<u>Literature Review</u>

As already claimed by Danish author and Web Design expert Jakob Nielsen, design plays an eminent role in the conceptualization of authenticity and trustworthiness. In his book *"Trust or Bust: Communicating Trustworthiness in Web Design",* he deems quality design, up-front-disclosure, comprehensive and current content as the well the connection to the rest of the web as indispensable in the role of trustworthiness.

Renee Garett follows the Nielsenian way of compartmentalizing the definition of design elements in highlighting the importance of website designs and visuality in his paper:*'Website Design and User Engagement'* as today's business-to-consumer interactions most often occur online. "The International Standardized Organization (ISO) defines usability as the extent to which users can achieve desired tasks (e.g., access desired information or place a purchase) with effectiveness (completeness and accuracy of the task), efficiency (time spent on the task), and satisfaction (user experience) within a system. However, there is currently no consensus on how to properly operationalize and assess website usability (Lee & Kozar, 2012)". Although little research has been made yet on the topic, Garett succeeds in pointing at seven crucial design elements which are: navigation, graphical representation, organization, content utility, purpose, simplicity, and readability.

Likewise in her study *"Trustworthiness in Web Design: 4 Credibility Factors***",** Aurora Harley builds on Nielsen's reasoning in order to argue that factors contributing to authenticity and hence trustworthiness as stated by Nielsen have not been subject to significant change over time but instead remain to exert influence over users. Harley therefore claims that *"although design patterns and trends change over time, human behavior does not"*[1]. The study argues that our very own expectations have risen with the modernization of technology especially in the online world and as a consequence are conditioned by the personal usage of software. Therefore aspects such as the influence of visual design on authenticity might be subject the current societal norm or a social group with **"***young adults considering flat designs as more professional than older audiences simply because they use more websites that have adopted a minimalist style, and have adjusted their expectations over time*[2]**."** An

---

[1] https://www.nngroup.com/articles/trustworthy-design/
[2] https://www.nngroup.com/articles/trustworthy-design/

observation that could be interesting to take into account for our output. In addition Harley adds the factor of practicability in describing how the interface of a web design with regards to its organization has an impact on how easily users may interact on it and therefore consequently impacts the relationship between the user and the webpage as the text goes on to elaborate that "*as a result, they (users) will become frustrated and may abandon the site. In contrast, when the links unambiguously point users in the right direction, they will feel confident and will trust your company[3]*". Apart from that, the study by Harley seems to give specific importance to Nielsen's fourth criteria, "*Connectedness to the Rest of the Web*", in deeming it more relevant than ever by arguing that a well-perceived web design including a reasonable content may no longer suffice in achieving authenticity but must be imbedded and complemented by references from other "unbiased" websites. As such, Harley stresses the importance of online-ratings, references, partnerships and social media contacts that must be part of the web design so as to ensure authenticity and trustworthiness as "*due to the sheer amount of social media and review sites available, people have learned to trust these external sources more than company-sponsored content.[4]*"

A different objective was pursued with a study by J.T. Luo published through the "Emerald Group Publishing" that limited its scope with regards to web design to the "On-Screen Characters" in order to "*investigate whether or not the OSCs representation, along with user differences, influence, how likeable, appropriate and trustworthy they are.[5]*" The study therefore explicitly wanted to analyse the usage of "*human-like facial appearance*" on websites and its relevance concerning consumer trustworthiness rates. It therefore suspected human aspects to benefit the web designs' authenticity as it assumed a positive effect from the inclusion of human beings in the normally content-focused as well as technologically dominated framework of a webpage. The study was therefore conducted based on the main differentiation of "*facial appearance (human‑like vs cartoon‑like) and gender (male vs female)[6]*". In fact, the study managed to prove its thesis in that it found a more positive feedback from its participants when human-like characters were included. However it also

[3] https://www.nngroup.com/articles/trustworthy-design/
[4] https://www.nngroup.com/articles/trustworthy-design/
[5] https://www.emeraldinsight.com/doi/abs/10.1108/08876040610657048?journalCode=jsm
[6] https://www.emeraldinsight.com/doi/abs/10.1108/08876040610657048?journalCode=jsm

critically concluded that gender in equal measure played an eminent role as "*cartoon-like OSCs, especially female, had more positive effects on the web site interface[7].*"

This, yet again, stresses the importance of psychology with regards to marketing and therefore exactly goes back to studies such as conducted by Diane Wang and Henry Emurian, in their paper "*An Overview of Online Trust: Concepts, Elements, and Implications*" (2005) "*explored online credibility by drawing on concepts from philosophy, psychology, management, and marketing (2005a, 105).*"[8] The two scientist therefore explicitly targeted our point of interest in pointing out the difficulty of defining perceived authenticity and trustworthiness in the field of the world wide web. This carries the burden of finding scientifically sufficient and well-reasoned empirical data as "*human purposes in accessing the online world are both visible and invisible, mental and emotional, social and personal[9]*" and the classification as to how the individual accesses this medium might differ case by case. Wang and Emurian however managed to dissolve this problem by using the concept of the "first impression" that according to them had prevailed as a decisive tool for empirical research and must hence be used, as its constituted design elements remain to be "color, typography, graphics, and layout.[10]" The first impression will therefore also guide our very own research. At the same time Wang's and Emurian's study also showcases the difficulty of grasping the major elements of effective design. In general, researchers such as Wang and Emurian but also Lighter in a study in 2003 have pointed out the damaging impact on the perception of professionalism when graphics are overused and illustrate that simplicity and consistency enhance accessibility, making the website more trustworthy. It is therefore often an accurate and simple design that creates authenticity, which is supported by social scientists such as Metzger and Flanagin (2007) that found out that the increased accuracy of advertisements proposed ultimately increases the perception of credibility. Another aspect that will hence influence our survey choice.

Especially interesting for our project will then be the findings of BJ Fogg's research "web credibility", which he conducted at Stanford University in 2001, as he specifically questioned

---

[7] https://www.emeraldinsight.com/doi/abs/10.1108/08876040610657048?journalCode=jsm
[8] https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1852&context=etd
[9] https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1852&context=etd
[10] https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1852&context=etd

"what causes people to believe (or not believe) what they find on the Web?" as well as *"what contextual and design factors influence these assessments and strategies?"*[11]

Similar to our initial intention, Foggs used professionally-designed websites which were assessed as to their trustworthiness by the experimental method. The researcher especially found that the web design would prevail over the given content of a webpage especially referring to the organization of the website. Foggs therefore *"shows that online users considered the structure of a search engine website to be the most credible, followed by a financial website."*[12]

In conclusion, the opinions of many scholars underline the relevance of the connexion between usability and aesthetics, involving the field of social psychology. It is therefore however important to remind ourselves that the question is of great complexity and for its comprehension to be complete, an interdisciplinary approach is required.

Bibliography

Nielsen Norman Group. "Trust or Bust: Communicating Trustworthiness in Web Design". Nielsen, Jacob. 1999. Accessed October 14, 2018.
https://www.nngroup.com/articles/communicating-trustworthiness/

Garett R, Chiu J, Zhang L, Young SD. A Literature Review: Website Design and User Engagement. Online J Commun Media Technol. 2016;6(3):1-14.

J.T. Luo, Peter McGoldrick, Susan Beatty, Kathleen A. Keeling, (2006) "On-screen characters: their design and influence on consumer trust", Journal of Services Marketing, Vol. 20 Issue: 2, https://www.emeraldinsight.com/doi/abs/10.1108/08876040610657048?journalCode=jsm

Wang, Ye & H. Emurian, Henry. (2005). An Overview of Online Trust: Concepts, Elements, and Implications. Computers in Human Behavior. 21. 105-125.

Standford Web Credibility Research. Stanford Persuasive Technology Lab.
https://credibility.stanford.edu/
Accessed October 16, 2018.

---

[11] https://credibility.stanford.edu/
[12] https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1852&context=etd
13 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4974011/

Fogg, B.J., Persuasive technology: using computers to change what we think and do. Magazine Ubiquity. Volume 2002. December 2002. New York

Miriam J. Metzger, Andrew J. Flanagin. (2013). Credibility and trust of information in online environments: The use of cognitive heuristics
Accessed November 14, 2018