



PROMOTING CRITICAL LITERACY:

THE CASE OF PROMOTIONAL MATERIALS FOR BURGERS

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Abstract: This paper explains what critical literacy is, why it should be included in the teaching of languages, and how to include critical literacy in language education. An example of doing critical literacy is provided via a pilot study of a critical analysis of promotional materials for burgers, both burgers made from animals killed for their meat and burgers made from plant based ingredients. The burger analysis project is described in detail, including the texts and images analysed. Also, the authors offer suggestions on how to implement five pedagogic principles relevant to the learning of critical literacy and to education generally. These principles are: students should be active learners; students should have some input into what they study and how they study it; tasks should be doable for students yet involve some challenge; students should have opportunities to interact with peers and others; and learning should contribute to making the world a better place.

Keywords: Critical literacy, plant based food, burgers, language teaching, critical discourse analysis

Resumo: Este artigo explica o que vem a ser letramento crítico, porque ele deve ser incluído no ensino de línguas e como incluir letramento crítico na educação linguística. Um exemplo de como praticar letramento crítico é apresentado mediante um projeto piloto de análise crítica de material de propaganda de sanduíches, tanto feitos da carne de animais assassinados quanto produzidos a partir de ingredientes oriundos de plantas. O projeto está descrito em detalhes, incluindo-se os textos e imagens analisados. Ademais, os autores apresentam sugestões de como implementar cinco princípios pedagógicos relevantes para o aprendizado de letramento crítico e de educação em geral. Esses princípios são: os estudantes devem ser aprendizes ativos; eles devem ter alguma informação sobre o que estudam e como estudá-lo; as tarefas devem ser factíveis para os estudantes, mas envolver algum desafio; os estudantes devem ter oportunidades de interagir com os colegas e com outros; o aprendizado deve contribuir para fazer do mundo um lugar melhor.

Palavras-chave: Letramento crítico; alimento à base de planta; sanduíches; ensino de língua; análise crítica do discurso.

1. Introduction

The paradigm shift toward cognitivism (GARDNER, 1985) and social-cognitivism (VYGOTSKY, 1978) has profoundly affected education at all levels and in all subject

areas, including second languages. One of these affects has been efforts to mobilize and enhance students' thinking skills. Thinking skills include the abilities to compare, question, connect, categorise, elaborate, give opinions about, apply, evaluate, and investigate ideas (SCRIVEN & PAUL, 1987). In the past centuries, as well as millennia, scholars including Confucius, Socrates, Bacon, and Dewey, have discussed the need for education curricula to include thinking skills as necessary preparation for success in life and fulfilment of the duties of active citizenship (PAUL, ELDER, & BARTELL, 1997). Applying thinking skills in the service of literacy can be termed critical literacy (CL). A related term is Critical Discourse Analysis (TAHMASBI & KALKHAJEH, 2013). Behrman, writing in 2006, stated that CL was already "well established as a major ideological construct influencing literacy education". For example, Behrman reported that in 2004, the International Reading Association, now the International Literacy Association, had formed a committee on Critical Perspectives in Literacy. While CL seems especially important given the accelerated dissemination of fake news, skilled communicators, with both good and nefarious motivations, have long used various language tricks to persuade people to think and act in preferred ways.

CL involves not just skills but also the adoption of a questioning, searching attitude towards what people read, hear, and view. This paper attempts to provide some guidance in how to help students become critically literate. Teachers, even teachers of teenage and adult students, should not assume that students already have CL skills and attitudes. This paper's guidance on teaching CL begins with some basic educational principles. Next, this guidance is applied to the analysis of marketing materials for two types of hamburgers: those made with meat from animals and those burgers made from plants.

2. How To Teach Critical Literacy

The teaching of CL cannot be reduced to a toolbox of techniques, although techniques can be very useful. Morgan and Wyatt-Smith, cited in Behrman (2006), stated that CL is more of a theory than a method. Thus, students and teachers can use whatever methods and techniques they wish to learn and apply CL, i.e., they can evolve their learning methods in a grassroots, organic manner (LUKE, 2000). For instance, ecolinguistics (International Ecolinguistics Association, 2018) offers a wide variety of ways to analyse texts. However, one point to be clear on from the start is that the word 'critical' need not mean that analysts restrict themselves to identifying and shining the light on demerits of texts and the creators of those texts. Instead, just as peer and teacher feedback on student writing should include praise, so too should CL.

As the teaching of CL admits a range of teaching ideas, the authors of the present paper wish to share what they feel are five basic principles of education. Of course, these five principles of education do not constitute the only five important principles.

- (1) Students should be active learners. To quote the poet, Yates, "Education is not the filling of a pail, but the lighting of a fire." In other words, teachers cannot merely pour information, skills, and attitudes into students' minds and hearts. Instead, students need to construct their own learning via such activities as creating visuals, interviewing and other forms of question asking, searching for reasons, and creating categories. CL affords students many ways to actively engage with the texts in their lives.

- (2) Students should have some input into what they study and how they study it. Part of constructing their own learning involves students in having some power to decide what topics to learn, e.g., if the topic is zero waste, students, as groups or individually, can make their own choices about which waste reduction areas interest them, and they can have a role in finding texts for analysis in the areas of their choice.
- (3) Tasks should be doable for students yet involve some challenge. The activities students do should not be so easy that little learning occurs (in students' Boring Zone), nor should they be so difficult that students become frustrated and, again, little occurs (in their Panic Zone). Instead, tasks should be doable yet challenging (in the Stretch Zone). One way of enabling students to be in their stretch zones involves modeling by teachers, in this case, modeling of how to do CL.
- (4) Students should have opportunities to interact with peers and others. Students can learn more when they have many chances to learn with classmates and others. After all, language is about communication. Thus, students need to communicate to learn how to communicate. In CL, students can share with others about the texts they are analyzing and help each other in interrogating those texts.
- (5) Learning should contribute to making the world a better place. Motivation can increase when students feel they have important goals and that others share their goals. This is part of the aim of CL in helping students, not to mention their teachers, to become astute, active citizens of the communities they live in and of the larger world.

3. Applying Critical Literacy to Promotional Materials about Burgers

This section of the paper demonstrates CL with texts used to promote two kinds of burgers. First, some background is provided on the topic of burgers and the texts to be analysed. The history of hamburgers, henceforth 'burgers', can be traced back at least to the 19th century, if not earlier (McWILLIAMS, 2012). However, it was only in the second half of the 20th century that burgers became an iconic food, first in the U.S. and now in many other countries around the world. Furthermore, burgers remain popular. In one recent U.S. survey, 51% of respondents reported that burgers were their most frequent restaurant food (SENA, 2018). Along with the continuing sales of burgers has also come greater variety in the types of burgers available (SENA, 2018), e.g., nowadays, there are more burgers made of plant based ingredients, such as burgers made from soy beans and peas (SCHOUTETEN ET AL., 2016) and under development are burgers made by growing cow cells outside of cows' bodies (SHAPIRO, 2018)¹.

The authors of the current paper thought it would be interesting to use CL to compare the marketing materials of burgers made from animal based ingredients and burgers made from plant based ingredients, also known as vegan burgers, as vegans seek to avoid products, including food, that originate from animals, such as not buying leather shoes and instead purchasing shoes made from other materials. When researchers share their work with others, honesty dictates that the researchers disclose their interests. In the case of the present study, the first author is an activist for veganism, while the second author is not, although she strives to pursue environmentally friendly behaviors.

4. Finding Data

Perhaps, the initial focus when embarking on CL involves finding the data, i.e., the texts that will undergo critical analysis. The initial questions the researchers asked and their answers for those questions were:

From which burger companies to look for materials? In the case of meat burgers, data were available on which were the top selling burgers in the U.S., and it was decided to use materials from the top five selling burger companies in the U.S. (Quick-Service and Fast Casual Restaurant News and Information, 2015). These five companies were, in descending order of sales: McDonald's (2018), Burger King (2018), Wendy's (2018), Sonic (2018), and Carl's Jr. (2018). These companies, especially the largest of the all, McDonald's, have substantial promotional budgets, e.g., Bruno (2017) estimated that McDonald's advertising budget was about two billion dollars annually². As to plant based burgers, the researchers were unable to locate sales data; so, they referred to listings of vegan burgers found on the internet, e.g., PETA (2015), and they asked vegans they knew which plant based burgers were best known to them. From these sources, four companies were chosen, in no particular order: Beyond Meat (2018a), Impossible Burger (2018), Sunshine Burgers (2018), and Field Roast (2018). It should be noted that many animal based burger companies now offer vegetarian burgers at least some of their outlets, although the sauce and buns for these burgers may not be vegan.

Which materials from the burger companies to analyze? The data search was limited to burgers, but any type of burger was included, e.g., some of the companies that sell burgers made from cows also sell burgers made from chickens. Another decision the researchers made was to limit their analysis to static materials and not to analyze videos. Also, the researchers did not look through newspapers and magazines. Instead, they searched only via the internet, and used what is known as a convenience sample, i.e., the materials that were easiest to find. In this case, they used Google search to find advertisements and websites of the two types of burger companies – meat based and plant based. The websites selected were the companies' main, U.S. website if, as was the case for McDonald's, the company had different websites in different countries³.

Staying with the internet made searching easier; the researchers could just type search terms in to Google. Of course, searching on the internet involves skills and flexibility, as well as critical evaluation of search results (LEEDER & SHAH, 2016). Data searches can be modified in a number of ways. For example, the researchers specified that they only wanted to search for English language materials (so that the materials they found would be assessable to the widest audience) from between 2000 and 2018. In addition to choosing the language(s) of the search, researchers can also choose whether to include materials for general audiences or only search for materials created for scholarly audiences, such as university students and lecturers. In the case of the current study, materials for general audience were searched, as the researchers were interested in companies' outreach to the general public. In all, the data selected consisted of 15 advertisements for meat based burgers, as there were many of these available, and seven advertisements for plant based burgers.

All 22 advertisements can be viewed at

<https://drive.google.com/drive/folders/1x8XUTWuB3wxvUwOksatmK9F52CzLTfc5>.

The data also included the websites of the five meat based burger companies and the four of the plant based burger companies. As websites are much larger than single advertisements, only the websites' URLs are supplied to interested readers. These URLs can be found in the reference list at the end of this paper.

5. Analysing the Data

Two ways of analysing data. In general, in CL, two ways can be used to analyse data: top down and bottom up (ROGERS, MALANCHARUVIL-BERKES, MOSLEY, HUI, & JOSEPH, 2005). Top down analysis begins with certain ideas in the researchers' minds. These ideas can come from what the researchers have read, heard, or viewed on the topic being researched. Additionally, top down ideas can come for the researchers' interests. In the case of the present study, the researchers' previous reading led them to suspect that the promotional materials for the meat based burgers might link meat and masculinity (ADAMS, 2015). Additionally, both researchers have an interest in nature and environmental protection; so, they were interested to see what if anything the materials for both types of burgers said about this topic of interest. Two other topics that came from the researchers' background knowledge were: (a) concern for the animals used for food in meat burgers, and (b) the effect of diet on human health. These two topics are prominently mentioned in materials promoting plant based diets.

In contrast to top down analysis of texts is bottom up analysis. In bottom up analysis, researchers start with no preconceived ideas of what to look for in their data. Instead, they read through the data and see what emerges. Once an idea emerges from one text, the researchers check for that idea in the other texts. The Constant Comparative Method (LINCOLN & GUBA, 1985) is one example of a bottom up approach. The one topic in the current study **the emerged** as the researchers were examining relevant texts was the topic of authenticity, i.e., whether burgers provided customers with an authentic burger experience.

In summary, one way to remember the difference between top down and bottom up approaches is to think of people sitting at desks reading books. The people's heads are above the books; thus, what is in their minds, e.g., background information and interests, goes from their heads down to the books, thereby affecting what the people see in the books. Alternatively, in a bottom up approach, the information goes from the books up into the heads of the readers. Of course, researchers can combine top down and bottom up approaches.

The category system used in this study. In the current study, the texts about burgers were examined for the presence of five content categories. The researchers did not investigate about the percentage of a particular category in a particular text, e.g., just one mention of species extinction classified a website as connecting to animal welfare. Each of the five content categories is described below.

1. Environment. The materials were deemed to have environment content if they included topics on environmental protection, such as carbon footprint, and terms such as *organic* and *non-GMO*. The heavy use of the color green was also felt to signal an environmental message.
2. Animal protection. Materials were deemed to contain animal protection content if they included topics about protecting the welfare of farmed animals, companion animals, or wild animals. Terms linked to animal protection were *free range*, *species extinction*, and *ethics*.
3. Health. The researchers categorized materials as containing health content if the companies claimed that their burgers have healthy ingredients or suggested that their

burgers boosted people's health or protected people from disease, such as heart disease. Also, where nutrition information was given, this was seen as fitting in the health category, as it allowed consumers to make informed decisions. Indeed, reading such nutrition information constitutes one aspect of critical literacy. The researchers disagreed somewhat on this category, with the second author feeling that pictures showing healthy ingredients that are not always found with burgers, such as dark green lettuce and bright red tomatoes, should place a text in the health category.

4. Masculinity, especially appeal to heterosexual men. Four features led to materials being categorized as containing content in this area: (a) burgers were likened to seductive females, sometime with pictures of females appearing in the text; (b) not eating the burgers was labeled an act of cowardice, e.g., it was stated that people who did not eat the company's burger were chickens, i.e., cowards; (c) mention of men, e.g., showing a burger and mentioning Fathers' Day; (d) reference to large size, such as the word 'huge', as it is often seen as macho to have a large appetite, whereas females are supposed to be smaller with dainty appetites. (e) seriousness, as women are sometimes seeing the ones involved in serious tasks, e.g., one of meat based burger companies', Carl's Jr's promotional materials stated, "We hope you're hungry, because this menu isn't playing around."
5. Authenticity. Use of words such as *real* and *100%* led to texts being placed in this category. Another way to suggest authenticity was to state the origin of the food, e.g., McDonald's website stated that the fishes whom are used in its salmon burger were captured in Hokkaido. Also, when texts for plant based burgers stated that their burgers were "found in the meat section", this was considered to be making the case for these burgers being authentic.

Four of the five categories in the CL analysis of promotional materials for burgers came from top down thinking. Categories 1, 2, and 3 came from the first author's experience with materials used in advocacy for encouraging people to move towards plant based eating, as often the three main arguments that advocates make are that plant based diets protect the environment, show concern for nonhuman animals, and boost human health. The fourth category came from the extensive literature, e.g., Adams (2015) linking the oppression of human females with the oppression of animals, such as metaphorically describing females as "pieces of meat" and the scientifically unsupported belief that eating meat boosts men's virility (ESPOSITO, GIUGLIANO, MAIORINO, & GIUGLIANO, 2010). The one category derived from a bottom up process was Category 5, authenticity. This category was added because while looking through the materials, the researchers frequently saw reference to whether the burgers and their ingredients were authentic.

Inter-rater agreement. CL research measures what is known as inter-rater agreement, i.e., the extent to which analysis criteria have been sufficiently clarified so that people who analyse the same texts will reach similar conclusions about them. A simple way to assess inter-rater agreement involves two people first working together to decide on and provide details about the analysis criteria. Next, work together to code a few texts together and further define the criteria. Then, the two work alone to each rate all the remaining text. Finally, they compare their ratings, and their percentage agreement is the level of inter-rater agreement. If the ratings are very different, perhaps more discussion is needed in order to make the rating criteria clearer. In the researchers' experience, complete

agreement rarely occurs. The level of inter-rater agreement in the present study was approximately 85%.

6. Results

Table 1 shows how the various promotional materials were coded. Looking first at the advertisements, the data for which appear in the first two columns, what stands out are: (a) none of the advertisements for meat based burgers talked about environment, health, or animal protection, whereas approximately half of the advertisements for plant based burgers included these categories. The fourth category also showed a contrast in the promotional strategies of the two types of companies. Approximately 73% of advertisements for meat burgers include masculinity, whereas only one advertisement, 14%, among the plant burger advertisements touched on masculinity. Perhaps surprisingly, the percentage of plant based burger advertisements touching on authenticity, 71%, was higher than that for the meat based burger advertisements, 33%. The companies’ website presented a quite different picture, with the four of the five categories, other than masculinity, appearing in all or at least half of the websites. This greater presence of most of the categories might have been due to the fact that the much greater size of websites compared to individual advertisements afforded the companies much more space to address the categories. As to why masculinity was coded as appearing in only one of the five meat based burger companies websites, one hypothesis could be that websites are more informational appealing to people’s cognition, while advertisements appeal more to people’s affect.

	AMBB	APBB	WMBB	WPBB
Environment	0/15	4/7	3/5	4/4
Animal Protection	0/15	3/7	4/5	4/4
Health	0/15	4/7	5/5	4/4
Masculinity	11/15	1/7	1/5	1/4
Authenticity	5/15	5/7	4/5	3/4

AMBB = Advertisement for Meat Based Burger; APBB = Advertisement for Plant Based Burger; WMBB = Website for Meat Based Burger; WPBB = Website for Plant Based Burger

Table 1: Results of the coding of the five content categories for the promotional materials examined by the researchers.

The Results section of this paper is short, only two paragraphs and a table. Other times, CL research can lead to a much longer Results section with statistics and graphs. However, the section could also be shorter. The key is that the researchers have some relevant data to present, that they have given some thought to their research topic; they are not just talking off the top of their heads. Also, the researchers have considered others’ opinions and experiences, by reading, viewing, and discussing.

7. Discussion

The Discussion section of this report has four parts. First, various findings are highlighted. Second, explanation is provided as to how the research process modelled the five basic principles of education delineated in the Literature Review section of this report. Third, sharing one's research is discussed. Fourth, suggestions are made for future research.

8. Findings of Interest

This subsection highlights the current study's findings regarding masculinity. While four of the five categories used to analyse the promotional materials – environment, animal protection, health, and authenticity - could be seen as of benefit to the overall good of society, masculinity is more controversial. As Adams (2016) and Craib (1999) discussed, masculinity has been associated with oppression of females, while at the same time, the masculine ideal presents a target which many men reject, while those who seek to achieve that ideal find it unachievable. This raises the question of whether the plant based burger companies should use masculinity to promote their products. For example, in one study, masculinity was associated with behaviours that harmed these environment, whereas green behaviours were seen as unmanly (Brough & Wilkie, 2017). Along the same lines, in one online discussion group for vegan activists, it was argued that using masculinity to sell products is unethical, as it is trying to overcome the oppression of animals (by reducing meat consumption) using methods that support the oppression of females.

9. Modelling Five Basic Principles of Education

Earlier in the present article, five basic principles of education were explained. Below, the authors described some way in which they modelled these principles in conducting the research presented in this paper.

- (1) Students should be active learners. The authors not only read what others had written on their topic; the authors were also active in collecting texts, developing an analysis framework, applying that framework to the analysis of the texts, writing up the results, and preparing to present and otherwise share about their study.
- (2) Students should have some input into what they study and how they study it. The authors modelled having input in various ways, including choosing the topic of their study, deciding on how to code the texts, and how to share their findings.
- (3) Tasks should be doable for students yet involve some challenge. The authors faced many challenges in conducting the current study. For instance, they initially wanted to use the system of text analysis described in Stibbe (2015); however, they found that to be too complicated and, instead, used the simpler, although less in-depth and comprehensive, system found in this paper.
- (4) Students should have opportunities to interact with peers and others. The researchers, who are peers, had frequent discussions during the research. Often, these discussions concerned disagreements. Fortunately, these disagreements were resolved in a friendly manner, as the researchers shared a common goal of producing work which would be of use to fellow educators, as well as those educators' students.
- (5) Learning should contribute to making the world a better place. By doing and disseminating this research, the authors hope to increase people's level of critical literacy, as well as raising awareness of people's food options.

10. Sharing the Results and Discussion

CL involves more than learning for the sake of learning or learning solely for the benefit of those doing the learning. Instead, in the spirit of Dewey (1897) and Roth and Lee (2006), students and teachers are all part of a larger community, and what students learn enriches the knowledge of the community. Therefore, students need to share what they learn in their CL. This sharing can take place in multiple ways. For example, students can do a presentation to their class, make a poster or a video, or they can organise a CL conference where students and others from different classes and schools present and discuss. Also, students can share their findings with relevant government bodies, corporations, and NGOs. In the case of the present study, results can be shared with governments' environment agencies, with burger companies, and with NGOs concerned with food safety. The current paper has already been accepted for presentation at a conference on literacy, and the paper will soon be submitted to an academic journal, as well as being shared via repositories of academic papers, such as academia.edu and ResearchGate.

11. Suggestions for Future Research

Several areas occurred to the researchers of the present study as ideas for others who might like to conduct future studies on related topics. First, while the present study compared promotional materials for meat based burgers with those for plant based burgers, it appears fairly possible that by the early part of the next decade, another type of burger will be available: burgers made of animal meat produced not from the bodies of animals but made via cellular technology outside the animals (Shapiro, 2018). In other words, no animals will be harmed in the production of what is variously called *clean meat*, *lab based meat*, *cultured meat*, or even *meat without feet*.

A second area for future research could be to analyze the promotional materials for the different types of burgers using other analytical frameworks, rather than the five categories used in this study (or one or more of the categories could be redefined). Indeed, one of the many exciting aspects of critical literacy is that so many perspectives can be applied. One prominent analytical framework is that proposed by Stibbe (2015) who uses an ecolinguistic perspective to look at eight areas: ideology, framing, metaphor, evaluation, identity, conviction, erasure, and salience. Application of this framework was beyond the current capabilities of the first author of the present study.

Third, in every study, the researchers make choices, and other researchers can provide a wider perspective by making different choices in the studies that they conduct. In the case of the current study, the researchers looked at promotional materials only in English, from the U.S., and in the current century. Furthermore, they did not look at videos or at promotional materials in newspapers or magazines. Thus, by making other choices as to the materials to analyse, future researchers can contribute to enhanced understanding.

Additionally, the sample size of the materials used in the current study was very small. Thus, this study might best be considered only a pilot study. While, despite the small sample size, the study's result do seem to raise interesting issues, a larger sample same would be likely to shed more light of these issues. In hopes of encouraging more studies

on these and related issues, the researchers set up a Google doc with the advertisements used in their research.

12. Conclusion

This conclusion covers three areas: summarizing the article, suggesting an alternative to consumerism, and highlighting words of wisdom from a leading scholar in CL. First, the key goals of the article are summarized as follows: (a) to encourage the inclusion of critical literacy in literacy learning for students reading of promotional materials for burgers; and (c) to promote greater awareness of food options.

The second part of the conclusion makes a brief point about consumerism. A wide area to which people often apply CL involves making intelligent consumer decisions. In the present study, those decisions concerned which type of burgers to buy. However, Stibbe (2015) pointed out that consumers have wider options than whether to purchase product A or B or C or D. Another option is to buy less and buy simpler, especially for the sake of the environment. Yes, plant based burgers are much greener, but they often contain many ingredients. For instance, the Beast Burger, from Beyond Meat (2018b), contains more than 15 ingredients and is made via a high tech process.

It is hoped that this paper inspires students and teachers to expand their vision of what it means to be literate beyond only the ability to read and write. Freire, a leader in critical literacy, talked about the link between reading the word (basic literacy) and also reading the world (understanding the world we live in, the voices of the various actors in that world, and how to change the world. Freire urged students, teachers, and others to take part in using words as part of “rewriting” (1985, p. 18) the world for the better.

Notes

1. Burgers made from cells, i.e., what might be called ‘cellular agriculture’, are not yet commercially available ([see review of this book in this volume](#)).
2. It might have been better to use data from more countries, but the advantage of using the U.S. data was that, in the researchers’ experience, those data tend to be the easiest to find.
3. The internet was a great help in this regard, and a variety of internet advertisements were used, and all the companies had websites.

References

- ADAMS, C. J. *The sexual politics of meat: A feminist-vegetarian critical theory*. New York, NY: Bloomsbury Publishing, 20105.
- _____. *The Carol J. Adams reader*. London, United Kingdom: Bloomsbury, 2016.
- BEHRMAN, E. H. Teaching about language, power, and text: A review of classroom practices that support critical literacy. *Journal of Adolescent & Adult Literacy*, 49(6), 2006, p. 490-498. DOI: <https://doi.org/10.1598/JAAL.49.6.4>
- BEYOND MEAT. Author. Retrieved from <http://beyondmeat.com>
- _____. *Beast Burger 2.0*, 2018b. Retrieved from <http://beyondmeat.com/products/view/the-beast-burger>
- BROUGH, A. R., & WILKIE, J. E. B. Men resist green behavior as unmanly: A surprising reason for resistance to environmental goods and habits, *Scientific American*, 2017. Retrieved from <https://www.scientificamerican.com/article/men-resist-green-behavior-as-unmanly>

- BRUNO, G. McDonald's rethinks its \$2 billion ad budget, 2017. *TheStreet*. Retrieved from <https://www.thestreet.com/story/14362329/1/mcdonald-s-to-examine-how-its-spending-its-ad-dollars.html>
- BURGER KING. Author, 2018. Retrieved from <https://www.bk.com>
- CARL JR'S. Author, 2018. Retrieved from <https://www.carlsjr.com>
- CRAIB, I. *Experiencing identity*. London, United Kingdom: Sage, 1998.
- DEWEY, J. My pedagogic creed. *School Journal* 54, 1897, p. 77-80.
- ESPOSITO, K., Giugliano, F.; MAIORINO, M. I., & GIUGLIANO, D. Dietary factors, Mediterranean diet and erectile dysfunction. *The Journal of Sexual Medicine* 7(7), 2010, p. 2338-2345. <https://doi.org/10.1111/j.1743-6109.2010.01842.x>
- FIELD ROAST. Author, 2018. Retrieved from <http://fieldroast.com>.
- FREIRE, P. (1985). Reading the world and reading the word: An interview with Paulo Freire. *Language Arts* 62(1), 1985, p. 15-21.
- IMPOSSIBLE FOODS. Author, 2018. Retrieved from <https://www.impossiblefoods.com>.
- International Ecolinguistics Association. *About*, 2018. Retrieved from <http://ecolinguistics-association.org>.
- LEEDER, C., & SHAH, C. Practicing critical evaluation of online sources improves student search behavior. *The Journal of Academic Librarianship*, 42(4), 2016, p. 459-468. DOI: 10.1016/j.acalib.2016.04.001
- LINCOLN, Y. S., & GUBA, E. G. *Naturalistic inquiry*. Beverly Hills, CA: Sage, 1985.
- LUKE, A. Critical literacy in Australia: A matter of context and standpoint. *Journal of Adolescent & Adult Literacy*, 43(5), 2000, p. 448-461.
- MCDONALD'S. Author, 2018. Retrieved from <https://www.mcdonalds.com/us/en-us.html>
- MCWILLIAMS, M. *The story behind the dish: Classic American foods*. Santa Barbara, CA: Greenwood, 2012.
- MORGAN, W., & WYATT-SMITH, CM. Im/proper accountability: Toward a theory of critical literacy and assessment. *Assessment in Education: Principles, Policy, & Practice*, 7, 2000, p. 123-142.
- PAUL, R.; ELDER, L.; BARTELL, J. *California teacher preparation for instruction in critical thinking: Research findings and policy recommendations*, 1997. Retrieved from <https://eric.ed.gov/?id=ED437379>.
- PETA (People for the Ethical Treatment of Animals). *Our favorite vegan burger brands*, 2015. Retrieved from <https://www.peta.org/living/food/vegan-burger-brands-that-will-change-your-mind-about-veggie-burgers>
- QUICK-SERVICE and Fast Casual Restaurant News and Information. *The top 50 brands in quick service and fast casual*, 2015. Retrieved from <https://www.qsrmagazine.com/reports/qsr50-2015-top-50-chart>
- ROGERS, R.; MALANCHARUVIL-BERKES, E.; MOSLEY, M.; HUI, D.; JOSEPH, G. O. G.. Critical discourse analysis in education: A review of the literature. *Review of educational research*, 75(3), 2005, p. 365-416.

ROTH, W. M.; LEE, Y. J. Contradictions in theorizing and implementing communities in education. *Educational Research Review*, 1(1), 2006, p. 27-40.

SCHOUTETEN, J. J.; DE STEUR, H.; DE PELSMAEKER, S.; LAGAST, S.; JUVINAL, J. G.; DE BOURDEAUDHUIJ, I., ... & GELLYNCK, X. Emotional and sensory profiling of insect-, plant- and meat-based burgers under blind, expected and informed conditions. *Food Quality and Preference*, 52, 2016, p. 27-31.

SCRIVEN, M.; PAUL, R. *Statement at the Annual International Conference on Critical Thinking*, 1987. Retrieved from <http://www.criticalthinking.org/pages/critical-thinking-where-to-begin/796>.

SENA, M. *Burger industry analysis 2018 - Cost & trends*, 2018. Retrieved from <https://www.franchisehelp.com/industry-reports/burger-industry-analysis-2018-cost-trends>

SHAPIRO, P. *Clean meat: How growing meat without animals will revolutionize dinner and the world*. New York, NY: Simon & Schuster, 2018.

SONIC. Author, 2018. Retrieved from <https://www.sonicdrivein.com>

STIBBE, A. *Ecolinguistics: Language, ecology, and the stories we live by*. Abingdon, United Kingdom: Routledge, 2015.

SUNSHINE BURGER. Author, 2018. Retrieved from <https://www.sunshineburger.com>

TAHMASBI, S.; KALKHAJEH, S. G. Critical discourse analysis: Iranian banks advertisements. *Asian Economic and Financial Review*, 3(1), 2013, p. 124-145.

VYGOTSKY, L. S. *Mind in society* (Ed. by M. Cole, V. John-Steiner, S. Scribner, and E. Souberman). Cambridge, MA: Harvard University Press, 1978.

WENDY'S. Author, 2018. Retrieved from <https://www.wendys.com>

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