

HOW CAN METAPHORS ENHANCE OUR UNDERSTANDING OF MEDIA AND INFORMATION LITERACIES?

Diana Poudel

University of Tartu

Abstract. Explaining abstract concepts to general audiences is a core challenge in media and information literacy. Studies show that metaphors can help translate complexity into ordinary terms, enabling broad audiences to understand, compare, and talk about difficult issues without specialist vocabulary. This article analyses how Estonian experts from academia, defence, media and education use metaphors to explain core media and information literacy concepts. Thirty semi-structured interviews were analysed using qualitative metaphor analysis. Five recurrent source domains emerged: FOOD for production and consumption, WATER for flow and direction, NOISE for overload and interference, PLAYGROUND for cooperation, and BATTLEFIELD for conflict. Careful, context-aware metaphor choice improves teaching, public communication and policy, while careless framing can oversimplify and polarise.

Keywords: media and information literacy, metaphors, information consumption, information resilience, disinformation, critical discourse analysis

DOI: <https://doi.org/10.3176/tr.2025.4.06>

Received 12 January 2025, accepted 9 September 2025, printed and available online 10 December 2025

1. Introduction

Societies face complex challenges related to information disorder (Wardle and Derakhshan 2017), which can degrade decision quality and user behaviour in digital environments (Phillips-Wren and Adya 2020, Fu et al. 2020). Many citizens still lack the skills needed to search, evaluate and use information well (OECD 2019). This growing discrepancy underlines the urgent need for effective media

and information literacy education. Given limited time, educators and experts use analogies and metaphors to explain how the digital world works. This article sits at the intersection of media and information literacy and metaphor studies.

Metaphors have long been used to explain abstract concepts and influence social values and behaviours. They act as cognitive tools that shape perception and understanding of the world (Lakoff and Johnson 1980, Musolff 2012). Thus, the description of the internet as a ‘superhighway’ not only conveys speed and connectivity, but also risks oversimplifying the complex, decentralised nature of the internet, which affects how individuals engage and behave online (Edwards et al. 2004). Such simplifications can clarify or obscure information, depending on the audience’s prior knowledge and context. In media and information literacy, the strategic use of metaphors enhances cognitive and social dynamics and helps individuals navigate complex media landscapes (Giles 2007).

In education, metaphors bridge the gap between abstract scientific and digital media concepts and familiar ideas, promoting understanding and engagement (Cameron 2002, Lloyd 2006). In teaching, well-chosen metaphors can improve understanding and engagement.

The aim of this study is to examine the metaphors used by media and information literacy experts and assess their clarity and suitability for explaining media and information literacy concepts. It can help to improve educational strategies, inform policy and improve public understanding of media and information literacy, as well as develop better teaching tools and resources that resonate with learners.

RQ 1: What source domains emerge from the metaphors used by media and information literacy experts to explain key issues in media and information literacy?

RQ 2: How do these source domains differ in clarity and practical implications for teaching, public communication and policy?

2. Background

2.1. *The role of metaphor in shaping cognitive and social dynamics*

A metaphor is the phenomenon when we describe and possibly conceptualize one thing in relation to another (Semino 2008). Metaphors have long been recognized as powerful tools for shaping both cognitive processes and social dynamics. Aristotle emphasized the importance of metaphor in rhetoric in his work “Poetics”, highlighting its ability to bring clarity and vividness to language, thereby enhancing comprehension and persuasion (Kirby 1997).

Metaphors have contributed to a new understanding of the world by linking abstract concepts to concrete and familiar experiences. They can improve our conceptual thinking and help us to understand new concepts (Smedinga et al. 2023). For example, when Isaac Newton described gravity as an *attraction*. Charles Darwin used *tree* metaphor for evolution (Archibald 2014). Similarly, psychologist Herbert Spencer compared the brain to a *piano* (Leary 1994). These examples vividly illustrate how metaphorical thinking has helped to uncover the unknown.

Metaphors are also an effective way of simplifying political messages. Winston Churchill, for example, gave a speech on March 5, 1946, in which he used the metaphor of the ‘Iron Curtain’ to describe the division between the Soviet bloc and the West (Churchill 1946). Subsequently, the term ‘Cold War’ emerged, another metaphor that summarized the ongoing state of tension between the major global superpowers and became one of the most important political metaphors of the 20th century (Schlesinger 1967). Metaphors are essential in shaping political ideologies and constructing narratives that simplify complex global threats into comprehensible images for public consumption (McEntee-Atalianis 2011).

2.2. Metaphors in media and information literacy

Many metaphors have been used to explain issues of media and information literacy. In 2001, the term *echo chambers* was popularised to describe situations in which people selectively expose themselves to information that is consistent with their pre-existing beliefs, leading to stronger cognitive distortions and increased polarization (Sunstein 2001). A decade later, the term *filter bubble* was proposed to describe media consumption personalised by algorithms (Pariser 2011). Despite criticism that these concepts oversimplify complex interactions or shift responsibility onto the technology rather than the users (Bruns 2021) or claims that empirical data does not conclusively prove the existence of these phenomena (Puschmann 2019), the term *filter bubble* is widely used by the public and media and information literacy experts.

The concept of the *information landscape* helps to describe how information is embedded in a broader context and how individuals navigate these landscapes to seek, use and share information (Lloyd 2006). Similarly, the term *digital footprint* describes the data people leave behind on the internet, focusing on privacy and digital identity concerns (Weaver and Gahegan 2007). The internet can be described as a fundamental infrastructure, comparable to *roads* and *bridges*, that underpins our digital society and influences the flow and accessibility of information through intertwined technical, social and economic forces (Sandvig 2013). Furthermore, several IT-related terms that are metaphorically linked to the physical world, such as *firewall*, *cloud* and *sandbox*, help to conceptualize complex digital processes.

The book “The Information Diet” draws an analogy between the consumption of information and food intake. It emphasizes the importance of a balanced and healthy intake of information in order to avoid cognitive overload and to protect oneself from misinformation and manipulation (Johnson 2012).

The concept of information as a component of warfare is not new. Sun Tzu was one of the first authors to discuss the use of information as a strategic tool in his seminal work “The Art of War” (5th century BC). In this text, Sun Tzu emphasizes the importance of intelligence, deception and psychological tactics in warfare (McNeilly 2015). One of the first academics to use the term *information warfare* was Thomas P. Rona (1976). However, it was not until the late 20th century that the term *information warfare* came into wider use, particularly in the context of cyber warfare and digital espionage (Libicki 1995, Denning 1998).

Medical metaphors are also used in connection with information. The term (*computer*) *virus* describes self-replicating programs that can spread from one computer to another (Cohen 1987). On February 15, 2020, WHO Director-General Dr. Tedros Adhanom Ghebreyesus popularized the word *infodemic* by describing the flood of misinformation related to the COVID-19 pandemic and making it accessible to a wider audience (Ghebreyesus 2020), but this term was defined much earlier as “a few facts, mixed with fear, speculation and rumors, amplified by modern information technologies and spreading rapidly across the world” (Rothkopf 2003).

Several metaphors originating from psychology have also found their way into media and information literacy. The concept of *attention economy* was created to describe how, in an information-rich world, the abundance of information leads to a scarcity of attention (Simon 1971, Davenport and Beck 2001). In addition, many cognitive distortions are explained with the help of metaphors. The *anchoring effect* describes the human tendency to rely heavily on the first piece of information (*the anchor*) when making decisions (Tversky and Kahneman 1974), and the *bandwagon effect*, which describes the tendency of people to adopt certain behaviours or beliefs because many others do the same (Leibenstein 1950), are good examples of how metaphors are used to explain abstract phenomena.

Although metaphors are widely used in media and information literacy to make abstract topics more understandable to a wider audience, their use has not been without criticism. Some scholars argue that metaphors oversimplify complex issues and can lead to misunderstandings or misrepresentations of the underlying concepts (Boyd 1993). For example, the use of the term *infodemic* can contribute to unnecessary panic and the justification of excessive government control over information (Simon and Camargo 2023). Similarly, in privacy discourse, spatial and visual metaphors such as *privacy*, *zones* and the *panopticon* have been criticized for failing to do justice to the nuances of privacy in the digital age and potentially reinforcing outdated notions tied to physical spaces and visibility (Cohen 2012). While metaphors can be useful tools, it is important to use them judiciously and ensure that they accurately reflect the complexities of media and information literacy.

3. Methodology

3.1. Critical discourse analysis of metaphors

Critical discourse analysis (CDA) provides an analytical framework in which language is considered as a central element of social practice. This approach is particularly effective in examining how metaphors, as integral linguistic features, shape and reflect the power dynamics within societies. By examining metaphors, CDA aims to uncover the ideological backgrounds embedded in language that significantly influence social perceptions and behaviours. Such analysis highlights the subtle but profound ways in which language constructs social realities (Fairclough 1989).

The theoretical framework for metaphor analysis in CDA is heavily influenced by scholars such as Norman Fairclough and Teun A. van Dijk, who argue that language

functions as a crucial mechanism of social power. Fairclough describes texts as battlegrounds for ideological conflict in which meanings are actively constructed and contested (Fairclough 1989). Van Dijk goes one step further and examines how discourse structures either maintain or challenge social dominance (van Dijk 1993). In this context, metaphors are of crucial importance. They summarize complex ideas in comprehensible images and thus have the power to either reinforce or undermine prevailing power relations (Lakoff and Johnson 1980).

The methodology for analysing metaphors involves a detailed examination of linguistic choices and their contextual environment. This analysis uses the concepts of ‘source domains’, the concrete language from which the metaphors originate, and ‘target domains’, the abstract concepts explained by the metaphors. The analysis included concordance line checks and basic collocation checks of typical co-occurrences and semantic prosodies (Stubbs 1995, Partington and Marchi 2015). These corpus-style checks supported, not replaced, interpretive coding. In addition, thematic clustering was used to shed light on the role and semantic tendencies of metaphors (Lakoff and Johnson 1980, Semino 2008).

The CDA of metaphors in different areas shows that they have a considerable influence on the shaping of discourse. In education, metaphors influence perceptions of national identity and civic duty (Lee 2015), while in health communication they promote patient autonomy and engagement (Solberg et al. 2012). Adult literacy teachers use spatial metaphors to describe their role and emphasize their function as facilitators of knowledge and learning pathways (Konopasky and Reybold 2015). Overall, these findings demonstrate how metaphorical framing can both reinforce and challenge the existing ideologies and power dynamics within social structures.

While CDA effectively demonstrates how metaphors can perpetuate stereotypes and inequalities, leading to a more equitable and mindful approach to public discourse, it is also criticized for potential ideological bias and methodological limitations. Critics argue that CDA’s focus on power dynamics can distort interpretations and emphasize the need for a more balanced and empirically supported approach when analysing metaphors (Breeze 2011).

3.2. Data collection and analysis

This study investigated the use of metaphors by media and information literacy experts in Estonia. The primary data collection method was semi-structured interviews (N = 30) guided by an interview framework that included topics such as media and information literacy challenges, information resilience, and the potential for building a network of media and information literacy trainers within the Women’s Defence League.

Participants were first identified through purposive selection based on contributions to media and information literacy education, strategic planning, or research. The sample was then expanded via snowball sampling, with initial respondents recommending additional experts. The final sample size (N = 30) provided sector diversity and is consistent with guidance showing that 20–30 in-depth interviews are typically adequate for reaching saturation in focused expert studies (Guest et

al. 2006). Data collection ended when thematic saturation was reached, defined a priori as the point at which interviews no longer yielded new problem types or mechanisms in the information space or new approaches, constraints, or enabling conditions for building information resilience. After two consecutive interviews failed to introduce such content, and as referrals increasingly repeated names already interviewed (a snowball-closure signal), recruitment was stopped (Fusch and Ness 2015). The interview guide contained no questions about metaphors. References to comparisons, analogies or metaphors arose spontaneously and were analysed post hoc as an inductive, secondary lens on the transcripts.

The interviews were conducted between April and June 2023 in Estonian. Depending on the participants' preference, they were conducted either in person or via Zoom. The interviews lasted between 28 and 96 minutes, on average 56 minutes, and were recorded with the consent of the participants. Later recordings were manually transcribed using Wreally transcription software to ensure comprehensive and accurate data capture.

Data were analysed manually using the app LiquidText, which allowed for an organized identification, tagging and categorization of the metaphors in the transcripts. The original Estonian transcripts were analysed first, and identified metaphors were then translated into English. A thematic approach based on Lakoff and Johnson (1980) conceptual metaphor theory and Semino's (2008) developments on a framework for target and source domains was used in the analysis. This theoretical foundation enabled the analysis to identify and interpret the metaphorical language used by the experts. Domain labels were not predetermined. Labels were developed inductively during coding and are presented in the Results as empirical findings.

Participants were informed about the aims of the study, the planned use of data in academic publications and the doctoral thesis, and that findings would be reported confidentially without names. The study followed the European Code of Conduct for Research Integrity. Under University of Tartu policy, non-sensitive expert interviews did not require formal committee review; all participants provided informed consent.

4. Results

Interviews were conducted in Estonian, and the metaphors are reported in English to make the findings comparable and accessible to a wider, international readership. Most expressions had direct English equivalents that reflect a globalised media lexicon, so domain assignments were unaffected. Where an expression was culture bound, a literal rendering was kept with a brief gloss to preserve meaning. For example, *köögipool* ('the kitchen side') was retained to denote behind-the-scenes production, while *õngitsemine* ('angling') aligns with English *phishing*. Following guidance on metaphor translation, literal options were preferred and minimally adapted only when clarity required it (Schäffner 2004, Semino 2008). In this dataset, any nuance shifts were minor and did not change domain classifications.

The analysis yielded several emergent source domains used by experts to explain media and information literacy and information resilience. The most frequent were FOOD, WATER, NOISE, PLAYGROUND, and BATTLEFIELD; less frequent domains included LOCATION, MATTER, MEDICINE, NATURE, MONEY, POWER, WASTE, and AGENT. Each domain below is presented with typical expressions, collocational tendencies, and illustrative quotes.

4.1. Information as FOOD

Several experts used food-related metaphors to illustrate the production and consumption of information. By synthesizing the metaphors used by two different experts, it becomes clear that an understanding of *how the **kitchen** side works* enables individuals to make more informed decisions about their *information **diet***. This analogy illustrates that both information and food go through processes of production and consumption, suggesting that a deeper knowledge of these processes can improve the quality of decision-making.

Furthermore, the recommendation to *throw in a little science about how the brain works* is comparable to adding a nutritious ingredient – such as carrots or garlic – to a meal to increase its health benefits. This metaphor implies that integrating scientific knowledge into information can similarly enrich the *‘information **diet**’* and make it more useful and healthier. However, concerns were also expressed about relying on a single source of information. One expert said, *the problem arises when a person gets information solely from there, as it may lead to a very **unbalanced intake***. This reflects the dietary recommendations that a balanced and varied diet is crucial, as is the need for a variety of information sources to maintain a balanced perspective.

The metaphor of *living in a bubble, believing what the journalism **feeds** you* describes the passivity of some media consumers and suggests that they have no decision-making power when choosing their information ‘menu’. This scenario is complicated by the observation that *stories were actually **fed** from both sides*, suggesting that even with multiple sources, consumers may not have control over their information choices.

In contrast to the ideal scenario, in which the individual behaves like a discerning customer in an upscale restaurant and consciously chooses what they eat, the reality for many is more like that of a toddler being fed by a caregiver. And just as toddlers put everything in their mouths, *people have **swallowed** all sorts of nonsense or done things because information spreads on social media*. This analogy illustrates a situation in which consumers are confronted with pre-selected information and illustrates the challenges of promoting autonomous and critical media use.

Additionally, it was noted, *if I have a strong motivation not to agree with you, then I start **chewing** on your arguments with a certain bias*. This raises the question of whether such ‘chewing’ is harmful or whether it should be encouraged even with agreeable information to support a critical approach. The experts also pointed to the common practice of turning a small piece of information into an *‘appetizer’* or presenting messages in an *‘appetizing’* way to attract attention and arouse interest.

Source domain FOOD illustrates the complexity of information production and consumption and makes abstract concepts more accessible to a wide audience. For example, consuming social media can be compared to eating junk food, while engaging with data analytics can be likened to eating a nutritious meal. Equating time spent online with calorie intake also makes it clear that moderation is required even for beneficial activities. This approach not only simplifies the understanding of information but also emphasizes the importance of a balanced ‘diet’ in our digital lives.

4.2. Information as WATER

Metaphors such as ‘filter’, ‘stream’, ‘channel’ and ‘source’ are often used to describe both water and information. In English, the term ‘phishing’ is derived from ‘fishing’, while in Estonian the word ‘õngitsemine’ is used for both catching fish and tricking people into revealing personal data. In the media, the term ‘leaked’ is often used to describe situations in which confidential information is published against the owner’s will. In the interviews, the experts frequently used these terms, but also offered more nuanced and subtle metaphors, associating the creation and consumption of information with water to explain its dynamics.

One expert aptly described how the malleability of a discussion could be influenced by saying: *The general rule is: the earlier, the better. The more **fluid** the topic is, the easier it is to steer it in one direction or another.* This observation underlines how quickly and easily the direction of a topic can be changed when it is ‘fluid’. A parallel to the physical states of water: the most fluid state is gas, which requires a higher temperature to form. In social contexts, ‘temperature’ correlates closely with emotional intensity. So if we want to change a narrative or steer a conversation, it may be necessary to raise the emotional ‘temperature’. This could mean introducing provocative topics or using emotive language to increase engagement and fluidity. However, this strategy requires careful handling, as heightened emotions can also lead to volatility and conflict, affecting the quality and direction of discourse in unpredictable ways.

Themes have also been described as springs or smaller branches of rivers that, when they converge, become larger and more significant: *And now, if you look at how these themes **fall into** – if they meet then you have a context in which they both suddenly become important.* An interesting observation is that the passive word ‘lean’ was used to describe how people navigate through information, for example in sentences such as *which way the ship is **leaning** or people in this group tend to **lean** in this direction.* This usage implies a lack of agency and suggests that the flow and currents primarily dictate the outcome. In addition, one expert used the term **base beacon** to emphasize the role of personal values in the consumption of information. This is an apt metaphor, as a beacon is a powerful symbol for navigation and finding the right path.

However, these metaphors can sometimes lead to confusion. One expert pointed out the complexity of comparing offline and online communication, noting, *I think offline conversations are similar in some ways to online conversations, but there are*

more **currents** offline. They are somehow more diverse – if you let things escalate further in the group, people will leave. There might be more dynamics at play; social media, on the other hand, is more one-dimensional. The use of imagery relating to water, particularly ‘currents’, suggests a depth and complexity to offline interactions comparable to the sea, where currents are more pronounced and can significantly affect navigation. In contrast, the expert’s description of social media as ‘one-dimensional’ evokes the image of a lake, which may be deep but lacks the dynamic currents of the sea and is a more static and confined environment.

This analogy is confusing at first glance, but on closer inspection it contains an element of truth. Offline communication is not just about the words spoken, but also about past messages, historical context and the nuanced interplay of human emotions and reactions, much like the unpredictable currents in the sea that require careful navigation. Online interactions, however, often resemble the simpler, more straightforward dynamics of a lake, where participants ‘jump in’, make a few comments, and then move on, without the engagement or complexity found in deeper, more turbulent waters. While this comparison may seem oversimplified, it illustrates the fundamental differences in the depth and dynamics of offline and online communication. This concept fits well with the observation that *I am more anonymous virtually and braver to dip a toe in to see what happens and, if necessary, walk away quickly*. In a small lake or pond, you can clearly feel the temperature of the water by dipping a toe in, but in the sea such an action might not provide much useful information due to the large and varying conditions.

Source domain WATER is particularly useful for describing the flow of information and making abstract information spaces more tangible for the general public. However, these metaphors can sometimes be ambiguous, and the use of different metaphors can lead to logical contradictions. They are perhaps best suited to expert discussions where both parties can engage with the topic at a deeper level. This allows for a nuanced understanding that goes beyond the apparent contradictions and uses the richness of metaphors to promote a clearer understanding of complex ideas.

4.3. Information as NOISE

The information space is often described with terms such as *information noise* and *background noise* because it is overloaded with noise or static. This description, coupled with the statement that *we are all in this noise, and there is a lot of it*, summarizes the overwhelming and pervasive nature of modern information environments. This pervasive noise is in stark contrast to reasonable discussion and is vividly highlighted by criticisms such as *They just **scream** and ruin the discussion instead of saying something, instead of participating*. Such chaotic environments not only disrupt meaningful dialogue, but also intimidate individuals into silence, as comments such as *And people are afraid to **make a sound*** demonstrate. An illustrative example is a debate about the construction of a military training area, where residents’ concerns were overshadowed by political propaganda and disinformation, resulting in *burying out all kinds of **voices** of local, worried people. Burying them completely under nonsense*.

One expert also pointed to the communication problems that became apparent during the Covid-19 pandemic, noting: *I hear scientists complain that they are **not being listened** to. They often speak in a language you cannot understand.* This raises the question: Can it also be considered noise if we listen but do not understand? This dilemma highlights the crucial role of effective communication in science and emphasizes the need for clarity and accessibility to improve public understanding and appreciation of scientific research. It calls for a shift in the way scientists communicate their findings and advocates a communication style that balances engagement, clarity and accuracy to better engage the wider population.

The dynamics of leadership and group behaviour in communication also play an important role in shaping the noise in the information space. Observations such as *They **resonate** negatively with their own positions, and this creates a strong backlash* illustrate how the tone set by individuals or groups can significantly influence public responses, often leading to conflict rather than fostering constructive dialogue. The type of leadership, whether singular or plural, has a major impact on this tone, as described in *The **tone** that exists somewhere, whether one leader dominates or there are multiple leaders – it's like a kind of group dynamics.* An authoritative leader may establish a communication environment that inhibits collaborative dialogue, thereby limiting the development of diverse perspectives. Conversely, in multi-leader environments, a more diverse tone can prevail, which can either enrich the discussion or lead to disagreement and confusion. The impact of this dynamic is evident in the statement *And that has determined the **tone**,* which illustrates how established patterns of communication can entrench certain styles of interaction and influence the effectiveness of the group in achieving consensus or encouraging wider engagement.

Furthermore, various examples vividly illustrate how information reverberates and persists as a constant acoustic presence. The metaphor *continues to **beat this drum*** illustrates the incessant repetition of certain messages in the media, much like a drumbeat that draws attention to itself and overshadows other sounds. Similarly, *then people began to understand that one should not **crow** before checking* uses the image of a crowing rooster to caution against premature statements and emphasize the importance of verification before dissemination. The phrase *but people do not notice whether and to what extent it was refuted, instead the **first bell rings** in memory,* illustrates the lasting impact of the first impression. Even if later corrections are made, the initial information sticks in the mind like the first ring of a bell and overshadows later corrections. This underscores the challenge of correcting misinformation once it has made a lasting impression and highlights a crucial aspect of information management in noisy environments.

Source domain NOISE provides a richer way of explaining the problem, but it does not create a comprehensive picture that allows for a deeper analysis and resolution of the issues within the information space using the same metaphors. Building on this, we can look at how noise is not only distracting, but can also obscure meaningful content, much like the static on a radio. This noise often comes from a variety of sources, both intentional and unintentional, that contribute to the overwhelming atmosphere of the modern information landscape. Effective strategies

to curb this noise include improving signal clarity – by focusing on the quality rather than the quantity of information – and promoting media and information literacy so that people can distinguish valuable information from mere noise. These steps are essential to create an environment in which constructive and informed discussion can prevail over the cacophony of the current information climate.

4.4. Internet as PLAYGROUND or BATTLEFIELD

One notable observation in my study was the frequency with which the experts used metaphors in the context of games and warfare. About half of the experts I interviewed used at least one metaphor from these categories to express their ideas. Those who used both game and war metaphors tended to choose more general, less specific terms. This tendency suggests that experts often conceptualize their topics in terms of conflicts or strategies and use these familiar metaphors to simplify complex issues for better understanding. However, while these metaphors can make difficult topics more accessible, the specific metaphor used to describe information disorders has a major impact on how they are treated. War or game metaphors not only shape tactical decisions, but also influence emotional responses, collaborative dynamics and long-term strategies. Recognizing these differences is critical to developing more effective and sustainable strategies for managing information disruption.

In examining the ways in which the experts conceptualize and articulate the dynamics of information disruption, the frequent mention of ‘teams’ in their discourse stands out. This terminology suggests a recognition of structured competition within the same larger community, suggesting an underlying unity despite apparent divisions. For example, one expert emphasized the competitive aspect by stating, “If you manage to make me feel that there is another team here and that there is competition and this question refers to that.” This suggests a scenario in which opponents are recognized not just as opponents but as legitimate competitors in a shared arena, which can foster respect for different points of view, as another expert noted: “Again, the opposing team is very smart”.

But belonging to one’s own team can also hinder open communication, as shown by the reluctance to share information from perceived outsiders: *And that basically describes the phenomenon that I have the impression that the journalist is very knowledgeable in this field, but I have the feeling that he has his own agenda or is not part of my team.* This illustrates the double-edged nature of such metaphors in discourse, which on the one hand facilitate a competitive but respectful dialogue, but on the other hand can also promote a dismissive attitude. Interestingly, most experts preferred game-related metaphors to describe this dynamic, while war-related terminology was used sparingly. Only one expert used the phrase: *But the comrades-in-arms don’t mind it; the comrades-in-arms approve of it, and it’s clearly displayed in a little box in front of your eyes*, in a context without direct personal involvement. This selective use of metaphors demonstrates a keen awareness of the importance of language in framing discussions about social issues, especially in a context such as Estonia where national unity amid concerns about polarization is of paramount importance.

While the metaphor of ‘teams’ is often used in the conceptual framework to suggest structured competition, the actual actions within these debates often use the terminology of war or violence. This choice of words emphasizes the hostile and often personal nature of the conflicts. For example, one expert said it was about personal issues: *I generally **don’t pick fights** on social media unless something really gets under my skin...* This admission not only emphasizes the personal stakes in these conflicts, but also makes a connection to the broader, ideologically-driven **battle never ends**. Such statements reflect the recognition that ideological battles in the information realm are perpetual and fuelled by the abstract and enduring nature of beliefs and values.

Furthermore, the strategic aspect of engagement in this contested arena is emphasized by the advice to **choose your battles**. This strategy is dictated by the practical limitations of the information space, where the sheer volume of content and the fast pace of communication make it impossible to address every issue. As the expert points out, *in today’s information space, it is impossible – there is neither time nor resources – to resolve everything*. This pragmatic approach to dealing with conflict in the digital age highlights the need for discernment and prioritization when choosing which issues to focus on. This strategic choice is critical to managing the cognitive and material resources required to effectively engage in the ongoing ideological conflicts characterized by the information landscape.

If you look at how experts discuss the teaching of media and information literacy, it’s often portrayed as a game in which different skills are acquired at different levels. For example, using Google image search was described by one expert as **lowest level**, while proactively dealing with inappropriate online content was described by another expert as **higher level**. Interestingly, the terminology used by the experts to describe participants in media and information literacy training can be quite revealing. The use of manipulation tactics has been described as ‘**playing** people’s weaknesses’”, which also shows that manipulation is seen as a game rather than violence.

One expert used the phrase *These people who are the **target** of the training, I assume that most of them are also social media users and media readers themselves* to describe potential participants for media and information literacy training, while another pointed out a potential problem: *The **backlash** could also be that people are disinterested – I’m already smart enough*. This raises a provocative question: are media skills like bullets and the trainer like a shooter who wants to ‘hit’ the participants with knowledge?

This metaphor can be extended to the appropriateness of the pedagogical approach. If the chosen ‘weapon’ –, i.e. the teaching method, is too strong or too advanced for the current skill level of the participants, there may be a backlash that hinders effective knowledge transfer. Such a scenario underscores the importance of matching the complexity of media and information literacy training to the readiness and receptivity of learners to ensure that the intended educational outcomes are achieved without negative reactions.

Finally, some interesting terms that are used by experts to describe certain phenomena and illustrate the complexity of information dynamics. For example, the

sentence *We are all in the **trenches**, and mud is being thrown from one side to the other...* could be interpreted as a reference to the phenomenon of the ‘filter bubble’ or ‘echo chamber’. In this metaphor, we are confined to our own ‘trenches’ where we are primarily exposed to familiar ideas and perspectives, and anything coming from the outside is seen as ‘mud’ that is not welcome and must be rejected. This image vividly illustrates how selective exposure can limit our understanding and acceptance of divergent viewpoints.

Furthermore, technological development has been described as an ***arms race***, a metaphor that aptly reflects the rapid, competitive progress in areas such as artificial intelligence. The example of technologies such as ChatGPT shows that the pace of development is becoming increasingly worrying. It is difficult for states to slow down the pace, as these technologies could be powerful tools in an information war, so they need to prepare for possible attacks. This scenario underlines the strategic dimension of technological progress, where each advance must be complemented by others to maintain balance and security.

PLAYGROUND and BATTLEFIELD source domains are precise and particularly suitable for explaining the occurrence of information disorders. However, the values associated with these metaphors are very different. Discussing a topic as a ‘game’ assumes from the outset that all participants are playing by the same rules. Games are socially accepted and generally promote community cohesion – activities that we should actively encourage. In contrast, war is destructive and is often waged without adherence to common rules, and the resources available to each side may be unequal. The use of these metaphors needs to be carefully considered, as labelling a domestic debate as a ‘war’ or reacting to an aggressive act by a foreign state as a ‘game’ can contribute to further confusion and disorder in the information landscape. This nuanced approach is essential to maintaining a balanced and accurate discourse that can promote understanding and constructive interaction rather than escalating conflict.

5. Discussion

This study examined how experts in Estonia use metaphors to explain media and information literacy and information resilience. Five recurrent source domains were identified: FOOD, WATER, NOISE, PLAYGROUND, and BATTLEFIELD. Read through the lens of conceptual metaphor theory, the pattern fits the idea that people grasp abstract concepts by mapping them onto familiar domains that highlight some features and hide others (Lakoff and Johnson 1980, Semino 2008). FOOD brought production, quality, balance and personal choice to the foreground, consistent with public-facing work on the ‘information diet’ (Johnson 2012). WATER directed attention to flow, channels, confluence and timing, which aligns with work on information landscapes and navigation (Lloyd 2006). PLAYGROUND and BATTLEFIELD marked two contrasting stances. The first stresses shared rules, roles and skill progression. The second stresses conflict, risk and urgency. This

split matches accounts showing that social and political metaphors carry normative stances as well as images, which is why they steer behaviour as well as understanding (Musolff 2012).

The results both agree with and qualify earlier debates in media and information literacy. Metaphors are useful for teaching and public communication, yet simple frames can oversimplify complex realities. The long-running arguments about ‘filter bubbles’ and ‘echo chambers’ show this tension. These frames travel well and make lessons memorable, yet the empirical picture is mixed and sometimes contradicts the neat story the metaphors suggest (Puschmann 2019, Bruns 2021). The interviews add a practical nuance. When cooperation is the goal, experts often prefer PLAYGROUND language because it supports rule-setting and joint problem solving. BATTLEFIELD language can mobilise attention and resources when genuine conflict or state aggression is at issue, but in domestic debate it risks heightening polarisation and crowding out dialogue. Metaphors help, but they can also push a tone or attitude that works in one context and backfires in another (Stubbs 1995).

These patterns extend the background claim that metaphors shape both understanding and action. In practice, FOOD links system production to personal choice in ways teachers and campaigners can use. WATER frames spread and timing and helps explain flows and points of control. PLAYGROUND supports cooperative learning through shared rules and progression. BATTLEFIELD signals threat and asymmetry and can be appropriate in security contexts, but it should be used with care in public-facing communication. Together, these domains show how everyday wording guides what people notice and how they respond.

Interviews were conducted in Estonian and are reported in English to reach an international readership and to allow comparison with related work. Most expressions mapped cleanly to English, reflecting a shared media lexicon. Where a phrase was culture bound, a literal rendering with a brief gloss preserved meaning. This approach follows guidance on translating metaphors and on keeping mappings intact where possible; in this dataset any nuance shifts were minor and did not change domain assignments (Schäffner 2004, Semino 2008).

Several limits bound these claims. The study draws on expert interviews from one country. Snowball sampling risks network closure, even with sector diversity. Collocation and concordance line checks illustrate tendencies rather than report statistics. These constraints limit generalisability but do not alter the core pattern across domains. Future work should test effects directly, for example by comparing PLAYGROUND and BATTLEFIELD framings on cooperation, trust and recall, and by extending the analysis to other languages and settings. Overall, the findings show that metaphors help general audiences understand complex topics in media and information literacy, but they also steer values and choices. Deliberate, context-aware selection can improve teaching, public communication and policy, while careless framing can oversimplify and polarise.

6. Conclusion

Metaphors help general audiences understand complex topics in media and information literacy, but they also steer values and choices. Selecting FOOD, WATER, PLAYGROUND or BATTLEFIELD is therefore a strategic act. Match the frame to the goal, state its limits, and avoid casual BATTLEFIELD framing in domestic debate where it can polarise.

Use of AI tools. LLM (ChatGPT-5) was used for two limited purposes: (1) language editing to improve clarity and grammar, and (2) consistency checks on reference formatting against the Trames style. The tool was not used to generate content, analyse data, determine findings, or select citations. All suggestions were reviewed and approved by the author.

Address:

Diana Poudel

Institute of Social Studies

University of Tartu

Lossi 36

51003 Tartu, Estonia

E-mail: diana.poudel@ut.ee

Tel. +372 5309 7003

References

- Archibald, J. David (2014) *Aristotle's Ladder, Darwin's Tree: the evolution of visual metaphors for biological order*. New York: Columbia University Press. DOI: <https://doi.org/10.7312/arch16412>
- Boyd, Richard (1993) "Metaphor and theory change: what is 'metaphor' a metaphor for?" In Andrew Ortony, ed. *Metaphor and thought*, 481–532. 2nd ed. Cambridge: Cambridge University Press. DOI: <https://doi.org/10.1017/CBO9781139173865.023>
- Breeze, Ruth (2011) "Critical discourse analysis and its critics". *Pragmatics* 21, 4, 493–525. DOI: <https://doi.org/10.1075/prag.21.4.01bre>
- Bruns, Axel (2021) "Echo chambers? Filter bubbles? The misleading metaphors that obscure the real problem." In Marta Pérez-Escobar and José Manuel Noguera-Vivo, eds *Hate speech and polarization in participatory society*. Vol. 8, 33–48. Abingdon: Routledge. DOI: <https://doi.org/10.4324/9781003109891-4>
- Cameron, Lynne (2002) "Metaphors in the learning of science: a discourse focus". *British Educational Research Journal* 28, 5, 673–688. DOI: <https://doi.org/10.1080/0141192022000015534>
- Churchill, Winston (1946) *The sinews of peace ('Iron Curtain Speech')*. International Churchill Society. Available online at <https://winstonchurchill.org/resources/speeches/1946-1963-elder-statesman/the-sinews-of-peace/>. Accessed 08.09.2025.
- Cohen, Fred (1987) "Computer viruses: theory and experiments". *Computers & Security* 6, 1, 22–35. DOI: [https://doi.org/10.1016/0167-4048\(87\)90122-2](https://doi.org/10.1016/0167-4048(87)90122-2)

- Cohen, Julie E. (2012) "Privacy, autonomy, and information". In her *Configuring the networked self: law, code, and the play of everyday practice*, 107–126. New Haven: Yale University Press. Available online at <https://www.juliecohen.com/attachments/File/CohenCNSch5.pdf>.
- Davenport, Thomas H. and John C. Beck (2001) *The attention economy: understanding the new currency of business*. Boston: Harvard Business Press.
- Denning, Dorothy Elizabeth Robling (1998) *Information warfare and security*. Reading, Mass.: Addison-Wesley.
- van Dijk, Teun A. (1993) "Principles of critical discourse analysis". *Discourse & Society* 4, 2, 249–283. <http://www.jstor.org/stable/42888777>. Accessed 4.10.2025.
- Edwards, Richard, Katherine Nicoll, Nicky Solomon, and Robin Usher (2004) *Rhetoric and educational discourse: persuasive texts*. London: Routledge.
- Fairclough, Norman (1989) *Language and power*. (Language in Social Life Series) London and New York: Longman.
- Fu, Shaoxiong, Hongxiu Li, Yong Liu, Henri Pirkkalainen, and Markus Salo (2020) "Social media overload, exhaustion, and use discontinuance: examining the effects of information overload, system feature overload, and social overload". *Information Processing & Management* 57, 6, 102307. DOI: <https://doi.org/10.1016/j.ipm.2020.102307>
- Fusch, Patricia and Lawrence Ness (2015) "Are we there yet? Data saturation in qualitative research". *The Qualitative Report* 20, 9, 1408–1416. DOI: <https://doi.org/10.46743/2160-3715/2015.2281>
- Ghebreyesus, Tedros Adhanom (2020) "Munich Security Conference". World Health Organization. Available online at <https://www.who.int/director-general/speeches/detail/munich-security-conference>. Accessed 17.05.2024.
- Giles, Timothy D. (2007) *Motives for metaphor in scientific and technical communication*. Amityville, N.Y.: Baywood.
- Guest, Greg, Arwen Bunce, and Laura Johnson (2006) "How many interviews are enough?" *Field Methods* 18, 1, 59–82. DOI: <https://doi.org/10.1177/1525822X05279903>
- Johnson, Clay A. (2012) *The information diet: a case for conscious consumption*. Sebastopol: O'Reilly Media.
- Kirby, John T. (1997) "Aristotle on metaphor". *American Journal of Philology* 118, 4, 517–554. DOI: <https://doi.org/10.1353/ajp.1997.0056>
- Konopasky, Abigail W. and L. Earle Reybold (2015) "Accessing the world: adult literacy educators' metaphors for learners and learning". *Journal of Transformative Education* 13, 3, 239–258. DOI: <https://doi.org/10.1177/1541344615579514>
- Lakoff, George and Mark Johnson (1980) *Metaphors we live by*. University of Chicago Press.
- Leary, David E. (1994) *Metaphors in the history of psychology*. Cambridge University Press.
- Lee, Mary (2015) "Critical metaphor analysis of citizenship education discourse". *Public Relations Inquiry* 4, 1, 99–123. DOI: <https://doi.org/10.1177/2046147X14559934>
- Leibenstein, H. (1950) "Bandwagon, snob, and Veblen effects in the theory of consumers' demand". *The Quarterly Journal of Economics* 64, 2, 183–207. DOI: <https://doi.org/10.2307/1882692>
- Libicki, Martin C. (1995) *What is information warfare?* Washington: National Defense University. Available online at <https://apps.dtic.mil/sti/tr/pdf/ADA367662.pdf>. Accessed 08.09.2025.
- Lloyd, Annemaree (2006) "Information literacy landscapes: an emerging picture". *Journal of Documentation* 62, 5, 570–583. DOI: <https://doi.org/10.1108/00220410610688723>
- McEntee-Atalianis, Lisa J. (2011) "The role of metaphor in shaping the identity and agenda of the

- United Nations: the imagining of an international community and international threat". *Discourse & Communication* 5, 4, 393–412. DOI: <https://doi.org/10.1177/1750481311418099>
- McNeilly, Mark (2015) *Sun Tzu and the art of modern warfare*. Oxford: Oxford University Press.
- Musolff, Andreas (2012) "The study of metaphor as part of critical discourse analysis". *Critical Discourse Studies* 9, 3, 301–310. DOI: <https://doi.org/10.1080/17405904.2012.688300>
- OECD (2019) *Skills matter: additional results from the survey of adult skills*. (OECD Skills Studies). Paris: OECD. DOI: <https://doi.org/10.1787/1f029d8f-en>
- Pariser, Eli (2011) *The filter bubble: what the internet is hiding from you*. London: Penguin.
- Partington, Alan and Anna Marchi (2015) "Using corpora in discourse analysis". In Douglas Biber and Randi Reppen, eds *The Cambridge Handbook of English Corpus Linguistics*, 216–234. Cambridge: Cambridge University Press. DOI: <https://doi.org/10.1017/CBO9781139764377>
- Phillips-Wren, Gloria and Monica Adya (2020) "Decision making under stress: the role of information overload, time pressure, complexity, and uncertainty". *Journal of Decision Systems* 29, s1, 213–225. DOI: <https://doi.org/10.1080/12460125.2020.1768680>
- Puschmann, Cornelius (2019) "Beyond the bubble: assessing the diversity of political search results". *Digital Journalism* 7, 6. DOI: <https://doi.org/10.1080/21670811.2018.1539626>
- Rona, Thomas P. (1976) "Weapon systems and information war". Office of the Secretary of Defense, Washington DC. Available online at https://www.esd.whs.mil/Portals/54/Documents/FOID/Reading%20Room/Science_and_Technology/09-F-0070-Weapon-Systems-and-Information-War.pdf. Accessed 08.09.2025.
- Rothkopf, David J. (2003) "When the buzz bites back". *Washington Post*. Available online at <https://www.washingtonpost.com/archive/opinions/2003/05/11/when-the-buzz-bites-back/bc8cd84f-cab6-4648-bf58-0277261af6cd/>. Accessed 08.09.2025.
- Sandvig, Christian (2013) "The Internet as infrastructure". In William H. Dutton, ed. *The Oxford handbook of information and communication technologies*. Vol. 1, 86–106. Oxford: Oxford University Press. DOI: <https://doi.org/10.1093/oxfordhb/9780199589074.013.0005>
- Schäffner, Christina (2004) "Metaphor and translation: some implications of a cognitive approach". *Journal of Pragmatics* 36, 7, Metaphor, 1253–1269. DOI: <https://doi.org/10.1016/j.pragma.2003.10.012>
- Schlesinger, Arthur (1967) "Origins of the Cold War". *Foreign Affairs* 46, 1, 22–52. DOI: <https://doi.org/10.2307/20039280>
- Semino, Elena (2008) *Metaphor in discourse*. Cambridge: Cambridge University Press.
- Simon, Felix M. and Chico Q. Camargo (2023) "Autopsy of a metaphor: the origins, use and blind spots of the 'infodemic'". *New Media & Society* 25, 8, 2219–2240. DOI: <https://doi.org/10.1177/14614448211031908>
- Simon, Herbert A. (1971) "Designing organizations for an information-rich world". In Martin Greenberger, ed. *Computers, communications, and the public interest*, 37–72. Baltimore, MD: The Johns Hopkins Press. Available online at <https://known-production.s3.amazonaws.com/uploads/attachment/file/2005/DESIGNING%20ORGANIZATIONS%20for%20Information-Rich%20world%20-%20BSImon.pdf>. Accessed 08.09.2025.
- Smedinga, Marthe, Alan Cienki, and Henk W. de Regt (2023) "Metaphors as tools for understanding in science communication among experts and to the public". *Metaphor and the Social World* 13, 2, 248–268. DOI: <https://doi.org/10.1075/msw.22016.sme>
- Solberg, Hege, Gerd E. Nysether, and Aslak Steinsbekk (2012) "Patients' experiences with metaphors

- in a solution-focused approach to improve self-management skills: a qualitative study". *Scandinavian Journal of Public Health* 40, 4, 398–401. DOI: <https://doi.org/10.1177/1403494812449925>
- Stubbs, Michael (1995) "Collocations and semantic profiles: on the cause of the trouble with quantitative studies". *Functions of Language* 2, 1, 23–55. DOI: <https://doi.org/10.1075/fol.2.1.03stu>
- Sunstein, Cass R. (2001) *Republic.com*. Princeton and Oxford: Princeton University Press.
- Tversky, Amos and Daniel Kahneman (1974) "Judgment under uncertainty: heuristics and biases". *Science* 185, 4157, 1124–1131. DOI: <https://doi.org/10.1126/science.185.4157.1124>
- Wardle, Claire and Hossein Derakhshan (2017) *Information disorder: toward an interdisciplinary framework for research and policymaking*. Council of Europe report DGI(2017)09. Strasbourg: Council of Europe. Available online at <http://tverezo.info/wp-content/uploads/2017/11/PREMS-162317-GBR-2018-Report-desinformation-A4-BAT.pdf>. Accessed 04.09.2022.
- Weaver, Stephen D. and Mark Gahegan (2007) "Constructing, visualizing, and analyzing a digital footprint". *Geographical Review* 97, 3, 324–350. DOI: <https://doi.org/10.1111/j.1931-0846.2007.tb00509.x>