading the world as shown”, which centres around the notion of multimedia and multimodal literacies present in today’s contexts. Based on this idea, one can proceed to define the term media literacy, which refers to “the knowledge, skills and competences that are required in order to use and interpret media” (Buckingham 2007: 36).

Since media literacy is required in multidimensional situations, encompassing traditional, as well as visual and auditory text, a comprehensive definition necessarily surpasses Buckingham’s notion of media literacy. Thus, numerous theoreticians see media literacy as a “subset of multiliterac[ies]” by Burn (2007), who argues that not only a technological understanding of how media produce texts and distribute texts is crucial to the notion of media literacy, but also the importance of the “cultural competence” (2007: 5). In addition, it is stressed that traditional literacy can be a productive basis for the critical examination of media messages as well, using the three elements, institution, text and audience, as a means of analysis (Burn 2007: 3). Furthermore, Buckingham argues that media literacy also belongs to the realm of critical literacy, as it “includes analysis, evaluation and critical reflection” of texts (Buckingham 2007: 38). In this sense, it can be said that an unambiguous definition of media literacy would hardly be possible, since all the dimensions of media require their own strand of definitions.

Thus, in order to understand the essence of media literacy, one must start with comprehending the nature of media per se. Kress states that there has been a shift from “dominance of writing to the new dominance of the image” (2006: 1), which resulted in a paradigmatic change regarding the importance of the written book page, which has been subdued by the digital screen. Gradually, media gain importance and influence the relationships between humans, knowledge and the world (Kress 2006: 1). Since “[a] medium is something we use when we want to communicate with people indirectly, rather than in person or by face-to-face contact” (Buckingham 2007: 3), it also needs to be acknowledged that “[t]he media do not offer a transparent window to the world. They provide channels through which representations and images of the world can be communicated *indirectly*. The media intervene: they provide us with selective versions of the world, rather than direct access to it.” (Buckingham 2007: 3., emphasis mine).

Furthermore, not only the relationships between message and receiver change as mentioned above, but rather the organisation of every communicative interaction is affected by media, since there no longer exists a one-dimensional system via which messages are produced. In fact, there are two different systems of production and organisation operating, the written, letter-based system and the visual, picture-based system (Kress 2006: 2-4). In this day and age, these systems are inseparably intertwined. The organisation of the screen therefore differs immensely from the composition of a traditional book page. Hence, on screen, the two systems occur simultaneously, alongside different modes, such as visual or auditory cues, which might complicate the decoding of a message for untrained readers. As currently “numerous modal resources” (Kress 2006: 21) are used in crafting a message, special strategies are needed to efficiently understand these multimodal texts. Kress suggests adjusting the “reading paths” (2006: 4) of a page, in order to improve text comprehension.

In this respect, it is repeatedly said (Burn 2007; Buckingham 2007) that due to the changing modes of communication, literacy education needs to adapt in order to encompass the many modalities present in today’s texts. Therefore, the reader needs “critical understanding and active participation”, which facilitates interpretation and “informed judgements as consumers of media, but also [as] producers of media” (Buckingham 2007: 4). As a result, Buckingham (2007: 53-59) proposes a 4-step-model to the critical understanding of media messages, which aims at enabling media literacy. In the following, the four steps, which encompass terms according to which the reader should critically analyse a message are described:

1) Production

All the texts a reader can possibly encounter are “consciously manufactured” (Buckingham 2007: 54) and therefore, display a certain kind of interest. In this sense, it is vital to understand who the text’s producer is and who has control over the production and distribution. Further, it is of interest whose opinions, voices are heard, and whose are not.

2) Languages

This step consists in understanding the different languages present in the text, be it pictures, text or sound, and their specific manner of conveying meaning.

3) Representation

As already mentioned, media only represent reality. Therefore, this step aims at comprehending how media “guide the way of understanding the world” (Buckingham 2007: 57-58).

4) Audience

Lastly, it is also important to define who the audience is and how it is persuaded.

On balance, it can be said that this four-step approach provided by Buckingham is a comprehensive tool via which readers and receivers of messages, and also educators, can approach media. Thus, via this strategy, comprehension of multimodal messages can be improved and raise the awareness of media consumers regarding the messages encountered.

2.4. News Media Literacy

In light of 2016’s presidential election in the U.S., the following type of literacy is a matter of pivotal importance. As a subset of media literacy, Mihailidis (2012) names *News Media Literacy*. Similar to other approaches in the field of new literacies, *News Media Literacy* has a particular issue at its centre, namely the interrelation of “journalism, citizenship, and technology” (Mihailidis 2012: 1). The understanding of this subcategory of media literacy is crucial for understanding the motivations underlying the present paper, since it argues that, due to new technologies, not only reading processes changed, but more so, the consumption behaviour of news changed.

Thus, online and offline readers of news need to keep pace with the ever so rapid changes and to develop new skills to comprehend the recent developments. In this respect, research suggests that while news consumers have fixed ideas about news media, they often lack fundamental

understanding of how these media in question work (Ashley et al. 2013: 17). Therefore, it is essential that the instruction of *News Media Literacy* focuses on skills, as well as on knowledge (Ashley et al. 2013: 8), in order to provide a basis for approaching texts effectively. This means that it is not sufficient to be able to decode a message on the textual and visual level effectively, but also to understand production and dissemination processes of news. Regarding print press, this endeavour seems rather straightforward. However, due to the changing consumption behaviour, the internet is gaining more and more importance when it comes to reading the news, which raises new difficulties as far as learning about such processes is concerned.

In this sense, it can be concluded that literacy gains yet another layer, including news media literacy into the understanding of literacy today. In comparison to former times, where the variety of available news sources was manageable for the common reader, nowadays there seem to be no limits concerning the availability of different news outlets. Therefore, it is necessary to integrate this particular strand of literacy into the bigger picture, since it offers a theoretical understanding of how news production works and at the same time, teaches the reader how to select between reliable and unreliable sources. In this way, readers are equipped with the necessary tools for preventing to become a victim of the vicious circle of fake news. Eventually, it can be asserted that not only the understanding of a text is determined by the reader's degree of *News Media Literacy*, but also democracy and society benefit from increased level of qualification of news consumers.

2.5. Digital Literacies

Similar to the notion of multiliteracies, the area called *digital literacy* covers the manifold layers present-day literacy competence has due to the use of digital media and technology. Still, one might argue that especially nowadays, the boundaries between the different categories of literacy blur, as the majority of literacy-dependent activities occur in a multimedia, multimodal environment. However, in comparison to analogue literacy and other categories mentioned above, digital literacies are defined by the “affordances and constraints” (Jones & Hafner 2012: 13) involved in the use of digital technologies. Or, borrowing the words of Gilster: “Digital literacy is about mastering ideas, not key-strokes.” (1997: 1). In this sense, the area discussed in this subsection refers to the skills needed to master current literacy issues without the particular focus on the technological side, but rather approaches the idea of reading in the digital age on the meta-level, bearing in mind the complex processes involved in virtual meaning making.

According to Jones & Hafner (2012), digital technology impacts the way (social) identities and interaction, as well as thoughts, are produced (2012:12). In order to handle these newly emerged processes, not only the practical knowledge of how to operate different electronic devices is required, but also it is crucial to comprehend the interactive, social nature of communication, which is mediated via these technologies, in order to “creatively engage” in encoding and decoding processes (Jones & Hafner 2012: 12). To exemplify, it is in the online reading situation that the reader can actively create the text via hyperlinks, so that each reading session is shaped by individual choices. In this respect, the competence of handling technology is a “tool to do something” (Jones & Hafner 2012: 13), rather than a determining factor of reading comprehension. Therefore, it is crucial to differentiate between digital literacy education and information technology (IT) or ICT classes, as the latter exclusively concentrate on the operational handling of technology, that is for instance learning to install software, to use search engines effectively, or to configure a network. However, there is more to digital literacy than mastering keystrokes and software upgrades. In this sense, it is best explained using the words of Jones & Hafner who conclude that the term “[...] digital literacies refers to the practices of communicating, relating, thinking and being associated with digital media” and the “affordances and constraints” these technologies entail (2012:13).

As can be seen, the category of digital literacy adds another layer to the multiliteracies’ understanding of literacy, as it is concerned with the multifaceted nature of the online social sphere. Although it might seem that digital reading processes resemble their analogue predecessors, the engagement with the ideas present in the field of digital literacies proves this assumption to be false. Literacy in a digital age borrows fundamental elements from analogue traditional reading, but requires additional skills and competences, practical, social and theoretical ones, in order to be successful.

2.6. Critical Literacy

Bearing in mind the definition of digital literacy mentioned previously, this chapter attempts a smooth transition from the novelty of demands today’s readers face, to the practical tools which enable effective reading in the current context. As has been pointed out earlier, current literacy requires more skills than the mere practical handling or theoretical understanding of communication. To be successful, readers need to engage in critical enquiry, which is composed of “informed judgements” and the understanding of non-linear texts and hypertext (Gilster

1997: 2-3). Also, Buckingham suggests that readers “[...] need to be empowered to make informed choices on their own behalf, and to protect and regulate themselves” (Buckingham 2007: 177). Thus, regarding the different concepts of literacy mentioned so far, it can be said that also *critical literacy* is of paramount importance.

So far, numerous researchers in the field of literacy studies have approached the idea of critical enquiry. The New London Group for instance referred to this concept as “critical framing” (New London Group 2000: 34), which involves “[...] the conceptual tools to understand, select, challenge and evaluate the message of texts, and to recognise who benefits from the media they consume” (Mills 2011: 32). Also, Luke argues that, although IT and ICT education, which intends to train competences of managing machines is important as well, it is the “critical contextual dimension” (Luke 2004:132), which a multiliteracies education must encourage.

When defining *critical literacy*, it is necessary to recapitulate the background to message production. As already elaborated, messages are never neutral, and neither are media, as they do not offer a universal picture of reality but can only represent a subjective part of it (cf. McLuhan 1967). Another element that plays an important role in the production and distribution of messages is ideology. So far, numerous theoreticians have approached this key term from various angles. Since a thorough analysis of the term would exceed the scope of this paper, it will suffice to explain its meaning briefly. In short, the term ideology, as represented in this paper, refers to the fact that there are certain ideas which circulate in the discourse of a society, which are perceived as true and real, without recognizing the fact that these ideas are “possible versions of reality” (Jones & Hafner 2012:98). Therefore, in order to comprehend the full scope of a message, it is essential to consider the previously mentioned points in the critical inquiry of a text and this is precisely, the main objective of *critical literacy*. Or, in the words of Jones & Hafner (2012: 98):

What we really mean by a critical stance is a conscious stance – a stance that puts you in the position to interrogate the ideologies and agendas promoted in the text that you encounter via digital media and by digital media themselves.

Regarding the educational context of critical literacy, Fabos argues, while criticising the commercialisation of the internet, which will be discussed in more detail in chapter 3.1.6., for a different approach towards fact-based school assignments (2007: 178). According to her opinion, rather than searching the internet for facts and “truths”, pupils should be confronted with different opinions, which eventually will lead to the questioning of the different degrees

of ‘trueness’ of messages. As a consequence, this approach towards literacy education would “require that teachers engage students in critical and thoughtful discussions and analyses of issues of equity and access” (Luke 2004: 134). Luke therefore proposes to use the tools provided by critical media analysis and suggests examining texts’ trustworthiness, the manner of representing categories of gender, age and ethnicity, the devices and genres used, as well as the change in language and communication the new media use entails (Luke 2004: 134-135). As a result, Fabos states that such a reflected discussion will stimulate critical engagement with information altogether (2007: 178).

Hence, it can be concluded that critical literacy in practice would entail confronting the background of distributed texts and messages from a conscious, critical point of view and also question its content, its producer and overcoming the idea of universal truth. By this means, Fabos is convinced that “[i]nterpreting a multiplicity of texts (ideas), valuing this multiplicity and understanding its contextual complexity, is to engage, quite literally, in democracy.” (Fabos 2007: 178).

2.7. The other side of the coin – potential pitfalls of the New Literacies approach
However promising these different approaches towards an encompassing understanding of present-day literacy might seem and however productive their pedagogic implementation might appear, there are also some serious obstacles which need to be considered.

While one of the great advantages of technological development is the increasing democratization and participation, it is undoubtedly true that those who have no access to new technology or new media face exclusion (Buckingham 2007: 16). Although access to media and the internet is promoted over wide areas and in institutions, in 2018 many students around the globe still do not have the possibility to use media due to their socio-economic background or geographic location (McKinsey 2014: 22). Further, the degree of competence regarding multiliteracies shows correlations to pupils’ social backgrounds (cf. Warschauer et al. 2004; Henderson & Honan 2008; Chen 2013; Anderson & Perrin 2018). In this respect, Rowsell et al. (2017: 157) state that pupils from an economically weaker background often face “normalized class privileged lives”, suggesting that the standard promoted in education further divides the “digital haves and have-nots”. In this sense, exclusion and inclusion is a matter of different “lifeworlds” (Cope & Kalantzis 2000: 123) and is classified via categories like gender, ethnicity or age. Since also Mills (2011: 59) suggests that both, technological knowledge and knowledge about the medium determine the extent to which a person obtains access, pupils

living in modest circumstances face even more exclusion. Therefore, it is up to the institutions to act, in order to guarantee that every pupil receives equal opportunities.

In addition to the socio-economical gap, which is promoted in the institutional setting, another point of critique must be raised. The educational sector seems to adapt only gradually to the new demands posed by technological and social processes. Lankshear & Knobel summarise this when saying that at the moment, a phenomenon occurs, which is referred to as “fracturing of space” (2006: 31), which describes the gap between the real, physical world and the virtual world. Although the quote belongs to a rather dated source, it is due to the system’s inertia that similar developments can still be observed in schools today. The researchers conclude the following:

We are presently at a point in the historical cultural development of literacy where we don’t really know how to deal educationally with these new literacies. What seems to be happening is that the day-to-day business of school is still dominated by conventional literacies, and engagement with the ‘new’ literacies is largely confined to learners’ lives in spaces outside of schools and other formal educational settings. Insofar as schools try to get to grips with the changing world of literacy and technology (often seen in terms of using computers in the production of texts and textual representations), they often simply end up reproducing familiar conventional literacies through their uses of new technologies. Learners who have access to *both* realms of literacy – the conventional and the ‘new’ – experience parallel ‘literacyscapes’. At school, they operate in one literacy universe, and out of school they operate in another. For some learners, this experience is confusing and/or frustrating. Learners who do not have out-of-school access to ‘new’ literacies may escape this kind of confusion or frustration, but at the expense of not encountering forms of practice that are becoming increasingly prevalent in everyday life. (Lankshear & Knobel 2006: 30)

The point raised by Lankshear & Knobel (2006), namely that there is a gap between the educational world and pupils’ reality, describes not only a major issue which the educational authorities have to handle, it will also be crucial in order to understand the overall aim of this paper, since one of the main objectives of research conducted was to identify this gap and analyse its implications. In this sense, it can be concluded that the present realisation of literacy education needs revision. As the traditional notion of literacy is absorbing multiple literacies, it is of great priority that literacy education reflects these trends of development and urges the different fields of education to collaborate. Therefore, it is suggested that the different disciplines, such as ICT and IT- education, media education and cultural studies should cooperate in order to provide optimal support for students (Luke 2004: 132). In some countries, like Germany or Switzerland, there are already some projects which target this problem,

however, numerous areas still miss the urgently needed instruction regarding new literacies, as can be seen in a later chapter when the Austrian educational context will be examined in the light of its current literacy education.

3. Understanding online reading

Bearing in mind the theory elaborated in the preceding sections, the idea that traditional reading and online reading differ greatly from one another has already been touched upon. As outlined previously, the digital sphere added numerous layers to the traditional concept of literacy and since this is the case, the analogue, offline reading skills and competences do no longer suffice. Not only is it the sheer quantity of available texts online wherein the difficulties emerge, rather, it is the multifaceted nature of the online meaning-making processes that create challenges for some readers. While it is undoubtedly true that both, offline and online reading share some basic competences since both require the readers to activate prior knowledge and use different strategies to “select, organize, connect, and evaluate” texts (Coiro & Dobler 2007: 217), it is particularly in the online context that a broader range of skills is necessary. Here, readers must widen their perspective and develop a “cognitive flexibility” with regard to the immediate, hyperlinked, multimedia environment in which they are communicating (Coiro & Dobler 2007: 217).

In this respect, Coiro & Dobler amongst others, assert that online reading is a “more complex version of traditional literacy” (2007: 244). The complexity of the digital world does not only result from the numerous modalities present. Another factor stems from the fast-moving nature of technology. Updates are published at a rapid rate and bring new “affordances” to old technology (Jones & Hafner 2012: 52), such as real-time messages to be retrieved from anywhere in the world, which appear and disappear in the vast amount of online data from one moment to the next. Thus, each innovation requires the user to adapt his/her skills accordingly to guarantee a successful use of the medium (Leu et al. 2015: 344). This interplay between literacy skills and short-lived technological development can best be summarized using the words of Leu et al. (2015: 344), who concludes that “literacy is not new today; it becomes new everyday of our lives”. Although one might assume that teenagers today belong to the group that best deals with these changes, since they are also frequently called “digital natives”, growing up using new technology, research shows that particularly adolescents experience trouble in the digital world.

Until now, numerous researchers approached the issue of online reading from various angles. In their work, they have attempted to analyse user behaviour regarding different media, new technologies and the internet. Some of the studies also centre issues aligned to the *New*

Literacies. In the following, selected examples are used to elucidate past and present studies in the field.

As mentioned previously, young users, contrary to all expectations, frequently are not the most successful online readers. This can be seen by numerous studies concerned with the process of evaluating sources. Results obtained by early studies by Brem (2011), Grimes (2001) and Metzger (2003) are congruent with the results of more recent examinations, which show that readers of all ages and educational backgrounds hardly evaluate online sources. In this respect, a very disconcerting study conducted by the University of Stanford suggests that students rather choose sources according to their accessibility, than the quality of the content. Evidence gathered by analysts of the University of Stanford show that, when fulfilling a task using online resources, students tend to trust the search engine's selection and listing, disregarding features like the background of the author or the credibility of the website (Wineburg & McGrew 2016). Interestingly, numerous other studies underline this assumption. Amongst others, Kiili et al. (2008), who investigated students in the upper secondary and their source selection and evaluation behaviour, found that for a vast majority of participants, relevance was more important than credibility. Thus, it can be concluded that, regardless of their age, be it pupils, college or university students, a vast majority in every group of participants faces difficulties regarding the selection of quality sources and the detection of misleading information found online.

Another approach to studying online reading behaviour investigates the effects guided literacy training has on reading competence. An interesting example thereof is the study conducted by Leu et al. (2011), who ran a long-term research project at schools with a low level of overall achievement rates. Results suggest that continuous training of online and offline reading skills effects an improvement in the overall reading competence. Similarly, Ashley et al. (2010) and Sanchez et al. (2006), stress the importance of literacy training, after having studied how responses in relation to message credibility between trained and untrained participants differ.

Recent approaches to the study of *new literacies* evolve around topics like *News Media Literacy* (see chapter 2.4.) or are concerned with the readers' emotional responses to messages. In the latter case, Vraga et al. (2009) and Crocco et al. (2017) found that the personal beliefs of readers and their feelings and emotions regarding the topic might interfere with the perception of the story's credibility, and even bias the readers' assessment of a source. The nature of online

reading further emphasises these developments, since online texts and articles are frequently produced with intentions of evoking emotions and stirring up feelings on behalf of the readers.

In summary, research conducted so far suggests that students of any age face difficulties in the online reading context. However, it was shown that when provided with training of the relevant skills, students' literacy competences improve and thus, result in a positive outcome for everyone involved. As a conclusion, it therefore is recommended to include online reading training in literacy education, particularly within the institutional context, and develop target-oriented strategies. Before elaborating on possible objectives and strategies in detail, some vital characteristics and key terminology of online reading will be discussed.

3.1. Key terminology of online reading

Before turning to the terminology, it is important to mention that, when talking about media, one needs to differentiate between the “representational mode”, which refers to spoken and written language, and the “means for distribution”, which are the media per se (Kress 2006: 22). Thus, in the following, some vital terms for understanding these two pillars in the field of media and multiliteracies will be explained, in order to obtain a holistic comprehension of the representational and distributional characteristics of texts in the digital or online context.

3.1.1. *Information*

Numerous researchers claim that due to the development of new technologies, people have to face so called “information overload” (Waddington 1998 in Jones & Hafner 2012: 19). At first glance, this assumption might make sense. However, Jones & Hafner challenge this notion by explaining that there is a crucial distinction to be made between information and data (2012: 19). According to the researchers, the former refers to “the facts” which can be encountered in the world, the latter, on the other hand, refers to result of the individual's effort of relating to data. In this sense, data become information “when we create some kind of relation with them” (Jones & Hafner 2012: 19). In this sense, the researchers conclude that

[...] information is not about ‘facts’ so much as about the relationships that we create between ourselves (and other people) and those facts, and between different facts. [...] In other words, we would like to argue that information is most usefully seen not as a collection of facts, but as a social practice based on establishing relationships. (Jones & Hafner 2012: 20)

Besides the problem of approaching the amount of available information, Jones & Hafner name readers' ineffective means of filtering the important from the unimportant items as a key issue

(2012:20). Consequently, after the detection of data and the consecutive establishing of relationships between data and reader, it is the information obtained which generates knowledge via transformation and application (Jones & Hafner 2012: 19). Hence, rather than suffering an overload, it is up to the user to detect, select and “create information from the data that is available” (2012: 19), according to the situational and contextual needs. Thus, the successful application of the principle of relating to and discarding data encountered prevents an information overload and helps the readers distinguish between relevant and less relevant data.

With respect to the relationships described earlier, which the consumer establishes between him/herself and different facts, it is essential to understand that this process is also subject to change. Kress & Jewitt for example claim that online reading is organised via “bite-size chunks” of information (2010: 345), while in former times, input was generally speaking larger and required more effort on behalf of the reader to access and filter relevant information. In this sense, it can be asserted that the consumers’ changing attention towards elements found online determines the selection of data, which is processed further to information. In today’s digital age, the so called “attention economy” (Lankshear & Knobel 2006: 19) is a decisive criterion in the process of choosing one piece of information, while disregarding another. As a consequence, this fact has far-reaching implications for consumers in the worldwide web, since a large quantity of advertisers and companies capitalise on their online behaviours via cookies, customised algorithms or even keystroke data.

Regarding the organisation of data in new media, it can be asserted that there are manifold ways of structuring, arranging, finding and filtering data, which will not be discussed in detail, as this would exceed the scope of this paper. It should therefore be sufficient to mention some examples for the organisational regulation present in digital media. To exemplify, a keyword regarding organisation would be hypertext or hyperlinks, as well as tagging via hashtags, and for the search-process, the existence of algorithms is crucial. However diverse the existing technological strategies may be, it is important to stress that users need to be conscious about these mostly covert processes, as they determine the final outcomes of each digital inquiry. Therefore, it is essential to critically evaluate the relationship of the data obtained, with “other pieces of data and different kinds of people who have either produced, used or recommended them” (Jones & Hafner 2012: 31).

3.1.2. Participation

In contrast to the traditional forms of literacy practices, the digital world is characterised by immediacy. Particularly notable in this respect is the change of the relationship between sender and receiver of a message. Jones & Hafner (2012: 42) explain that this change has been caused by the transition from “web 1.0”, which was a space where only reading was possible, to “web 2.0”, in which writer and reader can equally contribute texts. Often, this is done in a quite immediate manner, for instance in comments, wikis, social networks or blogs (Jones & Hafner 2012: 42). Jones & Hafner summarize this development in the following words: “[The] shift in relationship between reader and writer, with readers now empowered to write back and contribute their own point of view” (Jones & Hafner 2012: 43).

In comparison to the traditional notion of literacy, which exclusively referred to the cognitive ability of making sense of letters, words and sentences, the broader, more recent, idea of literacy includes the productive aspect as well. Particularly, new media are characterised by their interactivity and their nature of facilitating creative contributions, which can be generated with minimal effort. However, it needs to be differentiated between interactivity of “interpersonal” relationships between author, text and reader, and the media-specific relationships within a text like “hypertextuality” (Kress 2006: 5). The latter will not be discussed in detail in this paper, as it would move its focus too far into the technical aspect of new media. Thus, the idea of digital media being collaborative spaces, in which the boundaries between time and space, writer and reader, producer and audience, blur, is a core element of the approach towards multiliteracies taken in this paper. No longer is the literate person confined to the space of consumption, he/she is also a text producer him/herself.

In other words, the properties of new media permit participatory practices to take place, which again, are beneficial to the development of different skills relevant for the workplace, private life, intercultural situations and democratic participation (Jenkins 2009: xiii). However, as already explained, not everyone obtains equal chances to participate, which results in what Jenkins (2009:15) calls the “participation gap”. Therefore, it is also essential to adapt literacy pedagogy practices, in order to meet different needs.

3.1.3. Multimodality

Regardless of its origin, text production, be it written or spoken, has always been inherently multimodal. This means that there is an “interrelation of two or more modes” to be perceived,

which are determined by the user group and the social and cultural background (Mills 2011: xiii). However, over time, as new media emerged, the relative number of modes present has increased. To exemplify, it is in digital media that visual and auditory stimuli appear together with videos, graphics and animations. This increase in elements accompanying the core text asks for a special kind of literacy, which comprehends them all, ideally at the same time. In order to comprehend modern day texts, be they digital or analogue, it is not sufficient to understand how language works. The nature of the multimodal texts require the understanding of all different modes and how they are intertwined (Kress & Jewitt 2010: 344). In this respect, it is argued that texts nowadays are produced using “several languages” (Buckingham 2007: 4) and amongst them, some languages are more, and some less apparent, which results in the obsolescence of traditional approaches to literacy-education.

In this regard, Jones & Hafner stress the impact of the visual, when arguing that

[I]t is increasingly important for readers and writers to understand the logic of visual communication. The users need to be aware of the affordances and constraints of text and images, [and] how image and text can be combined to make meaning. (Jones & Hafner 2012: 52).

Similarly, The New London Group underlines the significance of the “visual design” in online and multimedia contexts (New London Group 2000: 29). Consequently, it is once again to be stressed that this multimodal context and the shift in the readers’ attention “from page to screen” (Jones & Hafner 2012: 53) require a different approach towards literacy, as there are more layers to the core text. In this respect, it is recommended to read a text using “alternative reading paths” (Kress 2006: 4) which foster the comprehension of multimodal texts and to find “metalanguages” (Mills 2011: 132) to discuss the findings adequately.

3.1.4. Mediation

The term mediation refers to the idea, that “all human action is mediated” (Jones & Hafner 2012: 99). This means that in order to do something, express something, think something, or create something, one needs a tool which enables the performance of an action or a task. In this sense, a medium is a necessary tool, via which something is created. In order to understand what has been created with the help of this tool, one needs to understand how this tool functions. Therefore, the user of a medium needs the medium to accomplish his/her action and at the same time, the medium determines the process (Jones & Hafner 2012: 99).

Bearing in mind this definition of mediation, it is Jones & Hafner (2012) who claim that both, the medium and its user exert power over each other in different ways. Regarding the power exerted by the medium, there are four different types to distinguish. Firstly, it is crucial to acknowledge that “[d]ifferent tools make some actions more possible and some actions less possible” (Jones & Hafner 2012: 100). The nature of the medium therefore determines the level of participation. Secondly, the medium’s past use determines its present use, which is adjusted according to the historically developed “social rules” (Jones & Hafner 2012: 100). Thirdly, it is the diverging accessibility of a medium which exerts power. Often, the people who are able to access the medium, due to their socio-economical background, promote their dominant ideology and exclude those users who cannot access the medium (Jones & Hafner 2012: 100.). Lastly, the degree of understanding how the medium works is essential regarding its accessibility and significance, as Jones & Hafner (2012: 100) suggest that media which are easier to use are more frequently used and therefore, are considered as something “natural”.

With regard to the power the medium’s user exerts over the tool, Jones & Hafner name four different categories, which stress human agency over media. To begin with, the user is free to choose which medium he/she wants to use. Further, one can adapt media according to one’s personal purposes. Then, it is possible to change media to match one’s needs, and lastly, the user can mix one or more tools and use them together. In conclusion, it is suggested that the four categories, “appropriating”, “adapting”, “modifying” and “mixing”, which the authors refer to as “hacking”, are the vital elements that contribute to the users’ possession of control (Jones & Hafner 2012: 100-101).

3.1.5. Media Ideologies

Media ideologies determine the way, we use and comprehend media (cf. Gershon 2010). Therefore, neither the different media nor these ideologies “can not be understood in isolation” (Jones & Hafner 2012: 121), as each medium influences the user in his/her interaction with other media. Bearing in mind Jones & Hafner’s notion of the four elements of control mentioned in the previous chapter, it is argued that “media become ideological when they become resistant to hacking” (2012: 101). In this respect, the authors name two reasons to explain the process of becoming ideological. Firstly, it is the medium’s transparency, which effects that media are no longer perceived consciously and therefore, one forgets about its existence while using it. And secondly, it arises from becoming “opaque”, which means that it is no longer possible, to comprehend how the medium works. Often, these two processes appear together in the

development of a medium (Jones & Hafner 2012: 102.). This phenomenon has been described as the “transparency gap” (Jenkins 2009: 15), which develops between the competent user and the incompetent user.

The process of ideologization of a medium can be illustrated with the example of language. Jones & Hafner (2012) suggest that language, similar to media, “create meaning” and “promote ideology”, as both have overt and covert agendas and can never be objective in their nature (2012: 103-104). Further, the author of a text consciously chooses certain stylistic devices, genres or style of language in order to promote his/her agenda (Jones & Hafner 2012: 105). Similarly, media use comparable strategies and even regulate the users’ thoughts via selecting “discrete alternatives”, which “impose on reality systems of inclusion and exclusion” (2012: 107). Frequently, users are oblivious to the fact that the medium offers certain paths for each reader and thus, can never be neutral per definition. This problem can be better explained using a concrete example, namely the use of algorithms. For instance, on Facebook the underlying programme actively selects and recommends certain links, pages or events to the user, according to his/her browsing habits. Thus, it has to be taken into consideration that neither language, nor media can be neutral or even non-ideological.

3.1.6. Validity and evidence

As suggested by Coiro (2003b: 31), there is no “quality control” on the internet, which ensures that the “overwhelming” amount of information is reviewed and texts from unreliable sources are eliminated. Quite the contrary is true. In the world wide web, it happens easily that one encounters outdated information, or texts which are biased by “hidden social, economic, and political agendas” (Coiro 2003b: 31-32). Therefore, it is vital to critically evaluate online texts, because anyone can be the author (Leu et al. 2011: 4). Although the internet serves as a versatile collection of different opinions, information and other data, it is crucial to understand that, due to its nature, the users need to adopt a different stance when reading texts online than when reading print articles, since the process involved in publishing the latter usually ensures reliability and validity which online articles frequently lack.

Another crucial issue regarding this topic is concerned with the commercialisation of the internet. Not long after the gradual extension of the internet, businesses and advertising firms became aware of the seemingly endless possibilities of the online marketplace. This resulted in an increase in advertisements and sponsored content on webpages. As an example, Fabos argues that even search engines, which are usually perceived as objective tools for browsing the world

wide web, have “morphed into advertising conglomerates” (Fabos 2007: 169). The order of search results is never arbitrary, but rather reflects the investments big companies make, in order to lead the list which the search engine provides for its users. This development does not only have noticeable impact on online content, but also it influences the way in which users access information.

Particularly adolescents are in danger of being trapped by the biased information. Numerous studies have approached this issue (e.g. Jenkins 2009; Coiro 2003a, 2003b) and have provided evidence supporting the assumption to be true. To exemplify this argument, Fabos states that especially untrained users of the internet tend to use the easy option and organise their way through the internet by means of appealing design and easy accessibility, because “fast-facts [...] easily satisfy the requirements of students’ fact-based assignments” and “any fact will do, as long as it *seems* correct” (Fabos 2007: 172). Furthermore, Grimes (2001) and Kiili (2008) both conducted research which sustain these results. The researchers analysed student papers according to the evaluation and use of sources and concluded that, although being students at the higher level of education, they did not evaluate online sources and included information from unreliable websites in their papers (Grimes 2001; Kiili 2008). Similarly, Jenkins showed that teenagers assumed the facts presented in a historical computer game were true. Thus, the players did not question the stance the game took on the American Revolution, instead they believed that the fictional game presented an authentic account of historical events (Jenkins 2009: 20)

In this sense, it is important for a competent user of the world wide web to be aware of the different downsides encountered on the “information superhighway” (Fabos 2004), which often have to do with a lack of evidence, bias or hidden advertisements. Pupils are particularly susceptible to the various deceptions and must therefore be trained in new reading skills which prevent them from falling into these traps. Amongst researchers in the field, there is consensus about the need of strategies for successful online reading. Therefore, in the following chapter, some of the most interesting approaches and suggestions regarding strategies to successfully perform online reading will be outlined.

3.2. Strategies for online reading

When teaching reading to language learners, one tactical approach is to organise the reading event into three stages, with a pre, while- and post-reading activity. While this approach may

be useful for traditional teaching situations where analogue materials such as books or printed articles are used, the idea of the three stages seems to cover the issue insufficiently, since today's readers do not longer find themselves reading one-dimensional texts. In fact, reading in the online context has manifold layers as articles may be constructed via hyperlinks and interactive page designs. In this sense, one text may consist of numerous other texts which can be directly accessed while the reader is still reading the initial text and thus requires a more flexible approach to reading comprehension. Due to the fact that the present-day situation is characterized by different media, modes and compositions of texts, the focus and the function of educational frameworks towards reading change. Coiro (2003b) sums up the development as follows:

With traditional texts, pre-reading thought processes focus on questions such as the following: What will happen next? What do I know about this topic? What is the author's purpose? What do I expect to learn from this text? Within the interactive Web-based environment, however, proficient readers also need to plan answers to questions like these: How should I navigate this information? How can I expect to interact with my environment? What is my role or task in this activity? How can I add to this body of knowledge? (Coiro 2003b: 460).

Researchers like Leu et al. (2011) suggest approaching the problem of online reading comprehension via *Reciprocal Teaching*. The idea behind this method of teaching media competences resides in the gradual adoption of responsibilities on behalf of the students. After being instructed by the teacher, learners discuss an online reading task in small groups, in which learners take turns in the moderation of the discussion. This interactive process leads to the development of "metacognitive strategies", which eventually "become self-regulated and transfer to new reading contexts" (Leu et al. 2011: 5).

In addition to the ideas provided by Leu et al., one could approach a text based on Facione's (2013) 6 core properties for critical thinkers, which are "interpretation, analysis, evaluation, inference, explanation, and self-regulation". The first characteristic is defined as "includ[ing] the sub-skills of categorisation, decoding significance, and clarifying meaning", while the second characteristic consists in "examining ideas, detecting arguments" and analysis thereof (Facione 2013: 5). Then, the next two elements, evaluation and inference, are described as supporting the evaluation of a text's credibility based on examining the logic of the arguments presented, "querying evidence", and "conjecturing alternatives" (Facione 2013: 6). Finally, experienced readers show two more attributes, namely explanation and self-regulation, due to which readers "explain[ing] what they think and how they arrived at that judgement" and as a consequence, draw conclusions to "improve [...] previous opinions" (Facione 2013: 6).

Concluding the examination of these 6 core attributes, the author suggests, that the acquisition of these properties will ultimately effect a critical engagement with a text (2013: 5-6).

While Facione (2013) does not explicitly refer to how readers can acquire these 6 properties, Sanchez et al. (2006) propose practice as one possible way for raising awareness of critical engagement with texts. In this respect, research conducted by Sanchez et al. (2006) shows a significant correlation between the readers' online reading competence and previous sensitisation for the matter (Sanchez et al. 2006: 666). The focus of the study conducted was not only on online reading comprehension, but more so, on the discrimination of reliable from unreliable sources, which undergraduate students were supposed to use in their academic essays. The researchers developed a customized educational unit, which they called "SEEK-training" (Sanchez et al. 2006: 662). SEEK is an acronym composed of the four "key areas", which the researchers identified as crucial in the process of source evaluation. The first letter, which equals the first step, stands for "source" and is aimed at investigating the text's origin. The following two steps "evidence" and "explanation" foster the analysis of the evidence presented. As a last step, users of the SEEK strategy should activate prior knowledge with regard to the text's message and through insights gained with the four steps deciding, whether a source is reliable or not. Other studies also support the argument that training affects readers' online reasoning processes (e.g. Ashley et al. 2010).

For Coiro & Dobler (2007) online reading expertise lies within the application of four elements, namely activating prior knowledge, making inferences, regulating oneself and "affective variables" (2007: 218). Evidence show that these four elements contributed to the success of reading online, since effective readers tried to connect their prior knowledge about the text to what they "read between the lines", and if their application of strategies was not successful, they returned to a previous stage where they re-evaluated their strategy use in order to optimize it (2007: 240). In a later publication, Coiro develops these elements further into an "four-stage flexible online reading plan", which consists of 1) "plan of attack", 2) "navigating and negotiating online texts", 3) "monitoring comprehension of and pathways through online texts" and 4) "responding to online text" (Coiro 2011: 108). Both, the earlier and the later version of the four-steps might be beneficial to teaching reading in the educational setting, and eventually, when trained continuously, enter the students' mind-sets as an automated process of analysing texts.

Another interesting plan of action, although not exclusively for the application in the online context, but for broader situations where media are involved, is provided by Hobbs (2011), who proposes the “media literacy remote control” (Hobbs 2011: 52). When encountering any mediated message, the receiver should consider the following metaphorical buttons:

- True/False (Is the information presented correct/incorrect?)
 - Private gain/Public good (Who benefits from this message?)
 - Good/Bad (How do I personally evaluate the message?)
 - Read between the lines (What is the hidden message?)
 - What’s left out (Which information is deliberately not presented? Why?)
 - Record/Save for later (Can I use this information later?)
- (Hobbs 2011:52)

These buttons support media consumers in comprehending the range of a message beyond the surface level. In the educational context, Hobbs suggests using the remote control in classroom discussions and to include critical questions, which prompt students to reflect on the mediated message they consume (2011: 55).

With regard to the issue of superficial analysis, it is frequently argued that the majority of today’s media users are accustomed to the view, that media are means of entertainment. Therefore, the users usually consume without critically reflecting on the messages or modes present. As a solution to this problem, Hobbs (2011: 57) proposes close reading and close analysis which is based on three columns – “authors and audiences”, “messages and meanings”, and “representation and reality”. First, it is crucial to examine the background of the author and his/her motivation for writing the present text. Secondly, one should investigate which strategies are used to attract the reader’s attention and what meaning is conveyed. Thirdly, the manner of representing reality needs to be studied, taking into consideration which aspects are included and which are omitted. Consequently, it can be argued that via the application of both suggestions by Hobbs, the media remote control and the three columns, a critical analysis of messages which surpasses the surface level, could be achieved (2011: 57).

In conclusion, it can be asserted that the effectiveness of online reading and source evaluation is dependent on the application of certain strategies. Since research suggests that readers improve their reading and evaluation skills through training, it can be suggested to foster the instruction of these skills in the EFL class. In this respect, the SEEK approach by Sanchez et al. (2006) emphasises the critical elements, namely source, evidence, explanation and prior knowledge, which a convenient framework for analyses of online texts requires. In combination

with the guiding questions proposed by Hobbs' remote control (2011) and the 3 columns, the SEEK unit can definitely be an effective tool for approaching texts in the digital context and facilitate the readers' evaluation of a text's credibility. Since the research conducted in this paper seeks to analyse the status quo of Austrian EFL learners, there will not be a separate teaching sequence preceding the examination. Thus, a combination of Sanchez et al. and Hobbs' ideas will serve as the underlying framework for understanding the participants' behaviours while reading.

4. Fake News

The term “fake news” has become almost a joke; a tongue-in-cheek reference used by a society in which belief in any news is spiralling downwards. The term is also extremely polarizing, both socially and politically. And seeing a market in which polarized headlines sell, both “real” and “fake” news producers are contributing to this post-truth mess. News is being upsold on the notion of opinion. A neutral and objective story is being lost.
(Rochlin 2017: 368)

Journalism occupies a “central role” in democratic processes, since it is journalistic professionalism that contributes to “truth-seeking” and “sense-making” in the news, and the world respectively (Ashley et al. 2016: 145). But, since new technologies are characterised by their fast-moving nature, participatory nature and competition for the most clicks, it becomes more and more difficult to differentiate between professionalism and partisanship. Ever since the U.S. presidential election and the U.K. Brexit campaign in the years 2015/16, the term fake news has received attention from journalists, news consumers and researchers alike. The related term *post-truth*, which is an adjective to describe a situation, where factual information is disregarded for emotional beliefs, even managed to become elected as word of the year by the *Oxford Dictionaries* in 2016 (*Oxford Dictionaries* online, 2016). Today, it seems that these phenomena continue to stir emotions, and educators, researchers and citizens around the globe call for urgent action. In the following, a brief overview of the issue of fake news, from its definition, to suggested classifications and possible strategies to combat fake news will be attempted.

4.1. Definition

While the *Merriam-Webster Dictionary* traces the roots of the term fake news back to 1890 (for details see *Merriam-Webster Dictionary*, s.v. *fake news*), the underlying concept of fake news has been present for an even longer period of time (Tandoc et al. 2018: 138). At present, researchers like Brodnig (2017: 29) and Allcott & Gentzkow (2017) define fake news as the deliberate production and distribution of a text which carries incorrect information, with the goal of manipulating and deceiving the readers, often in connection to political or commercial agendas. While this is one of the more comprehensive attempts of defining the term, it is often claimed that such definitions are too vague and susceptible to being abused. The latter can be observed, for example, in how the president of the United States, Donald Trump, uses the term

fake news. Quite in line with the above stated definition of the phenomenon, Trump frequently uses fake news for describing texts published online and offline. However, and that is the vital difference, Trump uses the concept to denounce critical media and unpleasant journalists (Flegenheimer & Grynbaum 2018), rather than condemn the publishing of false information. Therefore, professionals of various fields, like Berghel (2017), Wineburg et al. (2017) and Wardle (2017) ask for the introduction of a new, unbiased term.

Another crucial question regarding fake news concerns its production and the reasons thereof. Since there is an abundant number of trustworthy news-sources, one might pose the question, how fake news became the centre of attention and why they exist in the first place. With regard to the first question, Tandoc et al. (2018) and Allcott & Gentzkow (2017) explain that the underlying algorithms used in social media might have to do with the rise in attention which fake messages receive. Thus, it can be seen as a fact that the more interaction an article gets, the likelier it is shared and recommended, and consequently, it becomes more visible in the online network (Tandoc et al. 2018: 139). So, to visualise this one only has to think of an article in one's newsfeed with a sensational headline – having succumbed to the temptation of clicking on the link, the algorithms present vault the message up the information stream. Furthermore, online readers using social media, face the problem of being trapped in the so-called *filter bubble*. This phenomenon refers to the situation one encounters on Facebook and similar networks, which are formed of like-minded people. In these homogenous spaces, readers usually read articles in conformity with their beliefs, a phenomenon referred to as the “selective exposure theory” (Rochlin 2017: 387). Thus, readers who receive news exclusively from these networks “are less likely to receive evidence about the true state of the world that would counter an ideologically aligned but false story” (Allcott & Gentzkow 2017: 221). In conclusion, the combination of catchy, sensational headlines, together with the boundaries of the filter bubble results in a distorted image of the coverage a particular story receives.

Apart from the nature of online discourse, characterised by immediacy, short-lived messages and uncontrolled user-generated content, there are other features which motivate the publication of fake news. As far as these motives are concerned, there are two recurrent ideas to be identified. The first in this list of objectives for publishing fake news, is financial profit. In this respect, one needs to examine yet another viral phenomenon called *clickbait*. This term refers to articles, which, via the use of linguistic or visual cues, aim at attracting the reader's attention, so he/she wants to click on the link and read the text. As a result, due to the careful placing of

advertisements, each ‘click’ translates into an increase in revenue. In this sense, Rochlin (2017: 390) criticises that profits are made by “targeting people’s closely held beliefs and opinions”. Similarly, Bakir & McStay (2018: 155) summarise that “[..] at heart, the fake news problem concerns the *economics of emotions*: specifically, how emotions are leveraged to generate attention and viewing time, which converts to advertising revenue” [original emphasis].

The second motivation for publishing fake news listed here is for ideological reasons. Taking into consideration the U.S. American presidential election again, it was found that out of a total of 156 fake news articles, 115 were skewed in favour of Donald Trump and 41 in favour of Hilary Clinton (Allcott & Gentzkow 2017: 212). Studies show that particularly these articles received abundant attention during the electoral campaign. In cases like this, it can often be observed that the websites promoting false information are deliberately designed like their professional counterparts¹. Not only their name and hyperlink, but also their visual appearance resembles the original and thus, aims at deceiving the readers (Allcott & Gentzkow 2017: 217). Not only is it becoming increasingly problematic to filter the vast amount of information found online, but also, due to the fact that some accounts might be more and some less credible, the online reader faces new challenges of discriminating between fact and fiction. Thus, this difficult situation results in overburdening the readers and at the same time, since fake news seeks to replace traditional news, in undermining the legitimacy of professional journalism (Tandoc et al. 2018: 147)

The nature of the internet further contributes to the problem of fake news since it is the case that not only misinformation is hard to identify and to detect, but also that the majority of misinformation is not eliminated nor is it unmasked as a hoax. So, the readers share the message without knowing that they spread wrong information. Also, studies suggest that it is difficult to reverse the effect of misinformation. Readers, even though they were confronted with the fact that the messages read were untrue, still do not manage to rethink their “attitudes” towards a situation completely (De keersmaecker & Roets 2017: 107). Furthermore, it is assumed that the more frequently readers encounter a certain lie, the more likely they are to believe it. Brodnig bases this assumption in Hebb’s theory of learning, which states that frequently recalled brain connections establish a dense network of synapses (Brodnig 2017: 110). In this sense, it can be supposed that with each instance of reading a message, the brain’s network densifies and as a

¹ One of the most notorious sources which fools readers into believing to be a renowned news site, namely *washingtonpost.com*, can be found under *washingtonpost.com.co*.

consequence, the likeliness of believing a message, increases. The author refers to this phenomenon as the “illusory truth effect” (Brodnig 2017: 110), which can be summarised using the words of Crocco et al. (2017: 67) claiming that

[w]e process information in ways that reinforces our existing beliefs, values and ideas. We spend more time critiquing information that challenges our views, and we seek out information that reinforces our views. (Crocco et al. 2017: 67)

In combination, these present realities contribute to the far-reaching repercussions of fake news, which frequently endanger not only the individual reader, but due to the social, digital networks in use, also the general public. Particularly, as will be outlined in the following chapter, adolescents “at a pivotal point in their psychological and social development” are at risk of deception (Crocco et al. 2017: 68).

4.2. News consumption behaviour and the role of social media

When defining fake news and its implications, it is inevitable to consider the changed media consumption behaviour of today. In this context, Mihailidis & Viotty (2017: 4) highlights that the “digital media ecosystem” is changing. When in former times, news was spread via printed newspapers, on the radio or on institutionalized channels on TV, today’s reality is drastically different. Allcott & Gentzkow (2017) for example, claim that a majority of U.S. Americans consume news via social media. Shockingly enough, Silverman (2016b) also found that during the presidential election, “the most popular fake news stories were more widely shared on Facebook than the most popular mainstream news stories”.

While it is true that the traditional channels still exist, younger users, who sympathise with digital media, show in how far the consumption behaviour has changed. Hence, they receive their news input rather from social networks than from traditional sources. Regarding online news consumption in U.S.-American adults, a survey revealed that Facebook is not the main source for obtaining news, but that it often provides news incidentally (Mitchell et al. 2013). While researchers like Patterson (2007) sense a disengagement of youth, regarding news and everyday topics, Marchi (2012) concludes otherwise. In her study, results suggest that although young people abstain from traditional news consumption, they are eager to investigate certain topics using “alternative ways” (2012: 248). Findings by Rosengard (2014) and Mitchell et al. of the Pew Research Center (2013) support this argument. The latter found that, “less engaged” adolescents are particularly likely to resort to Facebook to obtain news (Mitchell et al. 2013).

With respect to adolescents' social media behaviour, Ashley et al. found that adolescents use a "variety of media sources", first and foremost, different social media platforms (2016: 150). The majority of the teenagers stated that they primarily use these tools for communicating and interacting with friends (Ashley et al. 2016: 151). However, the study suggests that social media also play a role in the reception of news, which is considered as "valuable institution" and also, the participants consider it important to follow current affairs (Ashley et al. 2016: 151-156). On the one hand, these conclusions might sound quite positive, but on the other hand, numerous researchers like Marchi (2012) suggest that adolescents, rather than actively pursuing the latest news articles, they often passively consume news, and particularly in social media, do so only superficially. In this respect, Gabrielkov found that in more than half of the cases of sharing an article on Twitter and Facebook, readers only read the headline, not the whole text, before the users share them with their community (Gabrielkov 2016: 182). In addition, Ashley et al. claim that although adolescents consider news to be important, they engage in a rather "incidental news exposure", which Spohr (2017: 155) refers to as "news-finds-me" attitude.

Furthermore, not only social media is an important source for obtaining an insight into current affairs. Also, research stresses (Crocco et al. 2017; Huang 2009), the impact of "trusted adults", mostly parents, relatives and friends, when it comes to "filter[ing]" and "pointing out important issues and explaining their relevance" (Marchi 2012: 251) in relation with news consumption. Therefore, it can be asserted that the situational context is vital to access and comprehension of news, as it derives from real social networks and digital ones like Facebook, Instagram or Twitter. As has been outlined previously in this chapter, adults and adolescents are frequently using Facebook and other social media for obtaining news and therefore, it might be problematic to rely on these groups and their opinions, since they might also lack successful news evaluation strategies. Thus, it is important to consider the risks of the situational and affective contexts, since "media spectacles" can occur, which certain "online communities of like-minded citizens can create, extend and sustain [...] with little support from mainstream media" (Mihailidis & Viotty 2017: 2). In this sense, it has to be said that not only social networks, and the bubbles in which the reader finds him/herself might influence the perception of valid, trustworthy texts, but also real, social networks.

In addition, the affective responses these networks of trusted people evoke, might result in an increase of the amount of attention, the online or offline audience pays to a certain message (Bakir 2018: 155). This phenomenon is frequently referred to using the adjective *post-factual*,

which denotes a situation, in which stories that generate emotional turmoil are considered to be more credible, although on the factual side, they might not be true. Or how Rochlin (2017: 386) puts it, it describes stories in which “[...] facts and evidence have been replaced by personal belief and emotion [...]”. The author even reinforces the argument claiming that according to his definition, fake news no longer concerns the deception of the reader via publishing dubious content, but rather it “is seen to attack a person’s pre-existing beliefs” (Rochlin 2017: 386). Since, online publishers use this defect momentum for generating financial benefit or fuelling polemic discussions, at the cost of the story’s factual basis, Bakir (2018: 166) suggests close “scrutiny” of “digital advertisers”.

In conclusion, it is important to reflect on the role of these filter bubbles and social networks and their unsettling effects. Particularly youngsters rely on online or offline networks of people surrounding them, when it comes to discriminating fact from fiction. However, also adults frequently struggle with successfully evaluating sources and news outlets. Thus, it can be concluded that adolescents, since they depend on networks of trusted information-sharers, like parents or other adults, are particularly at risk when it comes to the dissemination of fake news and other types of misinformation.

4.3. Classification of different kinds of fake news

After retracing the current developments regarding fake news, the following section seeks to create an approximation to the classification of fake news. Since fake news in the online context is a relatively new phenomenon and constantly changing, there is no unique, comprehensive typology of different subcategories yet. However, so far, a number of researchers in the field have tried to approach such a typology, aiming at explaining in more detail which kinds of misleading messages can be encountered online. In the following, the more elaborate approaches will be outlined. First and foremost, this shall serve as an introduction to the topic, but also this chapter shall provide a basis for the latter part concerned with the empirical research which was conducted for the purpose of this thesis.

The first classification to be mentioned is provided by Tandoc et al. (2018), who published a literature review on scholarly articles dealing with fake news. The focus of Tandoc et al. (2018) therefore lies within academia and aims at reviewing different scholarly definitions of the term. Thus, via analysing a number of academic articles from 2003 to 2017 (2018: 141), the researchers identified a variety of different types of fake news. Therefore, the typology

proposed encompasses six categories and is based on the fundamental distinction between “facticity” and “intention to deceive” (Tandoc et al. 2018: 147). Based on these two pillars, the researchers argue that any type of fake news can be arranged on a continuum from high to low. The categories mentioned are “news parody” and “satire”, as well as “advertising”, “propaganda”, “manipulation” and “fabrication” (Tandoc et al. 2018: 148).

TABLE 1
A typology of fake news definitions

Level of facticity	Author's immediate intention to deceive	
	High	Low
High	Native advertising Propaganda Manipulation	News satire
Low	Fabrication	News parody

Figure 1. Continuum of fake news definitions (Tandoc et al. 2018: 148)

Another approach to categorise fake news online, was provided by Melissa Zimdars (2016), who compiled a vast list of misleading sources. Via the use of *OpenSource*, a platform which allows for virtual collaborations, she and others have until now listed and categorised 944 websites, which were analysed according to a uniform scheme consisting of 6 steps, which will be described at a later point of this chapter. Further, after the analyses of the websites, they were tagged according to four, and after an update twelve categories. In the first approach towards a classification of these websites, Zimdars distinguished four broad categories of fake news:

- 1) fake, false or regularly misleading information
 - 2) misleading and/or potentially unreliable information, which also might “present meanings as news”
 - 3) hyperbolic or clickbait-y headlines, published by sources which “otherwise [are] reliable”
 - 4) messages which are “purposefully fake with the intent of satire/comedy”
- (Zimdars 2016: 1)

In an updated version of the classification, which is also accessible online, Zimdars defines 12 sub-categories, which allow for greater stratification than the initial framework of only four categories. These twelve categories were translated into tags and used to classify the 944 websites listed according to the nature of the (mis)information provided. The following represents these 12 sub-categories which were translated into tags, according to which she and the collaborators label the websites they encounter online:

- Satire
 - Extreme Bias
 - Conspiracy Theory
 - Rumour Mill
 - State News
 - Junk Science
 - Hate News
 - Clickbait
 - Proceed with Caution
 - Political
 - Credible
- (Zimdars 2016: 2)

When one browses through this extensive list, numerous sources are to be found, and one can see the work which was required to conduct a thorough analysis like this. In addition to the categories provided, Zimdars also suggests a 6-step guide to evaluating sources. First, she suggests analysing the domain name (1), to find out whether it is a personal blog or a regular website. Then, it is recommended to examine the *About-Us* section of the website (2) and crosscheck the information provided. After examining the sources provided by the author of the text (3), Zimdars proposes to scrutinise the website's layout and design (4), as well as the writing style of the article (5). The final step is the so called "social media analysis" (6), in which the website's social media presence is investigated, in order to find out whether the outlet publishes clickbait articles or other attention-grabbing posts (Zimdars 2016: 2).

In sum, Zimdars' typology of different fake news categories and her 6-step guideline to analysing online content gives advice for detecting misleading content in this particular context and can definitely be considered a useful tool for educators, students and internet users in general. Nevertheless, Rochlin (2017: 389) considers Zimdars' comprehensive analysis to be ineffective since categories like "credible" and "political" provided can be read in both directions. To exemplify, Rochlin outlines the controversy which arose concerning the former US- president, Barack Obama, and his birthplace. In this respect, Rochlin states that both sources, the one which testifies that Obama was born in the US, and the other, which allegedly proves the opposite, can be regarded as fake news, depending on the readers' belief-system (Rochlin 2017: 389).

Thus, Rochlin's arguments show, that until now, no stable typology regarding the definition of fake news has been developed. And if there is a comprehensive framework, it still is open for criticism and change. However, putting aside Rochlin's criticism and focussing again on journalistic and civic professionalism, one might presume that readers are able to overcome

In comparison to the approaches outlined so far, Wardle's profound typology offers seven convenient categories, which help to understand the nature of fake news. Most importantly, Wardle's framework explicitly addresses an important issue in the discussion about fake news, which also Tandoc et al. (2018) incorporate in their paper – namely intention. Not always are messages falsified just for entertaining or hoaxing the reader, very often indeed, messages are produced, published and disseminated in order to deliberately deceive the consumers to evoke an untrue picture of reality. Thus, at this point it is vital to understand that messages which are created and published for solely one reason, namely, to deceive the reader, is the main problem in the online world.

In this respect, it is important to address a prevalent issue of the discussion. As can be seen in the descriptions of typologies above, most researchers and experts count satire as part of fake news. However, it is crucial to differentiate between satire and deliberate message manipulation. The first phenomenon is normally quite easy to detect. Many online readers know websites like *The Onion* or *newsbiscuit.com*, or the Austrian equivalent *Die Tagespresse*, which publish exaggerated and often unrealistic articles, and appreciate their entertaining approach towards media, news and current events. On these and similar websites, there is no intention to deceive the reader. Thus, it could even be argued that websites like the previously cited are reliable sources of satire and entertainment. Still, some researchers like Balmas (2014) or Marchi (2012: 253) quite inconsiderately refer to entertainment shows and websites, which use “satire to discuss public affairs” as fake news. While their line of argumentation is based on the fact that a majority of consumers quote shows like *The Daily Show* or *Saturday Night Live* as main sources for obtaining news, it has to be said that such sources of satirical entertainment do not belong to the category of fake news as it is defined in this paper, and for good reason. One major difference between *Die Tagespresse* and a random fake news website is that the former admits its satirical nature, while the latter denies the publication of misinformation. In this sense, it has to be stressed again that the term fake news is understood as referring to messages, which were crafted, published and disseminated with the malicious intention of deceiving the readers. Thus, the authors of these kinds of news are aware of the fact that they are publishing misinformation under the pretext of passing as reliable news outlets, while dismissing allegations of having published false and inaccurate information. Thus, a clear line must be drawn in this case, separating satire as an art form from deliberately published, malicious articles, which purposefully spread “hoax-based stories, [...] rumours, and misinformation” (Mihailidis & Viotty 2017: 4).

Bearing in mind the issue of intention, Wardle (2017) elaborates further on Higgin's idea, that authors of deceiving messages are motivated by the "8 P's: Poor Journalism, Parody, to Provoke or Punk, Passion, Partisanship, Profit, Political Influence and Power, and Propaganda" (2017). Via these eight motivations, Wardle's fake news typology gains another layer, which can be useful when analysing messages online. In this way, correlations can be encountered, which otherwise would have remained unnoticed. However malicious the intention of authors who publish fake news might be, Wardle still summons the responsibility each individual consumer has when browsing online. According to the researcher, it is not so much the deliberately constructed and invented fake news stories, but the irresponsible sharing of uncertified information by peers, that have the worst effect on naïve readers. After discussing possible typologies and the different kinds of motivations to publish fake news, the next chapter aims at approaching said responsibilities on behalf of the reader via providing a brief review of some strategic frameworks to combat fake news.

4.4. Strategies to combat fake news

Regarding the strategies to combat the spread of fake news, Crocco et al. (2017) suggest a focus on evidence. Particularly in the classroom context, fake news needs to be approached via a critical point of view that engages the examination of the texts' underlying evidence. As the consumer usually receives his/her input via "homophilous networks", which list corresponding opinions and filter "contrarian views" (Mihailidis & Viotty 2017: 1), it is particularly important to examine the messages' sources. Crocco et al. therefore suggest seven different types of evidence which ideally need to be considered when reading a text. Amongst others, the importance of statistical data, research and examples, as well as expert judgement are stressed. Apart from these rather formal types of evidence, there is also personal evidence, anecdote and second-hand experience which are regarded as evidence according to the author (Crocco et al. 2017: 68-69). The latter types of evidence are particularly controversial, because of their personal and emotional nature, and stress the importance of the social situation in which messages are emanated and serve as a good starting point when working in the classroom, since "situated cognition" is promoted (Crocco et al. 2017: 69).

As to the degree of evaluation of online content, research in the field of cognitive psychology provides interesting insights. Previously, in chapter 2.4. it was already alluded to the issue of the lacking competence of many users regarding the in-depth evaluation of sources. Recent research has shown that, apart from insufficient knowledge of skills, reasoning often depends

on the personal beliefs of the reader. In this respect, McCrudden (2016) found that messages, which are congruent with the reader's belief-system are more likely to be evaluated as correct, while opposing messages are dismissed as incorrect. The researchers refer to this phenomenon as "myside-bias" (2015: 276). Similarly, Vraga et al. (2009) examined the degree of students' trust in media emissions in relation to the students' personal standpoints. The findings support McCrudden's claims, since it was found that students trust media outlets which publish opposing messages less than outlets consistent with their opinions. In this sense, students frequently perceive contrarian media to be biased (2009: 68)

On the basis of data obtained, which showed the numerous difficulties students faced, Wineburg and McGrew identified three core properties, "professional fact-checkers" should have (Wineburg & McGrew 2016). Firstly, professional users read laterally, which means that they use other resources in addition to the main text in order to check the publishing background, to get information about the author and the institution. Furthermore, skilled readers disregard the *About*-section of a website, as they are mainly a means of self-presentation. Lastly, and most importantly, competent users of the web "look past the order of search results", having understood that Google, Yahoo and other search engines work via algorithms and advertisements (Wineburg & McGrew 2016) and thus do not provide a neutral listing of results.

Consequently, holistic strategies to combat fake news and its effects must encompass two different strands – first, there must be stricter policies regarding media and secondly, there must be preventive measures implied, starting as early as possible within the context of literacy education. With regard to the first strand, it is Berghel (2017: 81) amongst others who demands a technological solution in the form of a digital quality control, or how he calls it "crap-detecting engine" (2017: 83). Similarly, Figueira & Oliveira (2017) proposed different ideas for opposing fake news like compulsory algorithms. However, up until now, there is no consistent strategy at European level which aims at protecting online users. However, there are numerous non-profit organisations or interested groups who devote their energy to revising articles online and detecting and reporting misleading information. One possible idea, apart from elaborating a common policy addressing the dissemination of misleading, manipulated contents, would be to provide financial support in order to sustain these organisations and their crucial work.

Regarding the second strand, the educational position needs to change immediately. It is of pivotal importance that educational institutions adapt to the modern times by incorporating

media literacy education into the various curricula. As a consequence of the incapacity of the educational system to cater for the students' future needs, it needs to be acknowledged that a brief discussion of new literacies would not suffice, rather it is time to propose an interdisciplinary task force for addressing the problem. In the context of Austrian schools, for example, one might suggest implementing interdisciplinary projects, including subjects like ICT training, history and languages to provide a large network of accessible strategies, from practical technological skills, to source evaluation techniques and discourse analyses. It might be true to say that an implementation of such a proposal would mean large investments in the educational sector, but eventually, the benefits of training students as early as possible to handle digital media and technology properly, will outweigh initial reservations.

5. Multiple media literacies in the present-day institutional situation in Austria

As can be inferred from the previous passages, the *New Literacies* encountered in today's classrooms and outside of them pose a challenge, indeed a threat, to traditional literacy education. Since it is not sufficient to master only the practical aspect of new media to guarantee successful online and offline reading, new practices in teaching modern day literacy are required. When Leu et al. urge teachers to adapt to rapid changes and become an “orchestrator” (2004: 1599) for students, enabling socially situated learning situations, they also demand the adoption of measures in order to empower students in their use of new media in their academic and private lives. Not only is it important for learners to engage with the content provided in school, but rather online reading comprehension is “central to success in the twenty-first century” (Leu et al. 2011: 3).

However, the situation encountered in the Austrian educational setting appears to rather ignore the demands posed by the new times. In this respect, a brief glance in the curriculum for lower and upper secondary level suffices to support this argument. While it can be found that the general part of the curriculum encourages the use of ICTs for supporting digital competences, the critical examination of digital texts and discourses is discussed only vaguely. Regarding new media, the introductory part of the Austrian curriculum which specifies general didactic objectives states the following:

Innovative Technologien der Information und Kommunikation sowie die Massenmedien dringen immer stärker in alle Lebensbereiche vor. Besonders Multimedia und Telekommunikation sind zu Bestimmungsfaktoren für die sich fortentwickelnde Informationsgesellschaft geworden. Zur Förderung der digitalen Kompetenz ist im Rahmen des Unterrichts diesen Entwicklungen Rechnung zu tragen und das didaktische Potenzial der Informationstechnologien bei gleichzeitiger kritischer rationaler Auseinandersetzung mit deren Wirkungsmechanismen in Wirtschaft und Gesellschaft nutzbar zu machen. Die Erstellung eigenständiger Arbeiten mit Mitteln der Informationstechnologie ist in altersgemäßem Ausmaß anzuregen. (Bundesministerium für Bildung, Wissenschaft und Forschung 2004)

Similarly, the curriculum for English as a foreign language summarises the reading competence by discussing form-focussed and language-centred approach, as well as different general reading skills and strategies. However, the analysis of different discourses and critical reflection thereof are not explicitly discussed. Moreover, throughout the curriculum for foreign languages, there is no direct reference to online reading competences, nor is the critical analysis of

messages and media mentioned. Instead, media are exclusively referred to as a means of approaching the topics dealt with in the EFL classroom:

Die neuen Informations- und Kommunikationstechnologien (IKT) sind auch im Fremdsprachenunterricht vielseitig zu nutzen (zB bei der Bearbeitung von Lehrinhalten, zur Schulung von Arbeitstechniken und im Rahmen von Schularbeiten oder der Führung von Portfolios). (Bundesministerium für Bildung, Wissenschaft und Forschung 2004)

Summarising the insights gained from the analysis of the Austrian curriculum for general didactic objectives and for English as a foreign language, it can be found that the guidelines provided by the Ministry of Education are held rather vaguely. Thus, there is hardly any reference to digital reading competences, nor to online reading. On the positive side, this vagueness would enable dedicated educators to interpret the curriculum individually, so as to include elements like discourse analysis, online reading practice and digital reading competences in their lessons. However, the learners' ability to manage online reading situations would then be dependent on the commitment of motivated teachers, rather than obtaining the status of an official educational target.

One pivotal argument for promoting reading competences throughout the curricula are the Austrian PISA results obtained in 2015. The examination shows that, regarding students' general reading competence, Austria is located below the OECD average. Since nearly a quarter (23%) of Austrian teenagers show major deficiencies in text comprehension, Austrian readers are regarded as a risk group in reading, since a high percentage of participants scored insufficient results in this area (Suchán 2015: 61). While the reading examination was conducted in the readers' L1 it can still be assumed that when students face problems reading in their L1, the L2 reading skills might be even more worrying. Results of Austrian E8 examinations testing learners' competences in English support this claim. Findings suggest that, while the level of overall text comprehension is relatively high (68%), learners face difficulties "reading for detailed comprehension, including attitude, opinion & writer purpose", with only 51% of correctly solved tasks in this category² (Schreiner 2014: 40).

While the present educational system focusses on traditional notions of literacy, it neglects the students' reality, although studies show that reading habits have changed. A variety of studies

² For more information, consult E8 results (2013) and the reports on other educational standards published by bifie.

shows that students nowadays encounter different types of media and texts, which they have to comprehend (cf. Anderson & Jiang 2018). Consequently, the divide between education and reality further enlarges, as these literacies are not represented in the curriculum, which results in an unbalanced state, in which traditional literacy is trained, although students frequently find themselves in more modern reading situations, when they read news online or encounter articles via social media.

While the Austrian educational system seems blind towards this issue, many PISA leading nations decided to take action to combat misinformation and fake news online. As an example, it might be interesting to consult recent developments in Germany, particularly in Bavaria, where a conference was held in order to obtain possible solutions for the future of education in a digital age. The published results offer recommendations with regard to skills and strategies that pupils should be equipped with for an improved understanding of the (mis-)information they encounter online (Himmelrath & Egbers 2018: 129). Moreover, in Switzerland, digital competences are now inscribed into the overarching curriculum for all pupils from primary to upper secondary. While Himmelrath & Egbers (2018: 133) clarify that the term fake news is not included in the curriculum, it is nevertheless admitted that the curriculum aims at fostering reflected use of media and critical access to information online. Most importantly, Switzerland can be seen as a role model in this respect, not only for the act of including media competence and online literacy into the curriculum, but also for openly suggesting interdisciplinarity as a means of achieving these educational goals.

In this sense, it can be concluded that, although studies identified that students regularly fail at discerning misinformation online (e.g. Allcott & Gentzkow 2017), the curriculum provided by the Austrian Ministry of Education does not include a reference to the *new literacies* or other contemporary approaches towards (online) reading. While in the United States, Switzerland and Germany, it was decided to incorporate the much-needed media and information competence into the relevant curricula, authorities in Austria fail to follow this trend. Fortunately, there are numerous private initiatives, like the *Mimikama* association, which are occupied with evaluating information online and educating pupils about the possible dangers encountered online, or *saferinternet.at*, which cooperate with numerous Austrian schools. However, these initiatives and projects are not implemented generally and thus, depend on the respective teacher's initiative. Similarly, due to the vagueness of the curriculum, it can be said

that teachers might or might not include different approaches towards media literacy, depending on their personal interests.

In this respect, the current situation is best concluded using the arguments provided by Leu et al. (2004) who state that it is not technology that needs to adapt, but rather it is the users whose duty it is to learn how to deal with these circumstances. Hence, in the institutional setting, it is the responsibility of the Ministry to create the appropriate framework in schools and in teachers' education, as well as of the educators who need to provide the students with guided practise. Thus, it can be assumed that the role of the teacher also needs to adapt, since

Teachers will be challenged to thoughtfully guide students' learning within information environments that are richer and more complex than traditional print media, presenting richer and more complex learning opportunities for both themselves and their students. This alone should make teacher education and professional development issues important priorities. In addition, however, we must recognize that as the new literacies continually change, new professional development and teacher education needs will emerge. (Leu et al. 2004: 1606)

In conclusion, keeping in mind the present-day reality of young readers on the internet, which ranges from cyber mobbing, to fake news and hate speech, one might ask if the Austrian education system is fit for the digital age. Based on the insights obtained from the different curricula, the results of the PISA examination in 2015 and compared to other institutional settings as referred to previously, the answer is negative. When it comes to hard skills, such as operating technological devices, Austrian students are well equipped, but there is a lack of soft skills like evaluation of information and sources, reflective usage of online media and prevention of media abuse. In this sense, it has to be said that in this day and age, online literacy is a prerequisite to taking part in a society and to living a satisfying life as a responsible citizen in a democracy. Thus, not only must the educational structures adapt to the new times, but also definitions of literacy and teacher education need to be improved in order to guarantee equal access for all members of society.

6. Research design & methodology

6.1. Research questions, aims and hypotheses

After having examined different theoretical approaches towards literacy and fake news, as well as discussing the differences between offline and online reading, a number of questions arise. Bearing in mind the current realities of EFL students, it may be supposed that readers today frequently engage in online reading activities and further, encounter a high number of English texts. Although it might be assumed that today's students are so-called digital natives, who are growing up accustomed to handling new technologies, it might not be true that they manage to read effectively online. Particularly in contexts where false information is encountered, the mere fact of being used to read online is no guarantee for successfully distinguishing fact from fiction. Recalling the nature of online reading, it can be concluded that successful readers apply different strategies to distinguish between valid sources and invalid, deceiving accounts. However, it cannot be assumed that readers automatically use such strategies to evaluate information found on the internet. The purpose of the research conducted thus is to enlighten these hypotheses by means of answering the following questions

(Q1) What characteristics do the participants show regarding media habits, social media use and fake news experiences?

(Q2) How do Austrian EFL learners evaluate the credibility of content encountered when reading online?

(Q3) When presented with sample, real life texts in an online reading context, which strategies do EFL learners apply to discriminate between fake news and real news?

In order to answer the questions posed above, it was decided to use a mixed-method approach towards the investigation of second language learners' ability to detect fake news. For the first part of the case study, a short survey was conducted, to obtain a broad overview on the target groups' online behaviour and digital reading habits in general (Q1). The second part of the empirical research consists of a concurrent verbal protocol, which aims at obtaining insights into the cognitive processes of L2 learners when reading fake news in the online context (Q2, Q3). In the following, the methodological background to both parts will be outlined in detail, before giving an overview of the results obtained.

6.2. The questionnaire – description and design

The main reason for choosing the questionnaire-method was to generate an overview of the participants' habits and experiences with regard to (social-) media, online reading and (fake) news in general. For facilitating the research procedure, it was decided to create an online survey with the help of the website *eSurvey.com*. The survey's body is subdivided into 5 parts, each of which focuses on a certain aspect in relation to the above mentioned habits. The final version of the online questionnaire consists of five broad topics to elicit "factual", "behavioural" and "attitudinal" information (Dörnyei 2007: 102).

As far as the content-related aspects are concerned, the questionnaire is divided into 5 thematic parts, which cover personal information, the participants' general background, experiences with social media, as well as news, and fake news. Each part is further subdivided into 5-6 different closed- and open-ended items. Thus, the final questionnaire consists of 24 items, which the participants have to answer.³

The items are composed according to user-friendliness and intelligibility. Thus, it was aimed at including a variety of different item types, in order to increase the insights obtained, and keep the participants motivated so that they continue answering the survey. After the introductory cover page, which briefly outlines the questionnaire's aims and objectives, some initiatory, factual questions about the participant are asked. After the first page of the survey, the main topics are addressed, namely media, news and fake news consumption. Continually, page after page, the participant answers questions which address every main focus. Amongst the item types used in the survey are yes/no questions, multiple choice and ranked questions, as well as scaled questions, which are based on the scales developed by Likert (Dörnyei 2007: 105). Also, in accordance with the participants' English teacher, the language used in the items was adjusted to the participants' current language level.

Apart from accessibility and comprehension, it was also aspired to compose a survey that could be completed in a reasonable time span. This was done not only for reasons regarding research management, but rather in order not to overload or demotivate the participants. After completing the preliminary design of the survey, a pilot trial was conducted, in order to check if the items are comprehensible and manageable within the estimated time. In an informal setting, three pupils aged 15-17 were introduced to the questionnaire and were asked to

³ The full questionnaire can be accessed in the Appendix.

complete it. After completion, they were asked to give feedback on intelligibility of the items in a face-to-face conversation with the researcher. The participants in the trial reported minor issues concerning formulations, which were adapted in the final version. Overall however, the results of the trial revealed no major difficulties concerning comprehension and it was shown that the answering of the 24 items could be expected to take about 20-25 minutes.

6.3. The think-aloud protocol

With regard to the method used in the second part of the empirical research, it can be said that the so-called verbal protocol, or *think-aloud* method, derives from the field of cognitive science and is commonly used within L1 context, in which the participants' cognitive processes during a certain activity are examined (Dörnyei 2007: 148). Interestingly, for several years now, the method is also trending in the field of the study of language learning and is used in research contexts which focus on second language learners and their different approaches towards reading, writing and communicating in the L2 (Bowles 2010: 6). However, some researchers have raised their concerns regarding the method's functionality. Before explaining in detail the proceedings of the research conducted for the present paper, some fundamental remarks regarding the method's theoretical background, its advantages, and disadvantages will be made.

6.3.1. Excursus into the Verbal Protocol - Think-aloud method

The disputed *think-aloud* method is based on Ericsson and Simon's framework of protocol analysis (1993). The main idea behind this research method is based on the assumption that via verbalising their "inner speech" (1993: 16), participants offer an insight into the cognitive processes during an assigned task, either while, or after performing it. Therefore, the two main strands of the protocol analysis, which represent the "closest reflection of the cognitive processes", are the "concurrent verbal reports" and "retrospective reports" (Ericsson 1993: 16). The former encompasses all verbalisations which are expressed directly and is also referred to as the *think-aloud*-method. In comparison, the latter encloses reports, in which the participants' thoughts are verbalised at a later stage of the experiment. Ever since the protocol analysis was developed, the two methods have been and are still used in various disciplines, while its applicability is still at the centre of discussion.

As far as the different realisations of the verbal protocol are concerned, be it concurrent or retrospective, Ericsson identifies three types, which are referred to as "levels of verbalisation" (Ericsson 1993: 79-80). The first category, level 1, encompasses the "vocalization of covert

articulatory or oral encodings” of humans (1993:79), which usually does not require special cognitive efforts, since it is the basic level of verbalisation. On level 2, it is necessary to recode “thought content” and to explain and describe one’s thoughts (1993:79). The last subdivision, level 3, encompasses the verbalisation of additional, more in-depth comments on the thought process. Ericsson (1993: 79) explains, it requires “linking [...] information to earlier thoughts and information attended to previously”, fostering an interpretation of one’s thoughts, which is not present at level 2. In every case, the level is determined by the instructions provided (1993: 80). The core idea underlying these three levels of verbalisation is, that the participant thinks and verbalises these thoughts simultaneously, without reflecting what he/she is saying (Heine 2013: 14).

As already mentioned, there has been a heated discussion as to the test method’s efficacy and validity (Bowles 2010: 14). One of the major drawbacks of the method, which is frequently mentioned as a counter-argument for its application, is the “incompleteness” of the method. This is due to the fact that humans cannot verbalise all the cognitive processes taking place, as many of them are unconscious (Ericsson 1993:109), some opponents argue that the method does not provide complete coverage of the case. Furthermore, regarding the retrospective protocol, the question is frequently raised if the accounts provided by the participants are complete, since they might not remember all their thoughts accurately (Bowles 2010: 14). Furthermore, numerous researchers criticise that, during the concurrent verbal report, the verbalisation could affect the participant’s performance and thus, results cannot be generalised (Ericsson 1993: 170). Particularly in the L2 research context, some experts find that its “reactive effects” distorts results, since it is supposed that the nature of the task itself manipulates the cognitive processes that would otherwise appear naturally (MacDonough & MacDonough 1997: 193). Studies suggest that the likelihood of reactive distortion is particularly perceptible in level 2 and level 3 verbalisations and does not show a significant difference between L1 and L2 contexts (Bowles 2010: 56).

On the other hand, many researchers argue that although the method has its disadvantages, the insights gained prevail (MacDonough & MacDonough 1997: 191). The *think-aloud* procedure allows the researcher to obtain a “fuller picture of the learning process” and therefore, it should be considered a “phenomenon in its own right” (MacDonough & MacDonough 1997: 191). Furthermore, researchers emphasize that on level 1 and 2, there is little probability of reactive effects, but an influence into the duration of the task’s completion will be observed (Bowles

2010: 14). Thus, high validity is ensured (Schnell 2013: 95). In order to obtain more versatile insights into the participants' cognitive processes, it is recommended to use a combination of concurrent and retrospective protocols. By this means, possible uncertainties and comprehension questions on behalf of the test's coordinator can be eliminated at a later stage (MacDonough & MacDonough 1997: 194). Regarding other disadvantages the method might have, numerous researchers argue that the effects can be narrowed with a thorough elaboration of the research design (Bowles 2010, MacDonough & MacDonough 1997, Caspari 2016).

Also, in recent years, due to the increased use of the method, reservations are gradually disappearing. Moreover, in the light of the paradigm shift in cognitive science, some new strands of the method developed, based on social, emotional and situational characteristics (Schnell 2013: 96). The novel areas of research, such as "distributed cognition", "grounded cognition" and "embodied cognition" cover different aspects of cognition, all of which can contribute to a more profound picture of cognitive processes which can be obtained via the different levels of verbalisation (Schnell 2013: 98).

In this respect it has to be noted that in order to facilitate the investigative process and to minimise the burden on the participant, some suggestions should be considered. In quantitative research, it is recommended to include a control group which performs the exercise without the additional task of thinking aloud. If the results of both groups show similarities, there is no distorting reactive effect. Furthermore, to lessen the cognitive burden the participant might feel while performing the task, it is considered appropriate to allow the participants to choose freely between the use of the L1 and L2 (MacDonough & MacDonough 1997: 178; Bowles 2010: 119). Further, it is suggested to provide a warm-up session, in which the participants are instructed in how to use the method and then try to use the method in an informal task (MacDonough & MacDonough 1997: 196; Bowles 2010: 117). Lastly, it is crucial to provide uniform instructions, both verbal and in writing, and to decide beforehand, which level of verbalisation should be approached, according to which the instructions will be adapted. (Bowles 2010: 115).

On balance, it can be said that for answering the research questions posed in this paper, the advantages outweigh the disadvantages of the *think-aloud* method. Since it is a relatively new area of studies, data gained via introspection could provide vital insights into the learners' cognitive processes and strategies applied while reading fake news in the L2. The findings

obtained in the present research suggest that, although the method is disputed, conclusive results could be accomplished. In order to describe the research carried out for this paper in more detail, the following subchapters will focus on the methodological aspects concerning the transcription and coding, as well as the protocol design.

6.3.2. Design of the verbal protocol

After conducting an online survey with the case study's participants, the second part of the research process consisted in the performance of an online reading task, in which each participant was asked to *think-aloud*, or in other words, to provide the researcher with a full verbal account of his/her mental processes during the completion of the task performed. Participants were selected in accordance with the class' English teacher, who was asked to choose 4 students who differ in their language skills. This adjustment was made in accordance with current developments within the methodology of verbal protocols. After consulting different publications, which suggest choosing proficient readers over less proficient readers, it was decided for this project to use an option which allows for stratification of results, and thus, provides insights into the application of different strategies used by different learners. Dörnyei refers to this approach as “maximum variation sampling” (2007: 128), and states that by means of fostering a “variation within respondents”, it might occur that “a pattern holds across sampled diversity”, which again, allows the conclusion that it is “reasonably stable” (2007: 128).

Regarding the design of the verbal protocol session, the research section was subdivided into four steps, via which the participants could gradually approach the method and tasks. In the beginning, an introduction to the method and the topics is provided (PRE-1, PRE-2), followed by the two main tasks which focus on online reading (WHILE-1, WHILE-2), via which the second and third research question will be approached. After the preparatory phase and the main part, the examination concludes with a reflective part (POST-1). In the following, the design for each part will be explained in detail.

6.4. Description of 4 steps

PRE-1 and PRE-2

The first step of introducing the method (PRE-1), consists in the presentation of a preparatory video, which is shown to the participants. In the one-minute clip, which was provided by the Norman Nielsen Group (Nielsen 2014), a person's verbal protocol is shown, while searching a website. Via this video, the participants should be introduced to the procedure of the think-

aloud protocol and understand with the aid of a practical example how the method works. The next preparatory step (PRE-2) is a warm-up task, which asks the participant to look at a photograph and provide a title for it, while, at the same time, verbalising his/her thoughts. By means of introducing the method with a video and a warm-up task, it is aimed at preparing the participants for the upcoming tasks and, familiarising them with the unfamiliar situation and method. Before moving on to the actual tasks, the topics of the upcoming readings and key terms (such as credibility) are introduced, to activate and determine the participants' prior knowledge. Furthermore, any uncertainties should be addressed in this part of the research process, and it is suggested that the researcher checks if the participant understands the method sufficiently. In order to reduce the cognitive burden of the combination of thinking-aloud and answering the posed questions, the participants can choose between using their L1 or their L2.

WHILE-1 and WHILE-2

The main part of the study is concerned with the participants' strategies of detecting fake news and discriminating unreliable from reliable sources in the online reading context. Therefore, it was decided to confront the readers with two authentic sets of material. In the first task, participants are presented 3 headlines and the second task simulates an online reading situation, where participants read the 3 articles to the headlines. In both parts, participants decide on the material's credibility and present reasons for their choice.

As already mentioned, in the first step, the participants are shown headlines, which one might encounter while browsing the web. Particularly on social media sites like Facebook, such cut-outs which usually consist of a catchy headline in large font and a picture, tempt the online reader to click on the link. The three chosen headlines reflect this format since it can be assumed that it is one of the key elements of successful clickbait. The sample headlines are provided in print form to the participants. The aim of this task is to investigate how participants react to teasers online, when encountering them. Therefore, the participants are asked to decide whether they would be interested in reading the article to the headline or not. Also, they give preliminary considerations to the credibility of the (yet unknown) articles, by means of rating the headlines on a 1-4 scale from *very credible* (1) to *not credible* (4). By means of these two questions, a first impression of the readers' reaction to the online encounter with fake news will be generated.

In the second step, the full article is presented to the reader, who is asked to answer 3 guiding questions while reading the articles. The first question is concerned with generating an overall

understanding of the article's content, since it asks the participant to briefly summarise the text's main message. Then, the text's credibility has to be rated again on the basis of the scale used in the previous task and reasons for the rating are outlined. For this purpose, the three articles are presented to the participant on a laptop or computer. The reason for this is to simulate a real-life online reading situation, as well as to enable the reader to investigate the full scope of the website, or others if desired. Furthermore, the participants receive the written instructions⁴, and paper for taking notes. After a brief introduction on how to use the technical device, the participants start reading the articles. Again, they can choose between using the L1 or the L2. Also, they are informed about the possibility to visit other websites as well. During the examination, the researcher will only answer process-related questions and remind the participants to think aloud if necessary, to prevent manipulation of the results. After reading the three articles and answering the questions, participants are asked to compare the two ratings and explain which one they consider more suitable (rating WHILE-1 or WHILE-2) and give reasons for their choice.

POST-1

After completing the first and the second part of the think-aloud protocol, each participant is asked several reflective questions. The aim of the concluding reflection is to receive feedback about process-related problems, as well as about method-related difficulties. Furthermore, reflective questions regarding the content-level of the study will be asked for consolidation of results. Also, it is aimed at providing time for clarifying uncertainties or open questions on both sides.⁵

⁵For a detailed outline of the realisation of the four steps, please consult chapters 3 and 4 in the Appendix.

7. Classification of chosen material

Before commenting on the actual realisation of the think aloud protocol, the materials used will be described in detail. Generally, it has to be said that the three articles used in the examination are examples for fake news. In addition to their false, misleading nature, each example shows different features which help classifying the articles into different subcategories in line with the fake news typologies provided by Zimdars (2016) or Wardle (2017), which have been described in chapter 4.3. Depending on the specific article, there are different possibilities of its categorisation. For the purpose of classifying the materials used in this paper, the two typologies proposed by Zimdars (2016) and Wardle (2017) will be used, since both exhibit a thorough elaboration of different types of fake news. However, it can be inferred from the nature of the typologies described that categories might overlap and boundaries between the different divisions may blur. Since there is a variety of attributes to be found in the sample texts, numerous ways of categorising them according to the mentioned fake news typologies are possible. In any case, it is important in order to understand the results obtained in the research, that the articles have one property in common, namely that the messages conveyed are not factual but fake accounts.

The first bogus news story incorporated in the examination is an article published under the headline “Trump offering free one-way tickets to Africa, Mexico for those who wanna leave America” (tmzhiphop.com 2016). According to Craig Silverman from *buzzfeed* (2016a), this article appears among the 50 most shared fake news articles in 2016. Based on the 802,000 interactions the story received on the worldwide web, it managed to be ranked 5th place.

Although the article is no longer accessible using its original URL⁶, numerous sources on the internet have adopted the fake message. The article used for the purpose of this paper, was the original fake news source listed by *buzzfeed*, which starts with a picture showing similarity to a news channel header, stating in the bottom left corner the supposed name of the source “6 NEWS”. Furthermore, in the bottom right corner, there is a photo showing the president elect and, in the background, an airplane belonging to *Trump Airlines*. After the visual input, the headline is stated again and below, the buttons for sharing the article on twitter, Facebook and

⁶ The original website was removed from the internet due to its misleading information. However, numerous websites copied the original text and still spread misinformation, e.g. <http://massiveleak.com/trump-offering-free-one-way-tickets-africa-mexico-wanna-leave-america/>, or <https://loritosan.wordpress.com/2017/01/24/trump-offering-free-one-way-tickets-to-africa-mexico-for-those-who-wanna-leave-america/> (last access February 4th, 17:00)

Pinterest can be found. On the right side of the website, different clickbait-like advertisements for other articles can be encountered. Concerning the article's content, it can be said that, since it consists of only one paragraph, framed with two supposed Trump quotes, it is rather short and lacking information. Nevertheless, it manages to convince the reader of the message, since it uses polemic arguments and an exaggerated language, referring for instance to Mexico as "El Chapo's World"⁷. Via the inserted quotes, the article further simulates authority.

Regarding integration of the first article into the typologies described in chapter 4.3., it can be said that its intention to deceive is high, whereas its facticity is low, which leads to the placing of the article into the categories of manipulation and fabrication according to Tandoc et al. (2018: 47). Bearing in mind the visual cues, which were altered and used for deliberately leading the readers to believe the website presents information derived from a reliable news outlet, it can also be defined as manipulated and imposter content according to Wardle's definition (2017). Due to its statements and messages, the article belongs to "fabricated content" (Wardle 2017) and would count as "political fake", according to Zimdars (2016: 2).

Concerning the second fake news story, which was published under the headline "Saudi Arabia: Panel of scientists admits women are mammals, yet 'not human'", similar conclusions can be drawn. Similar to the first sample text, this article also manages to be featured in the top 50 list compiled by *buzzfeed*, but with less viral interaction, ending in 31st place (Silverman 2016a). Moreover, the article was featured on the renowned fact-checking website *snopes.com* (2017), which has identified the article's arguments as false.

At first glance, the website seems to be a reliable news source, since it copies the layout and design of renowned news outlets that can be found on the internet. The website's name, *World News Daily Report* (WNDR), further contributes to the impression of professional news source. On the right side of the website, one can easily access the connected Facebook page, which has over 76,000 likes (status as of February 2019). All of these characteristics support Wardle's category of "imposter content" (2017), since the website's layout, visuals and structure simulate to be a renowned news platform. However, when consulting their About-Us section, in which the publishers state to be "(...) an American Jewish Zionist newspaper based in Tel Aviv and dedicated on covering biblical archeology [sic] news and other mysteries around the Globe."

⁷ see screenshots, Appendix, ch. 8

(WNDR 2016a). The information provided and the featured advertisements on the website already allude to its unprofessional, deceptive nature.

In addition, this claim is further supported by another statement issued by *World News Daily Report*, which can be found on their website as well, saying that

WNDR assumes however all responsibility for the satirical nature of its articles and for the fictional nature of their content. All characters appearing in the articles in this website – even those based on real people – are entirely fictional and any resemblance between them and any persons, living, dead, or undead is purely a miracle. (WNDR 2016b).

In this respect, the statement encompasses one of the important controversies in the fake news discussion, namely its unqualified claim to be satire. The publishers themselves underline the “satirical nature” of their articles. However, the line between satire and malevolent intentions often is blurred and many readers do not understand the difference. In addition, it is a fact that the article was shared repeatedly in social networks and *snopes.com* (2017) even fact-checked it, which results in a dilemma of freedom of art and public endangerment, since the arguments presented in the article in respect and in others published on WNDR support certain resentments and stir up hatred against minorities. Thus, it is most definitely inaccurate to say WNDR employs satire in its articles, but rather it needs to be acknowledged that the publishers and authors become involved in cheap propaganda when committing their supposedly satirical articles to paper.

However, WNDR not only fails on the content level, also the visual level shows signs of unprofessional journalistic practise. This can be inferred from the photo featured below to the headline⁸, which shows a meeting at the *World Government Summit*, instead of the supposed scientist panel. Thus, it can be inferred that the article uses photographs in false contexts in order to manipulate and deceive (Wardle 2017). With regard to the article’s content, the main argument is that Saudi Arabia grants women to be mammals, denying them to be humans. By inserting numerous quotes, for instance by supposed activists of *Amnesty International*, the publishers intend to claim authority and aim at underlining the validity of their message (WNDR 2016c). However, the cross-checking of the quotes shows that none of these quotes are factual, nor do the quoted individuals exist (*snopes.com* 2017). Again, in this respect, it becomes evident that the authors which are not explicitly referred to, wrote an article which

⁸ For further details and examples, see chapter 8 of the Appendix of this paper.

corresponds to Wardle's category of "fabricated" and "manipulated content", and therefore, is an example of fake news in every respect.

The last article featured in the examination was published in March 2017 on a website called *asheepnomore.net*, which is no longer accessible under the original hyperlink, but via *web.archive.org*, describes itself in the About-Us section as follows:

A Sheep No More is no longer plugged into the Matrix like the many sheep who are still programmed to believe that they have correct information provided by a varied and "independent media." In fact the media is owned by 5 or 6 mega-media companies run by corporate advertising executives and Washington. (Sarich 2017)

This short statement already alludes to the website's inclination towards conspiracy theories. According to Fichera from *factcheck.org*, a platform similar to *snopes.com*, which also aims at demasking viral misinformation and is provided by *The Annenberg Public Policy Center*, the article is false (Fichera 2018). Still, it has been shared on the internet over 32,000 times, and thus, it can be said that it provides a successful platform for spreading conspiracy theories, frequently attributed to so-called *chemtrails*. In short, the article intends to inform the reader about alleged revelations from NASA, whose personnel admits having sprayed a number of toxic chemicals into the atmosphere, which supposedly endangers humanity.

As to the website's visual impression, one may argue that the presentation once again aims at simulating a professional journalistic source. The layout is clear, there are numerous hyperlinks embedded which the reader may follow for further information, creating the impression of reading a fact-based text. There are no advertisements, only a reference to networks like Facebook, Twitter and Reddit. After an initial assessment, the website might seem professional and reasonable, but the hyperlinks in the article refer to sources which are also to be considered dubious and in no way scientifically grounded. The visuals used are catchy, but digitally altered, so that skulls appear in the vapour trails in the photograph below the headline. The author of the text, Christina Sarich, whose short biography can be found at the bottom of the article, highlighted some text passages which she apparently considers to be important with bold, or even upper-case letters. Apart from the miscellaneous visual cues, the author's arguments constitute the last piece of the fake news puzzle.

Concerning the argument presented, it can easily be identified that the author does not substantiate her accusations well. Rather than presenting scientific sources, the author names websites which also occupy themselves with promoting common conspiracy theories, such as

stateofthenation2012.com, or *wakingscience.com* (Sarich 2017). One example of her deficient arguments can be seen in the following quote, in which the author presents not only frequent arguments proposed by conspiracy advocates, but also “opinion pieces as news” (Zimdars 2016: 1):

As more nations refuse genetically modified food, and refuse to drink fluoridated water, which has been named as a neurotoxin by one of the world’s premiere medical journals, the power structure that desires a complicit population has to figure out a way to alter our neurochemistry. (Sarich 2017)

Furthermore, she quotes trusted researchers, the WHO and different scientific journals to establish authority for her arguments. However, the author aims at demasking the arguments provided by these renowned sources, via giving her own interpretation of the topic without explicitly raising valid, scientifically grounded counterarguments. Furthermore, Sarich quotes NASA employees who state that NASA uses lithium in the upper atmosphere for research, which is a confirmed fact (Fichera 2018). However, she downplays the fact that these examinations are not harmful to humans, via questioning NASA’s scientific professionalism, when saying that

[i]t is possible that many of NASA’s own employees aren’t even aware of the true motivations for carrying out such a project, ironically displaying the very behaviors that these chemicals/pharmaceuticals are meant to instill. [sic] (Sarich 2017)

In conclusion it can be seen that in her article, Sarich questions scientists and institutions on basis of her own superficial knowledge and opinion on the topic. The author fails to present valid, scientific counterarguments. Moreover, she argues in a polemic, subjective tone that, while scientists try to manipulate humanity, her arguments are demasking the conspiracy. Consecutively, after analysing the article’s different attributes, it can be asserted that the last article corresponds to “manipulated content”, which is presented in a “false context” (Wardle 2017), and given the facts above, the article also features characteristics of Zimdars’s (2016: 2) categories of “junk news” and “conspiracy theory” and thus serves as a salient example of fake news.

8. Participants and procedure

For the present research project, 15 Austrian EFL learners of the 7th grade of an Austrian AHS were asked to participate. In accordance with the English teacher of the class, it was decided to conduct the questionnaire in the L2, since the teacher estimated the participants' language level as sufficient for answering the questions in English. During the second part of the empirical study, as already mentioned in the chapter about methodology, students could choose between the L1 and L2 in the completion of the think-aloud tasks.

The first part of the empirical research, the questionnaire, was supposed to provide an overview into the case study's participating group of EFL learners. For compiling an appealing, accessible online questionnaire, *eSurvey.com* was used. The online survey was conducted in the school's computer room, where each participant worked individually on a computer, completing the 24 items of the questionnaire. Before starting with the survey, a brief introduction to the project and the researcher was provided. The completion of the questionnaire lasted for about 25 minutes, in which the researcher answered emerging questions, regarding the comprehension of individual items.

For the second part of the empirical research, the *think-aloud* examination, 4 volunteers were chosen in accordance with the English teacher. It was aimed at selecting 4 learners of different proficiency levels, in order to obtain an overview into the strategies of a heterogeneous set of EFL learners. Before the actual research started, each participant signed a consent form⁹, which informed them briefly about the project's aims and objectives, and asked for their permission to record, process and publish their contributions. Regarding the research setup, the researcher decided to include an observer (fig. 3: O), for including a second opinion regarding the research management and task fulfilment, and also, to create a more relaxed atmosphere. The observer was asked to note observations on behalf of the participants' behaviours, as well as the researcher's behaviour. In order to facilitate the observation, an observation sheet was provided¹⁰.

The *think-aloud* examination took place in the school's library. For securing anonymity and privacy, the necessary devices were installed in a separate compartment in the room. Each participant (fig. 3: P) was examined individually for about 40 minutes. The participants sat on

⁹ see Appendix, ch. 2

¹⁰ see Appendix, ch. 8

a separate desk and were given printed instructions for tasks PRE-1, PRE-2 and WHILE-1. During online reading (WHILE-2), the participants performed the tasks on the researcher's Apple MacBook laptop, on which *Firefox* was used as a browser and the relevant pages were accessed in advance. Before the online reading, it was made sure that each participant knew how the browser and the operating system worked. The research team sat out of the participants' sight and each session was recorded using a voice recording device. Furthermore, a screen-capturing software called *Camtasia* was used in order to retrace the participants' movements within the website and browser in general.

Another crucial factor in the development and realisation of the research conducted for this paper, was the focus on validity. In order to reduce the amount of possible manipulation on behalf of the researcher, a strict protocol was created, which served as a guideline to the researcher. The instructions for each task were predefined and read to each participant. The instructions followed the general guidelines in accordance with the *think-aloud* method (Bowles 2010: 115). In the beginning, participants were informed about the reasons for conducting this research:

Hi (P's name). My name is (R's name). As you already know, I'm a student at the University of Vienna and I'm currently writing my diploma thesis. For this purpose, I'm examining how English learners like you read on the internet. Your participation helps me a great deal and the results may help me and other teachers in Austria to understand how we can improve our English classes. (see Appendix, chapter 3)

and also, on which languages they may use:

Feel free to use both, English and German, as long as it's natural for you. (see Appendix, chapter 3)

After the preparatory phase, in which the participants were introduced to the method via a video and a sample task, each task was introduced using unified and clear instructions, which explained the task and reminded the participant of the desired thinking aloud of thoughts:

Now, here's a sheet of paper with three headlines. I want you to answer the 3 questions. While you do so, please try to think your thoughts out loud. That means, say anything that comes to your mind, as if you were alone in this room. Have a look at the questions and tell me if there's anything you don't understand. Now, let's get started. Please answer the three questions and fill out the evaluation. (see Appendix, chapter 3)

Apart from process-related questions, it was aimed at not revealing any answers or evaluative comments that would influence the participants. Since it is suggested that the researcher and

the observer sit out of the participant's sight, the seating arrangement was adapted accordingly, as illustrated below (fig.3).

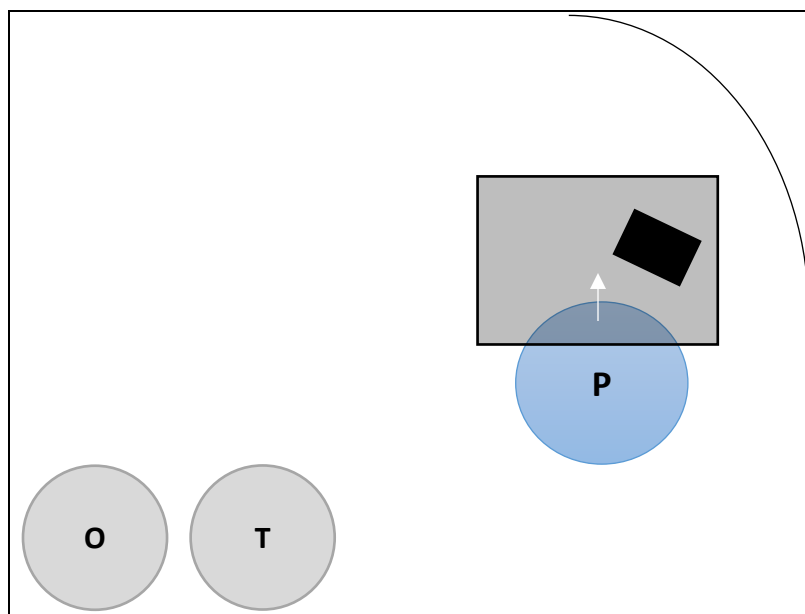


Figure 3. Seating arrangement, empirical research, pt.2

9. Data editing

9.1. Transcription

With regard to the editing of data obtained, two main steps were necessary. Firstly, the verbal protocols had to be transcribed. This was done using the guidelines provided by the *Vienna-Oxford International Corpus of English* (VOICE, 2007). Since the research focusses on the content level of the participants' contributions, it was decided to adapt the level of transcription to the context, in which the transcripts will be used (Knorr & Schramm 2012: 192). Therefore, the recordings should be transcribed on the macro-level, disregarding micro-level features like stress, intonation or phonology. Furthermore, the screen-recordings, which were produced using the *Camtasia*-software, served as an additional source for supplementing the transcription of the participants' voices. In this way, the screen video provides revealing insights into how the participants browsed through the articles. For guaranteeing valid transcriptions, the texts were revised by a colleague, who counterchecked each recording and its transcription for ensuring completeness.

9.2. Coding

In a second step, the transcripts were coded. In line with the grounded theory approach (Dörnyei 2007: 260), the coding process was subdivided into several stages. In the pre-coding stage, the researcher studied the material superficially, subdividing the material into logical parts and developing a feeling for the transcripts (Dörnyei 2007: 260). Then, the "theoretical coding" was initiated, where the material was approached with the purpose of encountering strategies used (Dörnyei 2007: 261). There were no strategies formulated prior to this moment of the coding process, but the list of strategies found was compiled gradually, one after the other, via the interpretation of the strategies. Subsequently, the designation of names according to the strategies' core purpose took place. Thus, the third and last stage of the coding process aimed at examining correlations between the strategies found to generate strategy-clusters and overarching "core categor[ies]" (Dörnyei 2007: 261). The results of this process can be seen in the following table, which also shows total numbers of strategies detected in the four transcripts.

		theme	code	hits
SURFACE-LEVEL	Publication info			10
		publication date	PUBL/1	(1)
		author	PUBL/2	(6)
		publisher	PUBL/3	(3)
	References			18
		reference to authority	REF/1	(9)
		reference to other sources	REF/2	(2)
		reference to hyperlink	REF/3	(3)
		reference to quote	REF/4	(4)
	Text			35
		font	TXT/1	(1)
		ling. characteristics	TXT/2	(17)
		length	TXT/3	(9)
		structure	TXT/4	(7)
	Visuals			27
		advertisements	VIS/1	(11)
		layout	VIS/2	(6)
		pictures	VIS/3	(11)
			TOTAL	90
META-LEVEL	Author			9
		author's objectivity	AUT/1	(8)
		author's authority	AUT/2	(1)
	Intuition			11
		content – lack of information	INT/1	(2)
		emotional response	INT/2	(9)
	Medium			8
		medium's authority	MED/1	(5)
		medium's objectivity	MED/2	(3)
	Prior knowledge	prior knowledge (about...)		41
		content	PK/1	(8)
		experience with media	PK/2	(8)
		interferes with beliefs	PK/3	(7)
		unknown origin	PK/4	(9)
		general	PK/5	(4)
		lack /check-up	PK/6	(5)
			TOTAL	69

Table 1. Codes used in the analysis of transcripts

As can be seen in the table, there were two overarching categories of strategies defined: strategies which operate on the surface-level, and those, which affect the meta level. The first core category encompasses the strategies which are based on the articles' surfaces. Consequently, it can be seen from the subcategories (*publication info*, *references*, *text* and *visuals*) that within this area, the strategies applied focus on the observable features found on the websites in general, or the articles in particular.

The latter category includes strategies, which were elicited by what was perceived as being implied by the text. Here, one might encounter subcategories like *prior knowledge*, *author* or *medium*. All of these categories include strategies which can be located on the meta-level of the relationship between the readers and the texts. Furthermore, the rather abstract subcategory *intuition* was included. This particular category reflects strategies, which were exclusively based on the individual participant's perception and sentiments. Thus, it was decided to also code emotional responses, since they frequently occurred within a clear cause and effect relation. The following quote from one of the participants' transcripts may exemplify what is understood by emotional response and its cause and effect relationship:

I've just read the first paragraph and I don't know it's weird that they're spraying something that's used to treat people with manic depression or bipolar disorder that's kina really bad. (Appendix, transcript 2)

For further information, detailed explanations of the coding categories and examples, the full table showing all surface level and meta-level strategies can be consulted in the following pages.

surface-level	theme	code	definition of strategy	example
Publication info				
	publication date	PUBL/1	Participant aims at investigating publication date.	"...it's from 2016 so I don't know"
	author	PUBL/2	Participant aims at investigating author.	"...who wrote it (...) TMC WorldStar okay I don't know who that is"
	publisher	PUBL/3	Participant aims at investigating publisher.	"...there's no <i>Herausgeber</i> to be seen"
References				
	reference to authority	REF/1	Participant checks whether there is any authority referred to on the website.	"...they really mention employees of NASA..." / "There's also Facebook and Twitter on the corner..."
	reference to other sources	REF/2	Participant checks whether there are any sources provided on the website.	"I can't really check the website for more <i>Quellen</i> "
	reference to hyperlink	REF/3	Participant checks whether there are any hyperlinks provided in the text.	"...so there are links" / "...and you have as well some links in the text so you can instantly go on from the text to other sites..."
	reference to quote	REF/4	Participant notices quote by person/authority/organisation.	"...ends with another quote by Trump" / "...maybe the quotes also make articles uhm more credible"
Text				
	font	TXT/1	Participant investigates font used on website.	"...the headline's really small"
	ling. characteristics	TXT/2	Participant investigates linguistic devices, such as word choice and writing style on website.	"...this article is a lot more complicated than the other one" / " <i>einige Fachbegriffe</i> " / "...but the provocative writing style makes it not really credible"
	length	TXT/3	Participant investigates text length.	"...it's also more credible cause it's a longer article" /

	structure	TXT/4	Participant investigates internal structure of text.	“...it has a better structure” / “... <i>ganz aufbauend aber jetzt auch nicht mega strukturiert</i> ”
Visuals				
	advertisements	VIS/1	Participant checks whether/which advertisements are featured on the website.	“...I’m looking at the advertisements or other websites that are there it says it’s sponsored by this so again I would say advertisements are not that good for all websites...”
	layout	VIS/2	Participant checks website’s general layout.	“...the layout is very serious you have not much advertisements...”
	pictures	VIS/3	Participant investigates visual cues (photos, graphs, pictures, etc.) on the website.	“...the picture doesn’t look very <i>vertrauenswürdig</i> credible...” / “...I think that’s not really a photo taken but edited in...”
meta-level	theme	code		example
Author				
	author’s objectivity	AUT/1	Participant comments on author’s objectivity.	“...like, if the article is written really <i>subjektiv</i> then I would know if I can trust it or not” / “...like the author of this article sees Trump”
	author’s authority	AUT/1	Participant comments on author’s authority/professional stance.	“...it seems that the person behind it is someone who is (...) <i>der sich damit beschäftigt hat</i> ”
Intuition				
	content – lack of information	INT/1	Participant suspects that there might be a lack of information.	“...maybe there’s information missing...”
	emotional response	INT/2	Participant relates emotionally to the text/parts of the text.	“...because it’s shocking...” / “...it’s weird that they’re spraying (...) that’s kinda really bad...”
Medium				
	medium’s authority	MED/1	Participant’s comments relate to the perceived authority of the medium.	“I think that must be very credible since you can’t change the fact that what they did and said there” / “And that’s not really something that people would come up with there’s not really a purpose to come up with something like this”

	medium's objectivity	MED/2	Participant's comments relate to the perceived objectivity of the medium.	"...it would just inform you about that meeting and not try to make your mind and just don't give information from the author but just about this meeting..." / "...every website is kinda not that credible because it's written by humans and humans are just <i>subjektiv</i> "
Prior knowledge	prior knowledge (about...)			
	content	PK/1	Participant relates text/passage read to prior knowledge of content.	"... <i>hab nicht wirklich davon gehört, aber okay...</i> " / "I've heard about other airlines selling one way tickets, so I don't know how this is meant"
	experience with media	PK/2	Participant relates text/passage read to prior knowledge/experiences with media.	"...just because I know such pages, they're pretty much strange..."
	interferes with beliefs	PK/3	Participant relates text/passage read to existing beliefs/personal values.	"...sounds like it's something great (...) it doesn't really sound like that for me" / "I don't know is this a <i>Fortschritt</i> ? I don't see it"
	unknown origin	PK/4	Participant detects lack of prior knowledge about the origin of the story/text.	"I've never heard of this website before so I wouldn't trust it at first sight"
	general	PK/5	Participant relates text/passage read to general knowledge.	"I can't imagine this is a real offer"
	lack/check-up	PK/6	Participant detects lack of prior knowledge and announces to cross-check facts/sources/etc.	"I will look that up later" / "I would inform myself about this news channel before"

Table 2. Table of strategies found including codes, definitions and examples

Another crucial step after the final coding of the transcripts was the re-examination of the coding by a neutral tester. Thus, a colleague from the University of Vienna's English department was asked to code parts of each transcript, for ensuring intercoder-reliability. Since the materials obtained during research are individual verbal protocols and will be analysed in a qualitative way, it was decided to use the simple calculation of interrater agreement, which suggests that the number of agreements are divided by the total of instances found (Miles & Hubermann 2009).

In sum, 159 instances of strategy-application could be identified during both stages (WHILE-1 and WHILE-2) of the four examinations. According to the principles of intercoder-reliability, this number was confirmed by a neutral sub-coder, who conducted an independent coding of the four transcripts. Overall, the extracts coded by the reviewing rater amount to 41%-76% of the transcripts. For better understanding, the percentage of transcripts coded, and the resulting level of agreement can be derived from the chart below (table 3). Thus, the outcomes of the intercoder reliability check conducted by the independent second coder suggest that the second rating corresponds to the first rating in all four cases. In the coding of the first transcript, the amount of agreement was the lowest, with only 68%. One reason for this rather low percentage could be that the second rater needed time to get familiar with the material and procedure used. However, the average level of agreement achieved on the strategies identified by rater 1 and rater 2 amounts to 79% agreement on average, which further demonstrates that the coding of the transcripts reflects a high level of reliability. The results of the intercoder check imply a high level of reliability of the coding process, but nevertheless, it should also be stressed that after the revision conducted by the neutral coder, some instances of strategy use were added.

	transcript 1	transcript 2	transcript 3	transcript 4
amount analysed	54%	76%	51%	41%
amount of agreement	68%	82%	75%	90%

Table 3. Level of rater agreement

10. Description of results

10.1. Questionnaire

The survey was carried out to gain insights into the target group's media-related behaviours. Thus, the results obtained must be viewed within their contextual boundaries and do not have a generalisable character. Therefore, it can be claimed that the results describe a small group relevant for the research conducted in this paper, but are not to be confused with large-scale studies, in which a greater number of participants and a greater level of variation is given. Nevertheless, the participating students delivered interesting results in the questionnaire, which tend to be in line with current research conducted in the field, e.g. by Anderson & Jiang of the Pew Research Center (2018).

When it comes to the target group's main characteristics, it can be seen that the genders are equally represented within the 15 participants. The majority of participants is 17 years old, and all of them are currently enrolled in a grammar school in Vienna's twenty-first district. Before starting the actual media-related questions, students estimated their reading skills in English. The obtained assessment corresponds to the estimation provided by the class' English teacher, who states that the students possess good or even excellent reading skills in the L2. Interestingly enough, all of the participants indicate that they frequently read English texts online.

Regarding the participants' habits of using technology, the internet and social media, interesting insights could be obtained. With respect to technology usage patterns, it can be seen that 100% have access to mobile devices such as smart phones, tablets or laptops and a vast majority states using these devices three or more hours each day. Another 40% say they use the internet for the same amount of time each day, predominantly for enjoying entertainment, maintaining social relationships or obtaining information. As far as social media is concerned, it can be seen that around 80% use social media. Among the most frequent platforms cited are Instagram, and Snapchat, which offers a one-to-one text- and photo-messaging service to its users, whereas hardly any participant uses Facebook. These trends reflect the tendencies detected by Anderson & Jiang (2018), which found out that Facebook is steadily losing significance among teenagers. Similar to the motivations for using the internet, participants state that they use social media for keeping in touch and for entertainment purposes.

With regard to the overarching theme of this research, which is news and its consumption, equally interesting findings were obtained. To begin with, it was found that two thirds of the

participating students say that they read news, half of them does so on a daily basis. Furthermore, when asked about their personal feelings, a clear majority of the respondents (86%) asserted that they consider it important to read the news and to be informed about recent developments and events. The most dominant sources for obtaining news as indicated in the questionnaire are teachers at school (66%), as well as printed or online newspapers (60%). Around half of the target group states they also receive news from the internet and TV – as well as from parents and family. Social media in this respect can be located slightly below 50%, and thus, scores place four of possible sources for obtaining news. This finding was supported by the fact that more than half of the respondents state they trust social media least but prefer sources like newspapers and TV.

When asked about their experience with fake news, all participants stated to be familiar with the concept and to have dealt with it in school. Correspondingly, 80% of the participants state that they have encountered a dubious article online before, which made them question its credibility. In such situations, 73,6% check another website to scrutinise the article and 60% consult someone familiar with the topic.

In conclusion, the questionnaire offers interesting insights into the participants' behaviours regarding new technologies, social media, news consumption and experience with fake news. In general, the data collected suggest that the participants are well-informed about current events and know how to retrieve quality information from various media. Summarising the results gained, it can be said that the participants show interest in news consumption and their behaviours and habits resemble the findings presented by researchers like Marchi (2012) and Mitchell et al (2013). Bearing in mind the self-report provided by the participants in the questionnaire, one may assume that the results for identifying fake news, as a consequence, should not form an obstacle for the participants. However, the second examination will prove this assumption to be wrong.

10.2. Verbal Protocol

As far as the results for the main examination of the empirical study are concerned, the two parts of the examination show quite different reactions. Before describing the results, it is necessary to recall the design of the two parts of the verbal protocol. As described earlier, the first part of the investigation was concerned with the first impressions the fake headlines make on the participants, simulating the random encounter of such a headline when browsing on social media. Whereas the second part is a more extensive analysis of the article, in which the

full article and website is accessible. In both cases, participants were recorded using the concurrent think-aloud method.

All in all, a total number of 159 instances of strategy application could be detected. The number of strategies applied is distributed evenly among the four participants, since the total share of strategies per participant is approximately 25%. While the total number of strategies applied by participant 2 and 3 is lower, participant 3 and 4 show roughly the same amount of strategies. This difference in the number of strategies applied might be due to the differences between weaker and stronger L2 learners to be observed. However, it is not likely that the differences caused by the language level had distorting effects on the results, since overall text comprehension was observed. In general, it can be said that when participants were unable to understand certain lexical items, they either asked the researcher or tried to understand the meaning from the context. To prevent any linguistic obstacles, each participant was asked to briefly summarise each story's gist, so the researcher could make sure, that there was no additional burden posed by the participants' language levels.

	surface level	meta level	total	% of all strategies applied
participant 1	31	14	45	28,48%
participant 2	13	16	29	18,35%
participant 3	21	16	37	22,78%
participant 4	25	23	48	30,38%
	90 (57%)	69 (43%)	159	

Table 4. Total number of strategies applied according to participant

The process of classifying the different strategies identified into coherent categories was accomplished as described in chapter 9.2. and will not be elaborated here in detail. As can be inferred from the table above, the majority of strategies applied by the participants altogether, belongs to the surface-level strategies (57% of all applied strategies). Amongst the surface-level strategies, the most prominent sub-categories encompass strategies occupied with textual (38%) and visual cues (31%), as can be seen in detail in the pie chart below (fig.4).

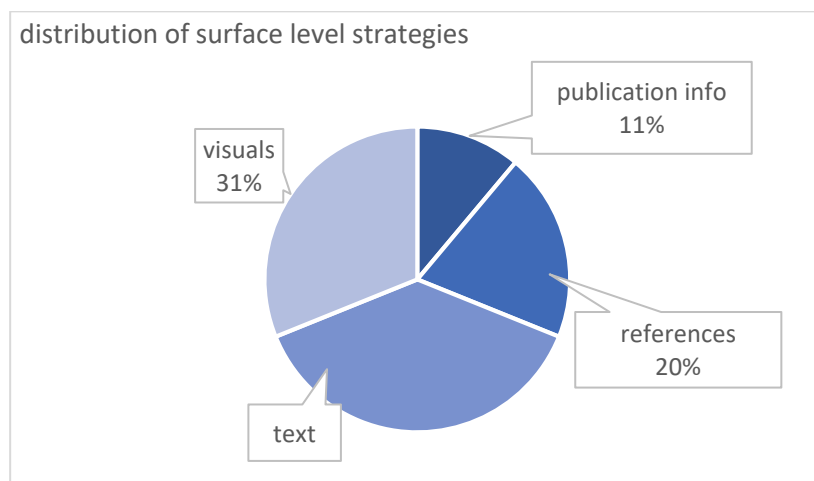


Figure 4. Distribution of surface level strategies

As already mentioned, these methods are mostly concerned with identifying structural and linguistic features of the text in question, such as text length and word choice, as well as examining advertisements and the overall layout. Frequently, participants investigated the different visuals used, like photos or graphs and analysed them. One participant, for instance, questioned the website's reliability due to the fact that a manipulated picture was used:

[...] you can already see the planes flying and spraying some kind of gas with skulls in it [...] I think that's not really a photo taken but edited in [...]

(Appendix, transcript 1)

or

[...] the picture I already saw so let's go down [...] okay I don't know the author
[...] the picture doesn't look very *vertrauenswuerdig* credible [...]

(Appendix, transcript 3)

With regard to the meta-level strategies found, which represent 43% of all strategies identified, the most significant sub-category comprises strategies related to prior knowledge with 59%. In the subset of meta level strategies, which are visualised in figure 5, participants were inclined to connect the present article to experiences related to media in general or prior knowledge about the topic, as for instance in

[...] just because I know such pages, they're pretty much strange [...]

(Appendix transcript 4)

or

[...] I've heard about other airlines selling one-way tickets, so I don't know how this is meant. (Appendix transcript 3).

In addition, some participants also justified their evaluation due to what was identified as emotional response in the coding process. The strategy emotional response refers to the fact that in some cases, there is no valid, reasonable process according to which the test takers operated, but their judgement can be retraced to their ‘gut feeling’. To exemplify, the category encompasses strategies similar to the following examples:

[...] okay wow i would be interested in reading the article because it’s shocking that someone would say something like that [...]

(Appendix transcript 2)

or

[...] and i don’t know it’s weird that they’re spraying something that’s used to treat people with manic depression or bipolar disorder that’s kina really bad [...]

(Appendix transcript 2)

In these two examples, it can clearly be observed that the participant relates emotionally to the message he/she is reading and further, it can be assumed that their judgement is influenced by these feelings. Using the data obtained, there is no clear correlation between emotional responses and the credibility ratings, so one can only assume to which extent the emotional aspect skews the impression of the test takers, or if it is a decisive factor in the process of evaluating a source or not. Nevertheless, it might be an amplifier of the overall impression the participant has while reading a message online.

Another interesting fact is that the examined individuals frequently expressed a lack of prior knowledge about the respective issue in respect and announced that they would research into the topic at a later point, saying for example, “I will look that up later” (Appendix transcript 3), or “I would inform myself about this news channel before” (Appendix transcript 1). However, in the end none of the 4 contestants realised the announcement, which lead them to carry out the credibility rating without compensating for their lack of knowledge. Given the fact that all 4 participants announced a cross-checking of facts or search for additional info on the topic, but none was actually realised, it might be assumed, that this reflects a trend of a certain online reading behaviour, in which on the one hand, the reader is aware of his/her lack of knowledge, but on the other hand, tends to disregard these possible gaps in knowledge.

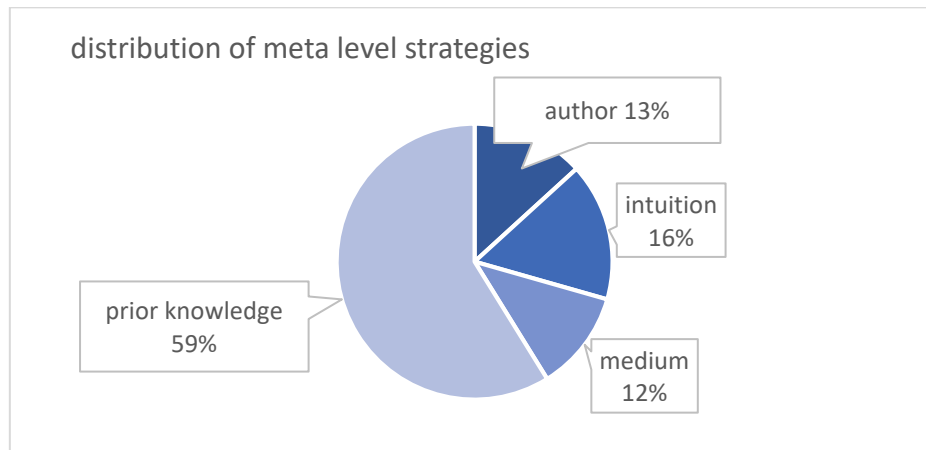


Figure 5. Distribution of meta level strategies

In general, results show that the main focus of the participants' attention moved from the surface level to the meta level. In how far the application of strategies changed from part 1 (WHILE-1) to part 2 (WHILE-2) is visualised in the bar chart below (fig. 6). Irrespective of the obvious quantitative differences between part 1 and part 2, which are due to the different scopes of each part, it can be seen that the distribution of strategies changed significantly. While in the first part, the majority of strategies applied belong to the meta level category (with 62%), it can be seen that in the second part, the surface-level strategies predominate with 65%. Thus, it can be concluded that while in the first part, strategies like intuition and activating prior knowledge were used, the second part shows that when confronted with an entire article, the focus on meta level strategies shifts towards surface level strategies addressing textual and visual stimuli. In this sense, one might say that the more input is provided, the more attention is paid to surface factors like visual and textual cues and less focus is on interpretation and prior knowledge, allowing for the shift from meta level to surface level analysis.

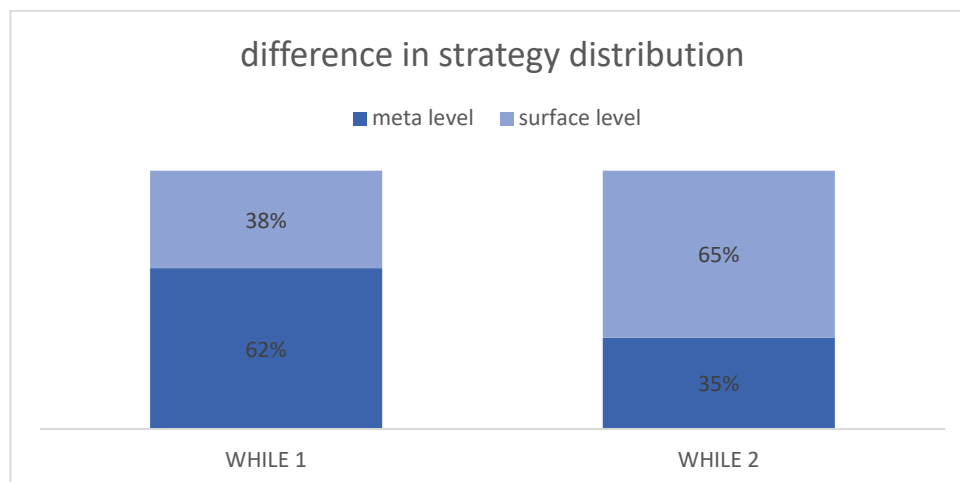


Figure 6. Distribution of strategies in to the two parts of the examination

Another interesting set of insights was gained via the credibility ratings made by the respondents. Since one of the main objectives stated in the examination was to produce a credibility rating of each fake news story, each participant was asked to rate the credibility of each story after, first seeing only the headline, and second, after reading the entire article on the website respectively. As can be inferred from the table below (table 5), the average credibility rating is 2.8, which translates to an average perception of the stories being credible with a strong tendency towards partially credible. Furthermore, it was found that in 7 out of 12 cases, participants decided to downgrade their rating, usually after investigating the entire story behind the headline. Only the credibility of the third story about NASA was upgraded, which might be due to the text's relatively frequent quotes and references to other sources. After the completion of the examination, each participant was asked whether he/she was satisfied with the rating and which rating he/she would choose as a final result. In all four cases, participants affirmed, that the second rating, which was submitted after the second part (WHILE-2), was their definite credibility rating. Consequently, it can be seen that in comparison to story 3, which is regarded as credible/partially credible, story 1 is rated the least credible story of the three fake news articles presented to the respondents.

	WHILE 1 Ø	WHILE 2 Ø	upgrade/downgrade
story 1	2,25	3,25	↘
story 2	2,63	2,75	↘
story 3	3,38	2,63	↗
(1= very credible, 2= credible, 3= partially credible, 4=not credible) Ø total= 2,8			

Table 5. Credibility according to credibility rating

On balance, it can be said that all four participants applied a broad variety of different strategies in order to examine the articles. Depending on the task, it could be seen that the focus of the participants' attention shifted from the meta level to the surface level of the text, resulting in different evaluations of the texts' credibility. However, although the attendees applied different strategies, it is still striking that none of the 4 participants managed to unmask the articles as fake news. When examining the transcripts, one might encounter signs of hesitation and disbelief. Nevertheless, the credibility and, in a way, the authority of the medium prevailed and led the participants into believing to have read true facts. The phenomenon encountered here, namely of failing to detect fake news despite having applied numerous strategies, will be approached in the following chapter.

11. Discussion of results

After having elaborated on different types of literacy and the definition of fake news, the present paper has examined different ways to combat fake news. In this respect, numerous researchers have provided different approaches on how to tackle the issue of mis- and disinformation online. From the “crap-detecting machine”, to different strategies and SEEK-training, as has been outlined in the previous chapters. Thus, the empirical part in this paper aimed at understanding how teenagers read articles online in the L2, which strategies of online reading they apply and how they distinguish between reliable and unreliable sources. Thus, as has been pointed out earlier, the following research questions were posed

(Q1) What characteristics do the participants show regarding media habits, social media use and fake news experiences?

(Q2) How do Austrian EFL learners evaluate the credibility of content encountered when reading online?

(Q3) When presented with sample, real life texts in an online reading context, which strategies do EFL learners apply to discriminate between fake news and real news?

The first research question could be answered via the conduction of the questionnaire. Moreover, the impression gained of the case study offered insights into the lives of the participating teenagers. All in all, the group seems to be well educated, able to handle new technology and interested in news and their emission. Most statements made resemble findings outlined previously. In general, the participants asserted to use new media mostly for keeping in touch with friends, but still, confirm the importance of being up to date regarding current affairs. Similar developments were observed by Ashley et al. (2016). Furthermore, in line with findings by Mitchell et al. (2013), participants claim that, while neglecting traditional ways to encounter news, they use new media for this purpose. Moreover, if in doubt, they consult “trusted adults” (cf. Marchi 2012). Overall, these findings reflect well on the supposed online reading skills of the participants. So, in the light of the insights gained so far, how can the results obtained in the second part of the empirical study be interpreted, or to put it bluntly – what went wrong?

In order to answer this question, it is necessary to recall the nature of reading in the online context, production of fake news and literacy education as practised nowadays in Austrian

schools. First and foremost, as has been repeatedly stated through the course of this paper, the demands posed on a literate person nowadays are different to those a reader in the past had to face. New technologies offer numerous “affordances”, like the possibility to retrieve real time messages from all over the world by the mere clicking of one button. However, this changed situation also poses new “constraints” (Jones & Hafner 2012: 13). While it was easily comprehensible in former times how a message got written, published and distributed, the understanding of the supply chain of messages present in today’s multimodal, multimedia world is becoming increasingly difficult. In this respect, one can assume that while educational institutions predominantly focus on the technical aspect of handling new media, these affordances and constraints of online discourse are frequently neglected. Thus, this situation might lead to the results obtained, reflecting a reality in which digital natives are able to handle technology, but unable to critically evaluate sources.

Taking the example of fake news, it is obvious that the motivations and operating principles in its creation and diffusion inherently differ from traditional news production. It is a fact that fake news is constructed in a way that aims at deceiving the readers and even manipulate them, while at the same time, its nature complicates the process of exposing such messages as intentionally published misinformation. Frequently, as explained previously, all available means, be it visual or linguistic cues, are used to retain the image of being a reliable source. Furthermore, the authors responsible for such contents understand how the human mind works when including references to well-known authorities, or news channels. In this sense, it has to be repeated that the participants did approach these visual and linguistic cues and also aimed at the examination thereof. Further, there was no difference between more and less proficient L2 users to be observed, which results in disregarding any influence of the language level on the outcome of the research. Despite all these attempts to analyse texts, it still happens that the reader falls for the allegedly true message, as manifested in the research conducted for this paper. In this sense, it can be argued that neither managing ICT on the practical level, nor being a digital native is a guarantee for mastering online reading.

Bearing this idea in mind, one might argue that rather than promoting ICT skills, education should aim at fostering different meta-level skills for successful online reading. So, as outlined previously, in the online reading situation it is crucial to have access to different tools and strategies to prevent getting caught in the web of skilful constructed lies. Precisely these strategies could be observed in the 4 participants who attended the second part of the present

empirical study. All in all, a total number of 159 strategies could be detected and participants mostly downgraded their credibility rating after closer examination of the texts, which on first sight seems to suffice in order to detect the fake news nature of an article. However, the opposite was observed, since no participant successfully managed to expose the articles as fake news and the average credibility ratings were rather high. There might be different reasons for this outcome which will be outlined hereafter.

First of all, all participants were eager to evaluate the texts they were presented and also attempted a critical engagement with the sources. Further, the participants reflected intensely upon the texts' credibility and employed strategies to scrutinise the texts. Thus, an abundant number of strategies could be identified, the majority of those applied belongs to the category of surface level strategies. Precisely, the participants mostly focused on visual and textual elements of the articles, disregarding characteristics that would offer a more detailed insight into the published message, such as investigating the author or publisher. Consequently, the participants identified advertisements as a marker that reduces credibility (“[...] I don't think its credible cause the website (...) I don't know (...) there's advertisement everywhere (...) no I don't think it's credible“, Appendix transcript 3), or drew conclusions as to how long the text was (“[...] I think it also more credible cause it's a longer article and has more information (...) it's not just a summary of something but its detailed [...]“, Appendix transcript 3) and which word choices the author(s) made (“[...] what I notice erm is that this article is a lot more complicated than the other one [...]“, Appendix transcript 4). In sum, all of these strategies identified on the surface level supported the participants in their decision about whether the article was credible or not. In the end however, the participants decided that the articles were credible or partially credible at least. In this sense, it can be assumed that while focusing on the apparent, the underlying details were missed.

Thus, dubious arguments presented were considered true and similarly, also quotes were taken for granted, because of the mere fact of appearing in an online article. Apart from the treacherous confidence in quotes supposedly provided by authorities, the participants showed an intense belief in the medium as such. The following quotes should illustrate the problem adequately:

[...] I don't think that that's something people would make up that much [...]
(Appendix, transcript 4)

[...] I think that must be very credible since you can't change the fact that what they did and said there [...] (Appendix, transcript 1)

[...] but what they said is true and that's not really something that people would come up with there's not really a purpose to come up with something like this" (Appendix, transcript 4)

In this sense, researchers like Hobbs (2011) consider it crucial to examine texts via a close reading, underlining the duality of “authors-audiences”, “messages-meanings” and “representation-reality” (2011:57). Unfortunately, evidence suggests that the participants were unaware of these correlations and rather focused on the texts’ surfaces. Hence, the outcome of the credibility rating was in line with the superficial discussions of the texts, leading to relatively high average credibility ratings and the devastating fact that no participant managed to demask the stories presented as fake news. Thus, it can be argued that the participants’ application of strategies can be considered a good starting point of evaluating an article, but in the long run, it is insufficient for a thorough analysis of the articles’ levels of credibility.

Besides emphasis on the surface level strategies observed, which might be one explanation for the findings, another decisive factor should not be neglected. As mentioned earlier, there was a set of arguments repeatedly brought forward by the participants, which grounds in the lack of understanding that a text published online asserts no claim of being true and could theoretically always be a hoax. In order to comprehend this mindset, one needs to revisit the idea of the ideologization of a medium, or more specifically, its authority (cf. chapter 3.1.5). In the experiment it could clearly be seen that, despite all the doubts the participants raised, they usually came to the conclusion that the articles have to be true, due to the fact that they exist. More so, considering the participant quoted above, it seems that the mere idea of an invented text seems to be inexistent in their mindsets.

One reason for this misconception might be grounded in the research design, since the experiment was conducted in the school setting, where pupils usually expect to be presented reliable sources, or at least, are not accustomed to question the contents. Another reason, which seems more plausible according to research in the field, concerns the consumers’ idea of a medium. As has been outlined, the majority of readers are unacquainted with the underlying processes of new media and the processes involved in the production and emission of contents. Thus, it is hardly ever scrutinised how messages are created and due to the fact that new technologies add more possibilities to this process, it becomes even more difficult to question the medium. In this sense, it is crucial to understand that in this examination, no participant

dared to question the medium's authority, nor reflected upon its ideologization. In this sense, rather than contemplating the elements that make an article untrustworthy, it would seem appropriate to pose the question, which aspects of a text accomplishes that readers believe the message.

In conclusion, the findings of the think aloud examination suggest that the understanding of new literacies needs to be reconsidered in the light of the medium's authority and the changing nature of messages published online. Thus, it can be inferred that it is no longer sufficient to understand letters, words and sentences, but rather literacy education necessarily needs to provide learners with ICT training, media and discourse analysis. Although there is a widely held belief that digital natives are fluent in the handling of new technologies, the problem of authority and authorship, production and emission in the online context seems to be neglected. Since in today's reality, every reader can be an author and vice versa, it is suggested to adopt a cross-curricular approach towards literacies education, which encompasses not only the traditional notion of learning how to read, but understanding how the complex web of media, internet and new technologies works.

12. Conclusion & implications for further research

On balance, it can be asserted that the meaning and significance of literacy has been subjected to change over the last century, but literacy education has not followed such. It seems as if institutions are unable to follow the new developments and are still stuck in the educational past. Literacy nowadays has a broad impact on society, or on humanity even, since being able to read, understand and produce texts is the key to participation in society. Thus, it can be said that after the digital revolution, it would be also necessary to have an educational revolution which addresses the new affordances and constraints accordingly and carries the past institutions into the present, equipping them with the necessary tools and skills to be fit for the future.

Furthermore, the research conducted for this thesis markedly supports the fact that young users of the internet are not only able to handle technology successfully, but also, they are surrounded by technologies constantly. According to the statements made by the participants when answering the questionnaire, it can be said that their behaviours are clearly in line with recent studies about teenagers and the media (e.g. Marchi 2012, Ashley et al. 2016), since it was found that the participants show interest in obtaining news, and handle doubts about messages and publishers in a similar way as the teenagers investigated by Mitchell et al. (2013). Nevertheless, interpreting the findings of the present study, it can be assumed that however accustomed the users may be with new media, it still costs a considerable effort to estimate a text's validity and credibility. In this respect, different reasons for the outcomes have been presented, none of which is so thought-provoking as the idea of the medium's authority. While readers have frequently raised concerns about whether the texts they were presented with were trustworthy or not, there was a genuine lack in the ability of overcoming the authority and authorship of the internet, since no participant scrutinised the websites' backgrounds. As a consequence, it would be necessary to examine how readers ideologise a medium and what factors determine the increase in credibility in similar situations.

Moreover, the engagement with the different sets of strategies applied by the participants shows that the participants were consciously using strategies to cope with the given task. In this respect, and in line with research question III, there were two subdivisions of strategies identified, facilitating the classification of surface and meta-level strategies. While all participants applied similar strategies, disregarding their language level in the foreign language, it was found that the majority of strategies observed belong to the surface category. As

mentioned previously, there was frequent questioning of visual impulses like advertisements, fonts, text length or images used. Nevertheless, since these strategies do not encourage an in-depth analysis of the texts, meta-level strategies like source evaluation or questioning the validity of the authorities cited, were neglected, which lead to relatively high credibility ratings and the failure of demasking the stories as fake.

As a consequence, it should be obligatory to teach students not only ICT skills, general reading strategies and tools for unmasking different discourses online, but it would also be important to discuss the production and dissemination processes involved in creating messages on the internet. Thus, teaching reading today requires more than focussing on language development, reading strategies and being able to infer meaning from context. Indeed, often it is neglected that real life reading situations considerably differ to the reading trained in educational institutions. Therefore, it is suggested to overcome the boundaries of curricular subjects, since it is not only the exclusive responsibility of the L1 or L2 teachers to train students' reading skills. On the contrary, an interdisciplinary approach would be required, which invites teachers of subjects like ICT and languages, as well as professionals in diverse fields such as journalism and IT to engage in cooperative projects for supporting the understanding of online reading.

In this respect, the results obtained in the research for this paper should serve as an impulse for further research in the field. It would be useful to have a broad scale adaption of the research design, encompassing a greater number of students, different school types and ages allowing for comparable, valid results which would offer more insights into the online reading skills of Austrian English students. Furthermore, it would be interesting to analyse the differences in strategies observed from one school type to another, or from rural to urban areas. Another possible focus would be on analysing students' performances according to languages to see if there are significant differences between reading and evaluating sources in the L1 and in the L2. While this paper offers only a small glimpse into the current reality of online reading in the second language, a bigger data set would facilitate an argumentation which could then support the cause in front of the responsible authorities and eventually, lay the foundation of a new, contemporary approach of literacy education.

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1. Questionnaire

Dear participants!

Dear participants!

My name is Jennifer Schiffer and I am studying English and Spanish at the University of Vienna. Thank you for agreeing to take part in this survey about media, news and fake news, which I have developed as part of my diploma thesis.

The purpose of the following survey is to find out how you and your peers feel about the media, the news and fake news. The questionnaire will take about 15 minutes of your time. You will have to answer different questions about the topic. Please note that there are no right or wrong answers. Therefore, I would like to ask you to answer as honest as possible.

The results of this survey will help us understand how teenagers like you think about the topic and support how we deal with the issue of fake news in the future!

So, your participation is really important!

All your contributions regarding the following questions will be strictly confidential. Responses will not be identified by individual, but analyzed as a group. The results will be handled with anonymity and only be used in this research.

If you have any questions or concerns, please do not hesitate to contact me. Also, if you are interested in the results of the survey and my diploma thesis in general, I'd be more than happy to share my work with you. Here you can get in touch with me:

Jennifer Schiffer
Florianigasse 75/11
1080 Wien
schiffer.je@gmail.com

Thank you once again! :)

(Please click 'next' to continue)

Personal information

Gender? *

Please choose... ▼

Age? *

Which languages do you know?

Please add the level of proficiency you think you have in these languages! (e.g. mother-tongue, fluent, intermediate, basic)

How would you describe your reading skills in English?

- ☐ excellent
- ☐ good
- ☐ regular
- ☐ basic

General background

Do you have access to devices like mobile phones, computer, tablet, etc.?

- ☐ yes
- ☐ no

Which devices do you usually use?

List the most important devices you normally use in your private/professional life!

Think about your personal habits.

How many hours a day do you use technological devices like mobile phone, laptop, tablet, computer, ...?

- ☐ 0-1h a day
- ☐ 1-2h a day
- ☐ 2-3h a day
- ☐ 3 or more h a day

How many hours a day do you spend on the internet?

Think about the time you spend using apps like Facebook, Snapchat, Instagram, etc.!

- ☐ 0-1h a day
- ☐ 1-2h a day
- ☐ 2-3h a day
- ☐ 3 or more h a day

Please rank the reasons for using the internet according to your personal habits!

I use the internet to...

(1=most important reason, 5= least important)

- ▲ ▼ keep in touch with friends, family, ...
- ▲ ▼ get information about certain topics
- ▲ ▼ entertain myself
- ▲ ▼ read news
- ▲ ▼ learn about latest events around the world

When online, which languages do you frequently read?

Make a list of the languages you personally encounter online (on social media, when surfing or researching). Start with the most frequent!

Social Media

Are you using social media like Facebook Instagram, Twitter, etc.?

- ☐ yes
- ☐ no

Which social media platforms/apps do you use?

List any social network you use!

For you personally, which are the most important reasons for using social media?

I use social networks to...

(1 = most important reason, 5 = least important)

- ⬆️ read news
- ⬆️ keep in touch with friends, family, ...
- ⬆️ entertain myself
- ⬆️ learn about latest events around the world
- ⬆️ get information about certain topics

News habits

Do you read the news?

- ☐ yes
- ☐ no

How often do you read about the latest events?

- ☐ once a day
- ☐ once a week
- ☐ once in a while
- ☐ Other:

I usually get news from...

You can choose more than 1 option!

- ☐ TV
- ☐ radio
- ☐ parents, family,...
- ☐ friends (offline)
- ☐ newspapers (print/online)
- ☐ social media
- ☐ internet
- ☐ teachers at school
- ☐ Other source:

For you personally, which source do you believe most?

most credible =1 /not so credible=5

- ⬆️ TV
- ⬆️ radio
- ⬆️ parents, family,...
- ⬆️ friends (offline)
- ⬆️ newspapers (print/online)
- ⬆️ social media

Describe your personal feelings towards these statements!

(there is no right/wrong answer!)

	strongly agree	agree	no opinion	disagree	strongly disagree
I think it's important to read the news.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust in newspapers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust in online articles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust in articles my friends/family...share online.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I regularly inform myself about the latest events.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Fake news

Have you ever read an article online and weren't sure whether it's true or not?

- ☐ yes
☐ no

Have you ever heard about the term "fake news"?

- ☐ yes
☐ no

If yes, where?

(school, at home, on the internet, friends,...)

Complete the following phrase:

When I find a dubious article online, I ...

You can choose more than 1 option!

- ☐ ...ignore it.
☐ ...check the URL.
☐ ...check the "About-us" part on the website.
☐ ...ask someone I know about it.
☐ ...check another source about the topic.
☐ ...look up the author/organisation/publisher.
☐ Other:

When you see a posting on a social media platform, what makes you click on the link?

You can choose more than 1 option!

- ☐ personal recommendation of someone I know
- ☐ catchy headline
- ☐ visuals (pictures, colours etc.)
- ☐ location (e.g. top of FB timeline, top of search engine results)
- ☐ links shared (or retweeted) by friends
- ☐ Other reason:

What's your experience with the following statement:

On social media, I share articles I have not read / or only partly read because of their interesting headlines.

- ☐ always
- ☐ often
- ☐ sometimes
- ☐ occasionally
- ☐ never

» **Redirection to final page of eSurvey Creator** ([change](#))

2. Participant consent form

Thanks so much for taking part in the first part of this research!



As a next step, I want to know more about **your thoughts and ideas!** Therefore, I will conduct a **think-aloud** examination.

The only thing you would have to do is sharing your thoughts with me while completing 2 online reading tasks.

Don't worry! It is not an exam and your answers will be **anonymous** and will not have any consequences whatsoever!

You would help me a great deal with taking part in my research 😊

If you would like to take part in the examination, please write down your name and sign below!

😊 **THANK YOU!** 😊

Your name

Signature

(source: http://worldartsme.com/clip-art-computer-internet-clipart.html#gal_post_91810_clip-art-computer-internet-clipart-1.jpg)

3. Instructions for the researcher

Hi (insert name). My name is /insert name). As you already know, I'm a student at the University of Vienna and I'm currently writing my diploma thesis. For this purpose, I'm examining how English learners like you read on the internet. Your participation helps me a great deal and the results may help me and other teachers in Austria to understand, how we can improve our English classes.

I have prepared some activities for you. All in all, this will take about 25 minutes. Each task will be explained in detail. Please ask if there's something you don't understand. Before we start, I want to remind you that I will record your voice and your movements on the computer. This helps me to remember all the important things you will be telling me.

Don't worry, no one will hear these recordings and your data will be anonymized.

i. PRE-1 Prior knowledge (method)

To start off with, I want to explain to you how the method works. I told you some weeks ago, that you will be thinking out aloud while you do these tasks. This means that you will be telling me all the things you are thinking while you are using the internet/solving the tasks.

- **Preparatory video (1min)/Preparatory task**

In order for you to understand what this means I will show you a video.
(source: <https://www.nngroup.com/articles/thinking-aloud-demo-video/>).

After watching:

So, this is how it works. Do you have any questions? (Y/N, answer)

OK! Then we will start with a trial: (show and hand out preparatory task)

ii. PRE-2: Prior knowledge (topic)

In a moment, you will be given a sheet of paper with three headlines. I want you to look at these headlines and tell me what you think.

- Before we start I want to know if you have already heard about
 - o topic 1
 - o topic 2
 - o and topic 3

Tell me anything you know about 1),2),3)!

- How do you personally understand the term credibility?

Now we will get started. I want you to feel comfortable. Just imagine, you would be alone in this room, solving these tasks! (Me and assistant move out of sight, S starts working on WHILE-1)

iii. WHILE-1: headlines

Now, here's the sheet of paper with the three headlines. I want you to answer these 3 questions.

While you do so, please try to think your thoughts out loud. That means, say anything that comes to your mind, as if you were alone in this room.

iv. WHILE-2: online reading

- Before starting, introduce the participant to the computer
 - Here's XY (Browser we're using)
 - I have opened the 3 pages already.
 - Apart from these already opened pages, you can open up any page you like for solving the task.
 - If you want to take notes, here is paper and pencil.
 - Please continue to think aloud!
 - Remember, you can use English or German.

Ask the participant whether he/she is familiar with the software etc. and explain, if necessary.

Now you are going to read 3 articles, which belong to the headers you've seen before.

While you read the articles, I want to you to think about the following questions (read questions).

While you answer the questions, please try to think your thoughts out loud. That means, say anything that comes to your mind, as if you were alone in this room.

After completion, ask if participant would like to change the first credibility rating.

v. POST-1: Reflection/Feedback

- So, how was it for you? How did you feel doing the T.A.?
- Did you understand the task? Was it easy/difficult? Were there any problems?
- Now you're finished, what comes to your mind regarding the text you've just read?
- Are you satisfied with your results?
- Would you want to give me any feedback on the research setup?
- Do you have any questions?

Then I will explain that all three texts are classified as *fake news*. I will then ask:

- Now you know this, what do you think?
- Has something similar happened to you before? (You found something online, which turned out to be false information?)
- What would you need in order to detect fake news better/easier?

Please do not talk to your colleagues about this until we are finished!

Release student.

vi. End of session:

- Record the end time
- Stop the recordings
- Save the files
- Reset the browser /clear browser history

4. PRE-1 material

PRE-1: preparatory task (method)

Have a look at the following picture and give it a title.

While you do so, please try to think aloud and share your thoughts with us.



(Source: <https://peru.com/actualidad/otras-noticias/irreverentes-estos-abuelitos-si-saben-como-divertirse-fotos-noticia-292320-934558>)

5. WHILE-1 material

WHILE-1: Headlines

I want to know ...

- o Would you be interested in reading the article that goes with the headline?
Why/why not?
- o Do you think the article that goes with the headline can be trusted?
Why/why not?
- o Please evaluate the three headlines according to credibility!
(1=very credible, 2= credible, 3=partially credible, 4=not credible)

Your evaluation

heading 1 “Trump” _____

heading 2 “Saudi Arabia” _____

heading 3 “NASA” _____

1)



2)

SAUDI ARABIA: PANEL OF SCIENTISTS ADMITS WOMEN ARE MAMMALS, YET 'NOT HUMAN'



3)

NASA ADMITS To Spraying Americans With Lithium & Other Chemicals

NOVEMBER 14, 2017 BY SHEEP MEDIA

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SHARES

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Thank you for your answers.
Let's move on to the 2nd task!

6. WHILE-2 material

WHILE-2: online reading

While you answer the questions, please try to think your thoughts out loud. That means, say anything that comes to your mind, as if you were alone in this room.

I want to know ...

What is the text about? Sum up in 1,2 sentences!

Please evaluate the three articles according to credibility!
(1=very credible, 2= credible, 3=partially credible, 4=not credible)

What are the reasons for your choice? Give 2-3 reasons for your evaluation of each website!

Your evaluation

article 1 "Trump" _____

article 2 "Saudi Arabia" _____

article 3 "NASA" _____

Thank you for completing the 2nd part of the research!

7. Observation sheet

Field Notes for Verbal Protocol Session on _____

Researcher: _____

Student: # _____ Age: _____ Grade: _____ Gender: _____ School: _____

Audio-file: _____ Camtasia-file: _____

Starting time: _____ Ending time: _____

Time	Observations

8. Fake News sample texts

8.1. Story 1 “Trump offers free trips”

CELEBS WTF CRAZY WORLD WOW LOL

f t v Q

6 NEWS

BREAKING NEWS

Trump FREE Trips to Africa/Mexico
 If You Wanna Leave America [Tmzhiphop.com]

CELEB

Trump Offering Free One-Way Tickets to Africa & Mexico for Those Who Wanna Leave America

By tmzworldestar
Published on Nov 11, 2016

SHARE TWEET P ENVELOPE

"Everyone says they want to goto Africa or Mexico well here's your chance! Make America Great and Go Back To Your Country for Free!" — Trump

Trump Airlines has received many requests to begin services to Africa and Mexico after he was elected as the next President. The Vice President for Trump Airlines announced this morning that TA will be giving away one way tickets to The Motherland and El Chapo's World but they will not be offering return flights. Trump Airlines is known for their discount rates and now they'll be the only airline that only sells one way flights to a location.

"I figured we can get you there but good luck bringing your Hilary voting Asses back to the US" — Trump

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CRAZY WORLD

Wife Murdered After Tricking Her Cheating Husband into F*cking a Transgender

BY TMZWORLDSTAR © AUG 20, 2017

CRAZY WORLD

Chicago Goon Who Was A Killer For The Vicolords Has Turned Into A Transgender!

BY TMZWORLDSTAR © AUG 19, 2017

CRAZY WORLD

Man Arrested After Kicking A 6-

8.2. Story 2 “Saudi Arabia: Panel of scientists admits women are mammals, yet ‘not human’”

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SAUDI ARABIA: PANEL OF SCIENTISTS ADMITS WOMEN ARE MAMMALS, YET ‘NOT HUMAN’



f 453K

Riyadh | In an unprecedented ruling, a panel of Saudi scientists has concluded that women are actually mammals, granting them the same rights as other mammal species such as camels, dromedaries and even goats.

The verdict, which fell just hours before the International Women's Day, is considered “historic” by some experts and advocacy groups for women's rights.

“It may seem too little, too late, but it is truly a milestone event for all women in the region,” explains Jane Austin, visibly excited.

“This is a great leap forward for women's rights in Saudi Arabia”

— Jane Austin, Women's Liberation Action Network

“From now on, women will be considered as members of the mammal class, whereas before women shared the legal status of an object, similar to that of a home appliance,” she admits.



Jillian Birch, spokeswoman at Amnesty International, said she is optimistic about the future as women will no longer be considered as “soulless objects” but as fully fledged mammals

From The Web

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top speed 60 km/h
on board

321 m

Skeid ship
top speed 27 km/h

PLAY THIS FOR 1 MINUTE AND SEE WHY EVERYONE IS ADDICTED

VIKINGS: FREE ONLINE GAME



World News Daily Report
73,420 „Gefällt mir“ Angaben

Seite gefällt mir Nach

TRENDING NOW



COUPLE STUCK TOGETHER FOR 16 HOURS AFTER MISTAKING SUPER GLUE FOR LUBRICANT



DRUG MULE ARRESTED AFTER DIARRHEA EJECTS COCAINE IN MIDDLE OF AIRPORT



BLACK STUDENT ADOPTED BY WHITE PARENTS QUILTS HARVARD TO DENOUNCE HER OWN WHITE PRIVILEGE



INDONESIAN ZOO EMPLOYEE HOSPITALIZED AFTER ATTEMPTING ORAL SEX ON MALE RHINO



RETIREMENT HOME RAIDED BY THE FBI FOR RUNNING ELDERLY FIGHT CLUB, 7 ARRESTS



MALE ANAL RAPE VICTIM SAYS 911 OPERATOR LAUGHED AT HIM, CALLED HIM A “FUDGE PACKER”

HOT NEWS

"Soulless objects"

The recent verdict could completely upset all laws currently enforced in Saudi Arabia believes Jillian Birch, a spokeswoman at Amnesty International.

"This verdict shows the incredible progress the women's rights movement has made in the past 50 years," she admitted in a press conference this morning.

"Finally, women will no longer be simply considered as objects without souls, but as full-fledged mammals, with the same rights as other animals of their species such as camels and goats," she said, visibly emotional.

"Women are still far from being considered 100% human, but their condition will improve drastically with this decision," she firmly believes.

An unprecedented verdict

The verdict, which fell like a ton of bricks on the Saudi state, has clearly not found unanimous support amongst religious authorities and the political elite, concede experts.

"It could create significant turmoil in the current legal state of affairs and the judiciary system of Saudi Arabia," says political analyst specialized in the Middle East, Anthony Bochstein.

"If women previously had the same rights as a chair or a table and were seen more as individual property, they now have an equivalent status to certain animal species, and thus must receive, at the very least, feeding, watering and be conferred a minimum of attention and respect, which was not the case previously," he explains.

According to the expert panel that ruled on the matter, women are still devoid of a soul but have been shown to possess qualities common to the mammal species, which would explain their ability to procreate and breastfeed, as well as why they are equipped with seven cervical vertebrae, a characteristic unique to the mammal species.



453K



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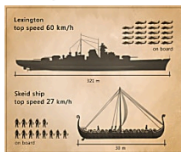


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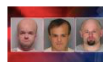
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8.3. Story 3 “NASA admits spraying Americans with Lithium & other chemicals”



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NASA ADMITS To Spraying Americans With Lithium & Other Chemicals

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NASA CONFESSES TO DOSING AMERICANS WITH AIR-BORNE LITHIUM & OTHER CHEMICALS

WAKINGTIMES There's the official explanation for why NASA is spraying lithium, a pharmaceutical drug most often used to treat people with manic depression or bi-polar disorder, into our ionosphere, and then there is the probable reason(s). It would be easier to accept NASA's official explanation if they were not so secretive about everything they study and do – but one thing is for certain – NASA's own personnel have admitted that lithium, along with other chemicals, are intentionally being placed into our environment regularly.

It is possible that many of NASA's own employees aren't even aware of the true motivations for carrying out such a project, ironically displaying the very behaviors that these chemicals/pharmaceuticals are meant to instill.

In the first bomb-shell video a NASA employee (Douglas.e.rowland@nasa.gov) ADMITS that lithium is being sprayed in the atmosphere, and says that it is "harmless to the environment."

Before I give you NASA's official explanation of **why they are spraying psych-meds over hundreds of thousands of Americans**, I'd like to point you to some references so that you can do your own research, and discover that this is no conspiracy theory. It is **very real**, and there is ample **scientific documentation** to corroborate what I put forth here:

A **Pub Med abstract** titled, *Feasibility of Aerosol Vaccinations in Humans* discusses how an increase in antigen volumes can be beneficial in aerosol delivery of vaccines, and could be used in "developing countries and disaster areas." The abstract also admits that **several thousand human subjects have already been aerosol vaccinated with live attenuated measles and influenza A vaccines**. The executive summary further states that **aerosol vaccinations are ideal** for "large populations."

This has apparently been happening since as early as 2003.

Another discussion of **aerosolized vaccinations** can be found in **The New England Journal of Medicine**. *A Randomized, Controlled Trial of Aerosolized Vaccines Against Measles* states that these vaccines were tested on children in India that were as young as 9 months old.

The **World Health Organization** has been **researching aerosol vaccines for years** now, as have "philanthropic" agencies which have clear aims to sterilize the population. It is also worth noting that the pharmaceutical industry has been **absolved from any legal responsibility** for medicating the masses since they were awarded **legal protection from all lawsuits** by Congress in 1986. This law was challenged, but **upheld by the U.S. Supreme Court** in 2011.

Many powerful agencies are making sure that we "take our medicine."

In fact, **many nations are participating in our unwitting, forced vaccination**, and the dumping of any number of attenuated viruses, chemical concoctions and other 'chemtrails' on our heads with dogged frequency.

The Office of the Gene Technology Regulator (OGTR) considered giving a license application to PaxVax Australia (PaxVax) for the intentional release of a **GMO vaccine consisting of live bacteria** into the environment in Queensland, South Australia, Western Australia and Victoria. They planned to release cholera on their people.

According to the regulator, **this GMO vaccine qualified as a limited and controlled release** under section 50A of the *Gene Technology Act 2000*.

Of course, we can't ignore the USA. **Michael Greenwood** wrote an article stating that:

"*The incidence of human West Nile virus cases can be significantly reduced through large-scale aerial spraying that targets adult mosquitoes, according to research by the Yale School of Public Health and the California Department of Public Health.*"

So, hopefully we've established that this IS happening. But why?

As more nations refuse **genetically modified food**, and refuse to drink **fluoridated water**, which has been **named as a neurotoxin** by one of the world's premiere medical journals, the power structure that **desires a complicit population** has to figure out a way to alter our neurochemistry.

Lithium alters how we think by changing the levels of serotonin and norepinephrine secreted by our endocrine system. Lithium strongly alters the brain system, yet the NASA employee in the above video states that "it is not dangerous" and doesn't harm the population.

Even doctors who normally prescribe this medication for the mentally ill have said that it is **dangerous** because it is **hard to figure out proper dosing**. Surely, spraying copious amounts of lithium indiscriminately into the air via aerosols should be questioned – but here's **NASA's**

We also learn from this specific call that **lithium has been dumped in our skies since 1970.**

If you wanted to medicate the masses to create mindless, slave-like prisoners who didn't even know they were imprisoned, this is surely a good way to do it.

Spraying **lithium** into our skies, **along with** countless other bacteria, viruses, prions, parasites, fungi, carcinogens, toxins, hormone-altering drugs, anti-flora and anti-fauna, as well as gene-altering micro-dust is nothing more than **bio-warfare** against the world's citizenry.

You can **call them chemtrails** or something else, the effect is the same.

" *The conscious and intelligent manipulation of the organized habits and opinions of the masses is an important element in democratic society. Those who manipulate this unseen mechanism of society constitute an invisible government which is the true ruling power of our country. .We are governed, our minds are molded, our tastes formed, our ideas suggested, largely by men we have never heard of. This is a logical result of the way in which our democratic society is organized. **Vast numbers of human beings must cooperate in this manner if they are to live together as a smoothly functioning society.** .In almost every act of our daily lives, whether in the sphere of politics or business, in our social conduct or our ethical thinking, **we are dominated by the relatively small number of persons..who understand the mental processes and social patterns of the masses. It is they who pull the wires which control the public mind.**" - **Edward L. Bernays**, Master Propagandist*

About the author: **Christina Sarich** is a writer, musician, yogi, and humanitarian with an expansive repertoire. Her thousands of articles can be found all over the Internet, and her insights also appear in magazines as diverse as **Weston A. Price, Nexus, Atlantis Rising,** and the official stance on this practice.

" *The project is studying neutral and charged particles in the ionosphere and how each affects the way the other moves resulting in currents in the region. The variations matter because all of our communications and GPS satellites send signals through the ionosphere. A disturbed ionosphere translates to disturbed signals, so scientists want to know just what causes the ionosphere to behave in specific ways."* **(NASA)**

Meanwhile, should the over-medicated start to *actually* figure out what is being done to them, the **government has imposed gag orders** on the National Weather Service (NWS) and the National Oceanic and Atmospheric Administration (NOAA) who might easily refute the ridiculous claims of NASA.



The US Navy admits to conducting electromagnetic warfare drills over the Olympic Peninsula. Reader submitted photo.

Notably, every single person who works for NASA, the NWS or NOAA are paid with tax payer dollars. **This means that we are paying to be medicated and poisoned.**

Here, to corroborate information being given by the NASA employee in the video, is the **Code 8440 RMMO** which states the exact purpose of using Wallops Flight Facility to launch a rocket containing lithium thermite:

“ **Purpose:** The primary purpose of this mission was to test the loading methods for lithium canisters to be flown on the upcoming Kudaki (Kwajalein, April 2013) and Pfaff (Wallops, June 2013) missions, and verify their functionality under sounding rocket launch and space flight conditions.

Rocket Type: Two-stage Terrier MK70 Improved-Orion

Location: Wallops Range

Launcher: MRL

Date of Launch: January 29, 2013

Time: 17:50 EST

Experiment results: Thermistor data looked nominal. Good report from airborne optical platform of recorded video and lithium clouds also visible by ground observation.’

expensive reputation. Her researches on related subjects have appeared in the Internet, and her insights also appear in magazines as diverse as *Weston A. Price*, *Nexus*, *Atlantis Rising*, and the *Cuyamungue Institute*, among others. She was recently a featured author in the Journal, "Wise Traditions in Food, Farming, and Healing Arts," and her commentary on healing, ascension, and human potential inform a large body of the alternative news lexicon. She has been invited to appear on numerous radio shows, including Health Conspiracy Radio, Dr. Gregory Smith's Show, and dozens more. The second edition of her book, *Pharma Sutra*, will be released soon.

FILED UNDER: **CHEMICALS, CHEMTRAILS, CORRUPTION, HEALTH**
TAGGED WITH: **CHEMTRAILS, GEOENGINEERING, LITHIUM, NASA**

9. Transcripts

9.1. transcript participant 1

code	<startT1_00:00>
PT1	<p>S1: and before we start erm with the actual activity i want to ask you well in a moment you will get a sheet of paper with three headlines as you find them on facebook like some kind of snapshots with a headline and a picture and erm i want you to look at these headlines and tell me what you're thinking about okay you will get the detailed instructions later but before that i want to erm know if you have already heard about first erm trump and his idea about immigrants from mexico and africa is this a topic you're familiar with</p> <p>S2: yeah i've heard it sometimes but i'm not too familiar with it i got an idea about it</p> <p>S1: so an idea great! the second topic has to do with saudi arabia and women's rights</p> <p>S2: e::::rmmm</p> <p>S1: a general idea</p> <p>S2: general idea yes</p> <p>S1: okay the third topic has to do with nasa do you know what nasa is</p> <p>S2: yes</p> <p>S1: mhm and the idea of spraying chemicals from above onto the ground</p> <p>S2: chemtrails</p> <p>S1: yes chemtrails exactly so you're familiar with that okay great erm so that's the tree topics we're going to discuss later on and the last point before starting has to</p>

	<p>do with the term credibility do you know what the term credibility means</p> <p>S2: ermmm</p> <p>S1: okay credibility for me at least it means that if you can trust something for instance you know i don't know you read an article and you think this is a source which i can trust so this is credibility</p> <p><L1de>glaubwuerdigkeit</L1de> in german okay</p> <p>S2: mhm</p> <p>S1: and the tasks will have to do with credibility so bear in mind the idea of credibility and what this means to you so <L1de>glaubwuerdigkeit</L1de> in a way okay so i think we're about to start erm yeah {researcher starts cantasia}</p> <p>S1: and erm yeah now here's a sheet of paper with the three headlines on the next page you've got the other two i want you to answer these three questions and while you do so please remember to think aloud and tell me just literally anything that comes to your mind</p> <p>S2: okay</p> <p>S1: erm have a quick look at the questions and tell me if there's anything unclear</p> <p>S2: <reading question> okay</p> <p>S1: are you alright</p> <p>S2: yeah i think everything's clear</p> <p>S1: okay so then you just start erm the end product of course is creating a rating of the three headlines so the last point</p> <p>S2: oh</p>
PT1	

PT2	fact that what they did and said there so i would give it a two as well erm
	the third one looks like a very catchy news site on the internet like others you find on the internet so i just give it a three because i don't know how trustable this site is
	S1: okay great so thank you this was the first part erm
	and the second part is on the computer have you worked with a mac before
	S2: yeah
	S1: so you know how to click and all these things
	S2: yes
	S1: okay so here's firefox the browser i've opened i've opened already the three articles of the headlines you've just read yeah apart from these pages you can open up any other page you want and if you want to take notes here's paper and pencils you can use this remember to think aloud please and i've already said you can use english or german as you want there's the instructions for the second part and erm well i want you to read these three articles and while you read i want you to answer these three questions the fourth question comes after reading all the three articles so have a quick look at the questions please and let me know if you understand them
	<reading questions>
	S2: so evaluate after i've read the articles
	S1: yeah question 2 i want you to evaluate the articles after reading it so go ahead and please remember to think aloud

TXT/2	S2: okay so you can see the picture i saw before right at the top <reading headline mumbling> so this is a very
TXT/2	catchy title and kind of provocative since it kind of shows the trump migration policy in a very provocative way like the
AUT/1	author of this article sees the politic of trump (.)
	S1: remember to think aloud
	S2: the article goes on with a quote from trump telling that he would pay for all trips from immigrants like home to mexico and africa (.)
	S1: what are you thinking right now
TXT/2	S2: <@> right know i'm trying to understand what they wanna say but they just like go on try to provoke that trump since he's the new elected president that he wants like to send all the illegal migrants back home to their motherlands they say here and yeah they want to offer them return flights to their homes with trump airlines but they only sell one way flights to a location
REF/4	yeah and the article ends with another quote from trump yeah and it's again very provocative against the hillary voters in the election and yeah trump says like they can try to get back to the us to the people who voted for hillary in the election but they just can try but can never come back to the us so he wishes them good luck
	S1: please remember the questions
	S2: okay so to sum up the article sums up the way that trump wants to get rid of the illegal migrants and his policy so he wants to pay for the one-way home tickets to their home-country and i would say that how this article is written is more like a three its only partially
TXT/2 PK/1	credible i think it's true that trump sometimes especially

TXT/2	the quotes he said these quotes but the provocative writing style makes it not really credible
PK/1	S1: so the reasons for your choice are S2: it's partially credible because trump i think must have really said the quotes but that's more like credible but
AUT/1	through that provocative writing style it seems like the author wants to <L1de>darstellen</L1de> trump in a very bad light so i think it's only like a three and yeah
VIS/2	also the layout of the website looks not very credible since you have on the right side much articles about
REF/2	different topics so you can't really check from the website more <L1de>quellen</L1de> to inform yourself to get further information S1: alright would you like to move on to the next article S2: okay so at the beginning we have again the title and the picture i've seen before then it starts with i think it's a saudi arabian city the riadh i don't know how to pronounce it but i think it's a city in saudi arabia then it goes on with a short summary of the article at the beginning yeah there's again the thinking that women are not humans right now and (.) yeah the meeting i think must happened just hours before the international women's day so i don't think its <L1de>zufaellig</L1de> that they chose this day to make the meeting to discuss the women's right just before the women's day (.) yeah and after that comes a quote by a speaker of amnesty international that says that the women's rights in saudi arabia have improved and made a great leap in the latest time and yeah they think that they are very optimistic that women's rights evolve in a good way in saudi arabia

	S1: okay so thinking about the questions again... S2: so i think the article kinda is about a meeting in s a where they discussed woman rights and want to improve the women's rights in saudi arabia and also the quote from the amnesty international speaker says that this evolution is very good they are optimistic that the future of women's rights in saudi arabia is great S1: so what do you think about the second question S2: so again i would rate it lower than just from the title i would give it a three as well because of course you have again amnesty international it's a very credible source of information so i think that if they have experts from amnesty it should be very credible but again you have these catchy titles and the layout at the right side again very catchy advertisements for games or other articles on the website so that makes it not very credible but i've never heard of this website before so i wouldn't trust it at first sight S1: do you want to add anything on the second text because otherwise i would ask you to please move on to the third one
REF/4	
REF/1	
TXT/2, VIS/1, VIS/1, PK/4	
VIS/3	S2: okay so it starts again with the title and the picture i've seen before and you can already see the planes flying and spraying some kind of gas with skulls in it i think that's not really a photo taken but edited in yeah and again they start with the explanation that nasa really admitted spraying lithium and other gases over the us i don't know which gases this is i would have to look it up on another website because it's not mentioned here (.) yeah and they mention again that nasa's own personnel
REF/1	

REF/1 PK/6	have admitted to spraying different gases over the us it mentions here but i think it's not just in the us that they spray these gases erm so it goes on with (.) i think they mention some kind of employee here from nasa but i would have to look it up as well because there's just an email address and i don't know to whom this email address belongs but they mention that nasa says that these lithium and gases are harmless to the environment so the people don't have to matter about the <L1de>auswirkungen</L1de> on the environment S1: so coming back to the questions what do you think S2: i think the text is about nasa employees who have admitted to spray different gases like lithium and other pharmaceutic drugs over the us and yeah i would rate this article with a two so rather credible because they really mention employees of nasa and also say which employees there are so you can really look up and look if another news pages say that these employees said that they're spraying gases and other things over the us and you have as well some links in the text so you can instantly go on from the text to other sites to inform yourself more about things you might not know from the text because they're not explained in there also at the top the layout is very serious you have not much advertisements really only the text you also have pictures that depict some kind of chemtrail things but i don't think you should trust the pictures too much cause you can photoshop them as well so yeah
REF/1	
REF/3	
VIS/2 VIS/1, VIS/3	

	S1: okay so regarding the fourth question erm would you change the rating would you rather take this one or the other one S2: i would rather take the second one that the first two articles are not that credible as i thought about when i only saw the title i think that how the article gets presented to you on the internet is very important about how credible a article is i think it's really important to see the whole thing and i would take the second rating S1: okay so erm {stops camtasia} that's the two parts i wanted to see you do and now i wanted to ask you some questions rather quickly because we're running out of time
	<endT1_38:22>

9.2. transcript participant 2

	<startT2_00:00>
	<p>R: so that was the <L1de>übungsphase</L1de> kind of and now we're going to start with the topic and before we actually start with the activities i want to know if you have already heard about some topics which we will discuss later on right now the question would be have you heard about trump and his opinion or policy on immigrants</p> <p>P2: yes</p> <p>R: so you're familiar with the topic</p> <p>P2: yes kind of</p> <p>R: okay kind of the second topic has to do with saudi arabia and women's rights how about that</p> <p>P2: erm a little bit</p> <p>R: the third topic has to do with nasa do you know what nasa is</p> <p>P2: yes</p> <p>R: and spraying chemicals from the sky</p> <p>P2: okay no i don't know about that</p> <p>R: chemtrails is a thing you've heard about</p> <p>P2: erm no i don't think so</p> <p>R: okay so we will see about that later on erm and before we start another question: the term credibility do you know what the term means</p> <p>P2: no i don't think so</p> <p>R: okay so the german translation would be <L1de>glaubwürdigkeit</L1de> for me it means that i can trust in something so the term will come up later in the tasks therefore i want you to remember what it means so</p>

	<p><L1de>glaubwürdig vertrauenswürdig </L1de> in this direction okay</p> <p>P2: yes</p> <p>R: okay i want you to feel comfortable imagine we're not here you are just alone doing whatever task you have to do pretty much i will give you a sheet of paper with three headlines okay i found on the internet like this okay erm i want you to answer three questions i've written them down just have a quick look at the questions they are in the orange box and let me know if there's anything unclear</p> <p>P2: these are the headlines</p> <p>R: exactly those things here you've got two pages these are the headlines okay (.)</p> <p>P2: i don't even know what this is about i kind of <reading></p> <p>R: what do you mean the topic it is about</p> <p>P2: yeah</p> <p>R: imagine you would look on facebook and you see a snapshot like this the headline and the picture that goes with it so trump free trips to africa and mexico means there are free journeys free tickets to go to africa or mexico so if you wanna leave so it says just tell me because i'll offer you a free ticket okay</p> <p>P2: okay</p> <p>R: so before we start i'm going to start the video {researcher starts camtasia}</p> <p>P2: and i have to answer these questions while thinking aloud</p>
PT1	

<p>PK/3, PK/5</p> <p>PUBL/2</p>	<p>the articles i want you to think about the following questions and while you answer the questions please try to think you thoughts out aloud okay that means say anything that comes to your mind english or german as if you were alone in this room take a look at the questions for a second and let me know if there's anything unclear <reading questions while circling words on sheet></p> <p>P2: okay it's clear</p> <p>R: okay then go ahead (.) please try to think aloud</p> <p>P2: okay but not while reading</p> <p>R: just tell me what you're doing</p> <p>P2: i'm reading the first paragraph erm <mumbling> okay right now i can't concentrate because the ship is <L1de>wackelig</L1de></p> <p>R: okay just give me an impression of what you're thinking</p> <p>P2: okay erm i don't know i can't imagine that this is a real offer i don't know doesn't sound that true</p> <p>R: so what about the first question what's the text about what did you get out of it so far there's no need to read all just overall ideas</p> <p>P2: what is the text about it's about trump he wants to like he has a deal with something an airline they announced that they will be giving away tickets like one way tickets to the motherland but they can't come back if they really going to fly there</p> <p>R: okay so the next question</p> <p>P2: credibility erm i don't know it's not like who wrote it tmc wordstar okay i don't know who that is erm but no i don't think its credible cause the website i don't know</p>
<p>VIS/1 VIS/1 PK/3, PK/5 PUBL/1</p> <p>PK/3</p> <p>PUBL/2 PK/4</p>	<p>there's advertisement everywhere no i don't think its credible erm so yeah that was one reason <L1de>also da ist überall werbung auf der seite</L1de> and also i don't know i just can't imagine that being true that he would pay the flight tickets erm and it's from two thousand sixteen so i don't know even if it was true it's not like <L1de>aktuell</L1de></p> <p>R: okay so what would be the rating then like from one to four</p> <p>P2: i think it would be four</p> <p>R: please go to the next you don't have to read all of the article just skim it through</p> <p>P2: mhm (.)</p> <p>R: what are you thinking</p> <p>P2: i don't really get why there's written this is a great leap for women in saudi arabia cause i don't see how that would be a great leap forward like women being seen as mammals but yet not human i don't know is that a <L1de>fortschritt</L1de> i don't see it okay i see so before it was like that woman were objects so now i guess this is a step forward i don't know i can't imagine how women are seen as in these countries kind of</p> <p>R: so regarding the questions what is the text about sum it up</p> <p>P2: its bout women's rights and its written that it's a leap forward that women are seen as mammals even though they're not yet seen as humans but its already good that they're seen as mammals okay i don't know if i don't know credibility yeah world news report < reading aloud website's name> i don't know this website i don't know i</p>

VIS/1	don't think it's that credible if there's everywhere
PUBL/2	advertisements like <L1de>werbung</L1de> about unnecessary things like computer games and something
MED/2	like that i'm looking for who wrote it can't find the author yeah no it doesn't look really credible and that's my feeling i don't know i think every website is kinda not that credible because its written by humans and humans are just <L1de>subjektiv</L1de> i don't know
	R: so the rating
	P2: erm the rating i don't know i would say four
	R: okay so please go on to the next article the next one is rather large as i've already said you don't have to read all of it just skim trough to find out what's important for you
INT/2	P2: (.) i've just read the first paragraph and i don't know it's weird that they're spraying something that's used to treat people with manic depression or bipolar disorder
INT/2	that's kina really bad and yeah i don't really know much about this topic but i think i agree that if they weren't so secretive about everything things would be clearer
PK/3	because i in general think that things should be more open and people should know about what other people do <L1de>die sachen die alle betreffen alle menschen</L1de> the text is about that nasa <L1de>angeblich lizium und andere chemikalien halt runterwirft</L1de>
	R: mhm okay and what about question two
TXT/2	P2: credibility hm i think this one is the most credible one it was easier to read because for me it's really distracting
VIS/2	when <L1de>werbung</L1de> is on the left or right side and here it's not but it's at the top so it's not really

PUBL/2	distracting from the article erm then let's see who the author is <mumbling> okay yeah and i think it also more credible cause it's a longer article and has more information
TXT/3	its not just a summary of something but its detailed more detailed yeah erm so i would give it a credibility of erm two to three i think
TXT/4	R: okay and after reading all the articles which rating would you prefer- the first one or the second one
	P2: just rating the headline is maybe easier but rating the article makes more sense
	R: okay thanks
	<endT2_33:55>

9.3. transcript participant 3

code	<begT3_00:00 >
	<p>R: in a moment i will give you a sheet of paper with three headlines i found on the internet like some snapshots you find on facebook or whatever and i want you to look at these headlines and answer some questions but before that i want to ask you if you've heard about the topics already so the first headline has to do with trump and the immigrants from mexico and africa is this a topic you're familiar with</p> <p>P3: kind of</p> <p>R: kind of okay and the second topic has to do with saudi arabia and women's rights</p> <p>P3: yes erm i've i think i know what it's about</p> <p>R: and the third topic has to do with nasa and the spraying of chemicals from the sky downwards do you know what nasa is</p> <p>P3: yeah i know what it is but the connection i don't know</p> <p>R: okay have you heard about chemtrails</p> <p>P3: no</p> <p>R: so the idea is that chemicals are dropped from planes that's the rough idea so those three topics we will discuss yeah afterwards and another thing i want to ask you has to do with the term credibility have you heard the term already</p> <p>P3: no</p> <p>R: okay credibility means that something ah that there's something you can trust in the german translation would be <L1de>glaubwuerdigkeit</L1de></p> <p>P3: okay</p>

PT1	<p>R: okay so think about that think about what credibility means to you personally because you will use this afterwards okay</p> <p>P3: okay</p> <p>R: okay erm okay {starts camtasia} this is going to film the screen here so i can look at it afterwards so no worries it's not going to film you anyway so there you go {handing out sheets } the first activity has to do with the headlines i told you about and i want you to answer these three questions and while you do so please remember to think aloud and share your thoughts that means just say anything that comes to your mind okay anything that catches your eye or whatever just like in the video you've seen before erm take a quick look at the questions and tell me if there's anything you don't understand</p> <p>P3: <mumbling> yeah</p> <p>R: everything's clear</p> <p>P3: i think so</p> <p>R: okay then go ahead</p> <p>P3: erm okay i don't really know what the article is about yeah some kind of trip to mexico and to africa i don't know i thought about that trump goes to mexico and africa but maybe it's also about people coming from africa and mexico or people he sends from the u s to africa and mexico erm</p>
TXT/2	<p><mumbling> and yeah the because the headline is not really clear i would say that i would read the article because i don't know what it's really about one of the three ideas erm</p>
MED/2	<p><mumbling> erm i don't really know if it could be trusted but in general i'd say yes it depends on what is in the text</p>
PK/2	<p>yeah in general the u s are kind of ah you don't know if it's</p>

VIS/3 PUBL/2, VIS/3	P3: yes R: the last question we're going to discuss after you've read all the articles okay P3: okay R: so then go ahead P3: the picture i already saw so let's go down okay i don't know the author the picture doesn't look very <L1de>vertrauenswuerdig</L1de> credible erm yeah <mumbling> yeah trump statements (.) R: please remember to think aloud P3: yeah okay ah i'm concentrating on the reading so <mumbling> i wouldn't think anything special about it it could be true maybe not i dun-(.) i will read the paragraph before i say something <reads mumbling> okay i read through it very quickly i don't really know what motherland and el chapo is i will look that up later ah i think t a will be trump airline or something like that erm and yeah i've already heard about other airlines selling one way tickets so i don't know how this is meant (.) okay R: regarding the questions what would you say what is it about P3: ah that trump buys tickets for people who live in the u s but are no citizens of america buys them tickets to go back to the land they're from or the land where they want to be instead of america and yeah R: what do you think about the second question P3: erm i would rate it worse than before because der <L1de>ausschlaggebende grund ist das profilbild </L1de> now i would give it a three or four i'm thinking about yeah (.)
PK/6	
PK/1	
VIS/3	
PK/4	

REF/1 PK/2	R: are there any other reasons except for the profile pic P3: i'm thinking about maybe on this platform i don't know about this platform i haven't heard about it before erm that maybe anyone could post something there there's also facebook and twitter on the corner so (.) erm <L1de> ich kenn mich mit dem nicht so gut aus weil ich's nicht verwend </L1de> so i would say four i'm thinking about (.) should i write the reasons down R: no just the rating P3: okay erm why yeah
VIS/1	R: okay maybe you just go on to the second text
VIS/1	P3: okay ah yeah i see an advertisement for a game other advertisements i now will start with the article <reads mumbling> okay the summary is pretty much the same as the headline a bit more it's erm <L1de> ich find's nicht gut erm soll ma sagen es ist ne verbesserung im gegensatz dazu wie's vorher war mal schaun ich les weiter</L1de> R: did you say <L1de>verbesserung</L1de> P3: <L1de>ja schaezt ich mal also es klingt so</L1de>
INT/2	
PK/3	
TXT/2 INT/2	R: and can you give some reasons for your choice P3: erm <L1de>also von der formulierung koennt auch sein dass es erm ich bin verunsichert grad aber einfach so mit begruendung von dem was man hoert ne verbesserung (.) ja im ersten satz klingts auch wieder so als waer's eben besser geworden weil's eben historisch sein soll darum schaezt ich mal dass sie vorher weniger rechte gehabt haben</L1de> R: so what do you think about the second question concerning the credibility P3: erm could be credible but not so as i said earlier i would maybe go down the rating to three but not lower(.)

VIS/1	R: downrate it to P3: to three i think before it was two but i don't remember R: what are the reasons P3: yeah again because there's advertisements and that's the only reason i would say if they don't have enough money to(.)<L1de>ah dass sie sich's eben selbst leisten koennen dass sie eben des geld von denen brauchen damit sie eben sich das alles leisten koennen ja und deswegen schaezt ich mal dass es nicht so wenn sie was echt aus papier haben und es sich nicht so gut verkauft dann wie gesagt ich hab's vorher noch nicht gehoert aber liegt auch daran dass ich nicht so viel im internet les </L1de> {another teacher interrupts (2)}
	P3: erm R: are there any more reasons that you want to add P3: not really R: okay then i would ask you to go on to the third text please it's a rather long text so you don't have to read it like whole like you did before just try to concentrate on the questions please P3: oh so i forgot to say what the article's about R: yeah you did so(.)
PK/2	P3: okay (.) okay i can see the picture more it looks like its photoshopped <reads mumbling> at first you get the text i ignore what's next to it so i will read the first paragraph <reading> erm R: so please remember to think aloud while reading P3: so erm <L1de>ich hab noch immer nicht herausgefunden warum sie das jetzt also warum sie das ueberhaupt zugeben dass sie das machen also allgemein kann man das schon
VIS/3 TXT/4	

INT/2	sagen aber ja da steht eben drin das sie das machen ich versteh's nicht ganz aber auch weil ich schnell drueber gelesen habe es geht drum dass sie eben das lizium in die atmosphere spruehn und dass da eben zur folge dass da eben depressionen oder keine ahnung was gibt das waer so meine zusammenfassung</L1de> R: okay what about the second question
VIS/1 REF/2	P3: credibility erm i'm looking at the advertisements or other websites that are there it says its sponsored by this so again i would say advertisements are not that good for all websites so before i said two also i would also go down to three just because of the advertisements and what it says in there
PK/4	R: is there any other reason except for the advertisements P3: erm i don't know i don't really know the website as the ones before it's always the same reason erm i'm going to look down a bit more but <mumbling> okay <L1de>ich werd nicht schlauer draus also ja</L1de>
PUBL/2	R: okay so no other reasons P3: <L1de>nicht wirklich autoren gibt's auch nicht wirklich also was ich so schnell gesehen hab</L1de> R: okay so your rating P3: three R: thank you now after reading the articles which rating would you take the first one or the second one which one is more(.) P3: erm i would say after reading the article its more clear because you can also see what's around like i said the advertisements and yeah you can also say something from

	the headline but not as much as from seeing the whole website and reading a bit in the article
	<endT3_36:01>

9.4. transcript participant 4

code	<begT4_00:00 >
	<p>S1: in a moment i will give you a sheet of paper with three headlines i found on the internet okay erm i want you to look at these headlines and tell me what you're thinking about before we're going to start this i want to know what you already know so the three headlines have different topics the first topic has to do with trump and immigrants from mexico and africa so are you familiar with that topic</p> <p>S2: a bit but not really</p> <p>S1: okay erm the second topic has to do with saudi arabia and women's rights</p> <p>S2: okay erm</p> <p>S1: have you heard about that</p> <p>S2: yes but i heard about everything kinda but it's not like that i'm erm informed about everything</p> <p>S1: that's okay the third topic has to do with nasa and the spraying of chemicals from plains onto the earth do you know what nasa is</p> <p>S2: yes</p> <p>S1: have you heard about the term chemtrails maybe</p> <p>S2: no...</p>

	<p>S1: okay that's just in the idea of spraying chemicals for whatever reason down to earth and the third article deals with this topic okay and another point i wanted to ask you has to do with the word credibility do you know what the word means</p> <p>S2: no</p> <p>S1: what does it mean to you maybe</p> <p>S2: i don't know</p> <p>S1: i tell you the german translation maybe <L1de>glaubwuerdigkeit</L1de> or <L1de>vertrauenswuerdigkeit</L1de> and it means that a text or whatever i'm consulting is trustworthy pretty much so that's kind of the same thing credible and trustworthy okay remember the idea of credibility cause we will use that afterwards okay</p> <p>S2: okay</p> <p>S1: okay so just imagine you would be alone in here no one's here no one's listening to you you're going to just talk to yourself while doing a task okay and {researcher starts camtasia} there you go that's the first activity erm as i said there are three headlines on the first page and on the second page and i want you to answer these three questions in the orange box while you do so please try to think your thoughts out aloud that means say anything that comes to your mind as if you were alone in this room okay have a quick look at the questions and tell me if anything's unclear</p> <p>S2: okay erm <reading></p> <p>S1: clear</p> <p>S2: yes</p>
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PT1	S1: so then please answer the three questions and try to make an evaluation in the end or whenever you want S2: okay <reading> would you be interested in(.)okay erm (.) and this is the headline S1: exactly S2: okay erm not really i'm not really interested in
PK/1	reading the article erm okay trump is doing something again and mexico it's always about anything regarding
PK/2	mexico and i don't know much about this topic i always see it with friends and at school but for myself i don't really read news and stuff like that so i'm also not interested now erm (.) if the headline erm okay the article can be trusted i don't really know this how is it called news six yeah and i don't really know without seeing it i can't really tell just trump free trips to africa and mexico it's (.) and it doesn't really sound interesting to me it's like trump is doing a trip and yeah i don't know why i should really know about it erm can be trusted yes actually i would say yes i think he's doing something if they are telling about it but i don't know if it's something that's worth to be put in a paper or anything else erm if it's really about if i can trust it i think yes he's doing a trip if they say it and the news (.) erm let's give it a two at first maybe i will change that later (.) what's a panel
PUBL/3	S1: erm that's like a people meet experts meet and they discuss certain topics S2: okay erm <mumbling> okay and what's that what's mammals
MED/1	S1: <L1de>saeugetiere </L1de>

INT/1	S2: so first question interested yes actually i would be interested because just women's rights and the topics like that i think they are really interested really interesting sorry erm i don't know if i can trust the article i mean if the title is just like the fact that they admit they decided anything that women are not human that sounds(pause)there is much information missing and if it's a whole panel i think they said many things and i would be interested in reading the stuff first before i can yeah decide there it just says admits women are not human it sounds like it's just really short and i don't think that in the whole panel it's just about this as one fact i think they're discussing more things so for credibility i would give a three and i mean it's still an article and i think there's always something true behind it i read through it and see <reading headline> nasa admits to spraying <mumbling> okay that's actually something i've never heard about erm okay it's an article on facebook not really on facebook but something you can share a site the thing i can see looks like something i can find on facebook and i know the articles i see on facebook and they are (.) yeah they can they usually can't really be trusted i can't really (.) it's like they've got catchy headlines but content is just bullshit i don't know okay erm okay i think from the content there must be something that's true like i said about the other articles but just yeah this headline this layout looks not rally credible just because i know such pages they're pretty much strange and you have to click a lot if you want to get to the content you want to see and there's always
MED/1	
PK/1	
PK/2	
PK/2	
TXT/2	
TXT/2,	
VIS/2	
PK/2	

PT2	next page next page and i don't know i don't really trust these pages so i would give it a four actually or a three three to four but not really credible
	S1: okay do you want to add anything on this
	S2: erm not really maybe like something like this {writing evaluation down}
	S1: okay so now let's move on to the second part erm as you already said you would need to read the whole article to get another impression erm so i've opened up the three pages already it's firefox have you worked with a mac already
INT/2 VIS/3 INT/2	S2: yes
	S1: {researcher explains laptop} apart from these already open pages you can open any page you want you can use anything you want on the computer erm if you want to jot anything down here's a paper and a pen remember to think aloud please you're doing this really well and remember you can use english or german as you want i want you to answer the first three questions the last one in the end have a quick look at it and let me know if there's anything unclear
	S2: okay
	S1: okay so erm just go ahead quickly skim through the articles and try to answer the questions okay
INT/2	S2: okay let me see <reading> okay i think it's a bit strange that it's an article and they put a picture from the news on like <L1de>fernsehnachrichten</L1de> on it
	let's see erm <mumbling> okay sounds a bit strange <mumbling> but actually isn't it like that this is the headline of the article that's just from the news

TXT/2	<L1de>fernsehbericht</L1de> okay <mumbling>) okay <L1de>klingt ziemlich provizierend mal schauen</L1de> (.)
	S1: please remember to think aloud
PK/1	S2: yes <L1de>ja das klingt so als wuerden sie die leute zurueckschicken wollen die unzufrieden sind trump airlines (.) hab nicht wirklich davon gehoert aber okay
	mhm klingt ziemlich uebertrieben (.) also was die da machen (.) es ist ziemlich kurz okay <mumbling> oh okay
TXT/2 TXT/3	ich hab' zuerst nicht gecheckt worum's geht aber jetzt ziemlich provokativ</L1de> yeah it's pretty short
	S1: answer the questions please
TXT/3, INT/1, MED/1	S2: yeah it's just like (.) before people is said they want to wait erm i don't really know what it means to begin services to africa and mexico
	S1: that means just to the service is like <L1de>betrieb sie beginnen den betrieb nach afrika und mexiko die trump airlines</L1de>
TXT/3, INT/1, MED/1	S2: okay okay so i would understand it like people would like to visit mexico and africa and trump is just really overdoing it and gives them the chance to give them a one-way ticket for free but it's like he doesn't want them to come back to america
	S1: next question
TXT/3, INT/1, MED/1	S2: okay erm i would still give it a two for credibility it's pretty short i think there's maybe there's information missing but what they said is true and that's not really something that people would come up with there's not really a purpose to come up with something like this so i

	would give it a two but it's just pretty short so i wouldn't give it a one
REF/4	S1: are there any other reasons
TXT/3	S2: erm not really maybe the quotes also make articles erm credible that's also a fact but i'm wondering why it's so short maybe there's not much to <L1de>berichten</L1de> about but yeah the whole article that short makes me wondering
TXT/3	S1: okay do you want to go on to the next article
TXT/3	S2: yes mhm i just want to check the length at first okay
TXT/3	that's a longer one okay it's on the first site it looks like something you can trust i already know the headline
TXT/4	okay i think the first (.) what is it called the summary
TXT/2	yeah erm a few words i don't really know <mumbling> that's really complicated i think <mumbling> okay erm i pretty much get the information i already have from the headline i don't really know what this is riad
	S1: that's a place in saudi arabia
TXT/2,	S2: okay <reading> what i notice erm is that this article is a lot more complicated than the other one and longer i
TXT/3	will just continue at first i don't get the whole thing yet but i will just continue it sounds like erm (.) and that says
PK/3	<mumbles reading> it sounds like it's something great it doesn't really sound like that for me i don't know i will continue <mumbles reading> okay okay yes if you put it like that if you see them as objects before then it would be maybe a <L1de>meilenstein</L1de> if they are considered as <L1de>saeugetiere</L1de> mammal now
	S1: can you sum up what you've understood so far

	S2: they had a panel and something great happened they are not considering women as objects anymore erm yeah and for them women are part of the menoclass now and that's something great that happened a progress
	S1: what about the second question
	S2: okay yeah i mean i haven't read all of it yet but i guess it will continue like that and i think it's very credible
TXT/3	S1: can you give me some reasons for your choice
TXT/4	S2: erm at first its longer than the other article it has a better structure and some other titles and also some
MED/1	quotes yes and just about the topic i don't think that that's something people would make up that much maybe i mean yes i would believe it if i read it and i read it so i would trust it there's still some steps to go but yes that would be my thoughts
	S1: okay would you like to move on to the last one it's a rather long text as i've said you don't have to read it all just quickly skim through to get the most important information
REF/3,	S2: okay so there are links let's see the headline's really
TXT/1,	small the structure is really strange and not really
TXT/4,	organised erm okay so there will be an explanation let's
VIS/2	see < reading> okay <L1de> einige fachbegriffe </L1de>
TXT/2	<mumbles reading> okay from the first paragraph i don't really get the reason yet i don't know if i have over-read it maybe but it's just said that erm that they admitted it and that nasa in general is pretty secretive (.) mhm and also <L1de>innerhalb von nasa wird das auch ziemlich geheim gehalten anscheinend also man hat mal

	<p>behauptet dass es nicht gefaehrlich ist</L1de> that it's harmless okay also die fangen damit an dass sie die erklaerung bieten die kommt aber recht spaet</L1de> <mumbles reading> S1: can you quickly sum up already what the text deals with S2: yeah with the spraying of chemicals which nasa does it's just about the explanation actually why nasa does it but i haven't got to the explanation yet they explain some general things about nasa that many things are secretive and some employees maybe don't know it either yes erm i would say it's pretty <L1de>aufbauend</L1de> and i hope i get to the explanation sometime and erm okay it's an article where you get the feeling that there's a person behind it and that there's an opinion behind it because he always tells from the <L1de>ich-perspektive</L1de> erm so that makes the article very subjective <L1de>subjektiv</L1de> erm so i have the feeling that its maybe just his opinion but it's something that nasa really does i believe that and they also said it themselves erm yeah S1: so can you go on to the second question concerning the credibility what would you say S2: i would give it a three i just think that there's some points behind it and it seems that the person behind it is someone who is someone <L1de>der sich damit</p>
TXT/4	
AUT/1, AUT/2	
AUT/1	

AUT/1, AUT/2 AUT/1	<p>beschaeftigt hat but it's es ist immer noch in der ich-perspektive erzaehlt das macht es sehr subjektiv man hat das gefuehl dass es sehr subjektiv ist und ja</L1de> S1: anything else any other reason S2: <L1de>vom aufbau her ist es ganz...aufbauend aber jetzt auch nicht mega strukturiert es sind paar links dabei da weiß ich aber nicht ob sie den artikel irgendwie glaubwuerdiger macht oder nicht man koennte die links wahrscheinlich nachverfolgen und schauen was da irgendwie drin geschrieben ist oder was man da so sieht also das ist etwas womit der autor (.) seine thesen (.) seine behauptungen beweist muesst man sich aber genauer anschauen die meisten menschen klicken eigentlich nicht drauf erm ja</L1de> S1: okay so which rating now after reading all the articles which rating would you prefer the first one with only the headlines or the second one S2: the second S1: thank you that's it for the main parT</p>
TXT/4 REF/3	
	<endT4_39:04>

10. English abstract

Due to the multi-layered nature of digital reading, the traditional idea of literacy changes. Also, the context of reading offline differs greatly to reading online, and thus, it is crucial to adapt reading strategies applied. Concepts like *fake news* and *alternative facts* play an important role in today's media landscape and underline the changing nature of the term literacy. Online texts often provide misleading or false information and therefore, require readers to read critically. Particularly adolescents, who frequently obtain news via social media, are at risk of being manipulated by such news accounts. Thus, the underlying thesis examines Austrian EFL learners' experiences with online reading, as well as their ability to evaluate sources and demask false information.

For this purpose, a mixed method approach is used. The study conducted features 15 students of an Austrian AHS, who took part in a questionnaire and *think-aloud* examinations. The former offers insights into general media-related behaviour, while the latter investigates learners' ability to detect fake news online, in order to analyse how they evaluate a text's credibility and which strategies they apply to detect misleading information.

Findings suggest that, although the majority of learners used different strategies, they failed at demasking fake news. A possible explanation for these results might derive from the authority exerted by certain media. Concluding the results obtained, this thesis calls upon authorities in the Austrian educational sector to take immediate measures and recommends adapting teaching methods accordingly to foster critical reading in online contexts.

11. German abstract

Entwicklungen der jüngsten Zeit, wie die digitale Revolution, bewirken, dass sich die Bedeutung von Begriffen wie Literarität verändern. Wegen dem Wandel vom analogen hin zum digitalen Lesen müssen sich nicht nur Definitionen ändern, sondern auch Herangehensweisen der Lesenden. Phänomene wie „Fake News“ oder „alternativen Fakten“ verkomplizieren die Situation. Es wird von Lesenden eine kritische Auseinandersetzung mit Quellen, Autor*innen und Inhalten gefordert. Besonders jüngere Leser*innen laufen Gefahr, auf gezielten Falschmeldungen hineinzufallen. Die vorliegende Arbeit untersucht daher, die Lesekompetenz von österreichischen Lernenden der ersten lebenden Fremdsprache Englisch, hinsichtlich ihrer Fähigkeit, Falschmeldungen zu evaluieren und identifizieren.

Im empirischen Teil der Arbeit werden Schüler*innen mittels verschiedener Forschungsmethoden befragt. Zuerst werden Informationen über online Leseverhalten und Erfahrungen mit „Fake News“ mittels Fragebogen erhoben. Anschließend werden Quellenevaluierung und Lesestrategien mittels des sogenannten think-aloud Protokolls analysiert. So wird die Fähigkeit der Lernenden dargestellt, inwieweit sie Falschmeldungen entlarven können und welche Strategien sie dazu anwenden.

Diese Ergebnisse lassen Rückschlüsse über die online Lesekompetenz und -strategien der Schüler*innen zu. Während alle Teilnehmer*innen Strategien anwendeten, um den Wahrheitsgehalt und die Vertrauenswürdigkeit eines Onlineartikels festzustellen, scheiterten sie daran, die Artikel als „Fake News“ zu entlarven. Eine mögliche Begründung liefert die Rolle des Mediums, welche einen höheren Stellenwert zu haben scheint, als die Meinung der Schüler*innen. Aufgrund dessen richtet diese Arbeit einen Appell an die Verantwortungsträger*innen des österreichischen Bildungssektors, diesen Entwicklungen Rechnung zu tragen und der kritischen Onlinelesekompetenz die Wichtigkeit zukommen zu lassen, die sie erfordert.