

Sociology Background In The Creation Of Popular Science Videos

INTRODUCTION

People are part of societies, whether it is in the real world or online, as they form “a large group of interacting people in a defined territory, sharing a common culture” (Bell, 2013). This common culture creates widely accessible, shared identification points for individuals, and allows them to configure collectivities such as families and nations (Mankekar, 2015). It is also observable evidence of social dynamics within a society, as it results from the interactions with people sharing this culture (Fedorak, 2009). Media, which includes YouTube videos, helps spread popular culture within and outside given communities (Mankekar, 2015). New media and the Internet bring a new perspective to building identification points as people can get in touch with them worldwide; societies may not only be geographical but also digital (Dodds & Funnell, 2020; Lupton, 2020). Digital technology has indeed become increasingly present in people’s daily lives, making it inseparable from their culture and thus society and communities they affiliate with. This also applies to YouTube, where online communities can be found, built around creators, called YouTubers, and their content (Ferreira, 2019).

Sociology looks at how people interact within societies and how this interaction impacts and influences people as individuals and as a group (University of North Carolina, 2023; Form and Faris, 2022). Some aspects of sociology can be applied in the context of online video-making. Being aware of these aspects allows content creators to better understand their audience, the context in which their content is spread, and which effects it might have on a larger scale. Therefore, this paper will focus on two sociology areas that can be applied to the existence of popular science videos on YouTube.

The first sociology aspect that will be overviewed is social influence, and how it applies to the work of YouTubers. The second aspect will be media effects, and how YouTubers and their videos participate in them.

THE YOUTUBER’S IMAGE AND INFLUENCE

Individuals of a society can have effects on other individuals of that same society, whether it is on their “thoughts, feelings or behaviours”. This is called “social influence” (*American Psychology Association*, n.d.). For example, if an individual who

did not have the habit of going to the bar every Friday makes new friends who do, the individual may be influenced to do the same over time. Lately, a selection of people called “social media influencers” have capitalized on this principle of social influence in their online activities on social media. Indeed, their aim is to “shape audience attitudes through [...] the use of [...] social media”, whether they do it as a profession or as a hobby. YouTubers are a type of social media influencer (Freberg et al., 2011).

There are multiple strategies by which YouTube content creators can influence their audience:

- **Resemblance:** YouTubers can work on their image in order to resemble their audience, which in turn will make YouTubers be liked by the audience. This can be related to Cialdini’s rule of liking (Cialdini, 2009). Indeed, viewers may be more likely to watch a video of someone they like, and views are what YouTubers are aiming to gather to make a living (YouTube, 2023). Working on being liked by someone else requires the development of impression management skills which usually is easier for confident and engaging people (Human *et al.*, 2012);
- **Credibility:** YouTubers can also work on their perceived credibility in their field. Applying Cialdini’s principle of authority in this situation, being credible in their field can give YouTubers a position of authority and competence to their audience’s eyes on their specific topic (Cialdini, 2009). This will also create a trusting relationship between the creator and the audience, allowing them to be more accepting of the creator’s message (Young, 2012);
- **Consistency:** YouTube creators should have a consistent and committed editorial line. This can be linked to Cialdini’s principle of commitment (Cialdini, 2009) for the reason that YouTubers, as humans, have a need to be perceived as steady in their public commitments. The messages their videos convey are public statements and values they need to stick with in the long term. This will allow them to not be perceived as hypocritical, and play on their appreciation by their audience.
- **Landscaping:** YouTubers can also choose the date, time, and context for publishing their videos, as well as the place of recording, and the writing of the script. All of these elements can be related to the concept of landscaping to introduce their topic (Pratkanis and Aronson, 2001) since YouTubers can consciously choose the “favourable climate” for their message to influence their audience in the intended way.

- **Structure:** YouTubers can also work on the structure of their message, which is conveyed through their script, to influence their audience. This, according to Pratkanis' message tactics (Pratkanis, 2007), means writing the video in a way that fits their audience and does not differ radically from what they seem to stand for. Doing otherwise could cause the immediate rejection of the YouTuber's message by its audience (Sherif and Sherif, 1967);
- **Emotions:** Lastly, YouTube content creators can play on emotions to influence their audience into watching their video from beginning to end. This relates to Pratkanis' emotional tactics (Pratkanis, 2007). YouTubers can indeed activate emotional triggers to induce viewers to keep watching, retaining their attention. This point is explained in more detail in the "*Cognitive Psychology Background In The Creation Of Popular Science Videos*" chapter of this document.

The elements mentioned in this chapter show that YouTubers should be aware of how they appear and appeal to their audience for their content to gather more viewers, and thus views.

MEDIA SOCIOLOGY

These elements discussed previously are aspects that regard the creators on the level of their online community. However, they should also be aware of elements that have come into play in a larger sociological context through media effects, whether it is at a micro, individual level, or at a macro, community level (Potter, 2012). Viewers who are exposed to their content may acquire new beliefs or attitudes, develop a new behaviour, or have these modified. Within the landscape of media, combining traditional and new media, the content YouTubers' viewers are exposed to, and its influence can be related to media effects (Schudson, 2011). Indeed, media effects are the result of individuals' or groups' exposure to messages carried through the media, as well as their processing by these groups or individuals (Tsfati, 2011). Media can affect individuals' physiology, attitudes, behaviour, beliefs, affect, and cognition (PABBACs) (Ajzen & Fishbein, 1975; Albarracin *et al.*, 2005; Potter, 2012). When being exposed to YouTube videos in the context of media effects, four effects can happen:

- **Adoption:** Viewers can adopt specific PABBACs about a topic similar to the YouTuber's they are currently watching if they are exposed to the said topic for the first time. This connects with the principle of acquiring (Potter, 2012) as viewers will retain some or all elements they are being exposed to. For

example, if a YouTuber exposes a certain point of view about a topic that is new to the viewer, that viewer is likely to adopt that point of view;

- **Prompt:** Viewers may be induced to action by an element in a YouTube video. The concept of triggering explains this (Potter, 2012): a sensory element can cause the activation of a memory, knowledge, or anything also already existing in that person. If a viewer sees a cat in a video, it may trigger them to think about their cat's food their need to buy;
- **Change:** For viewers, seeing or hearing opinions that differ from theirs, can incite them to adjust their PABBACs to partially or completely conform with the opinion they are witnessing. This is linked to the concept of altering (Potter, 2012) as messages viewers are exposed to can change something that is already existing in the person. If a YouTuber, in a video, expresses an opinion about a topic that is different from what the viewer already believes, that view is likely to change their opinion about the said topic;
- **Strengthening:** Last, viewers who watch content displaying their current PABBACs will be likely to continue having these PABBACs in a more affirmed way. The concept of reinforcing stresses this aspect (Potter, 2012). Indeed, exposure to a message can reinforce something already existing in the person through repeated exposure to an element. If a YouTuber presents information that confirms what the viewer already believes, their beliefs will be built up.

Along with these media effects, there is the matter of how issues, their context, their causes, and effects are being presented by the YouTubers to their audiences. This is called social representation, as the matter is about how the media, in general, depicts "people, institutions, events, or facts" (Çobaner, 2021). It is important for content creators to be aware of these representations as they contribute to it through their content, consciously or subconsciously, and may create or reinforce stereotypes and biases if managed incorrectly. There are two elements to be aware of in media representation:

- **Collective cognition:** People categorize the elements they see in YouTube videos in order to make sense of the video in a given context. This is called 'social representations' (Moscovici, 1988) because individuals and objects according to the social setting in which they are, as well as making sense of their behaviour as part of that social setting. These representations are created and altered through communication between individuals or groups (Höijer,

2011). Therefore, YouTubers can contribute to the perpetuation, creation, or change of social representations in their society as they communicate ideas to make sense of our environment. For example, climate change can be abstract to some people, but when explaining the phenomenon in a popular science video, the creator can relate it to the rise of the oceans' level, which are elements that can be conceptualized much more easily as it appeals to a place that people concretely know about and that can be observed directly;

- **Symbols:** YouTubers, like a teacher would to a student, use words and images —symbols— as they transmit their knowledge and ideas through written or oral words, body language, images, and music when explaining concepts to their audience (Forte, 2010). This relates to symbolism (Aksan *et al.*, 2009) as meaning emerges from interactions between people through symbols that are carriers of information for knowledge to be transmitted from the popular science YouTuber to their viewers.

YouTubers thus participate in media effects and subsequently media representation when posting content on YouTube.

CONCLUSION

When creating content on YouTube, whether it is popular science or another type of video, YouTubers have to keep in mind that their person and their content can have an influence on their audience individually. That influence can be done willingly, consciously by the creator, or not. There are several influence strategies that come into play when being a YouTuber. Six of them have been identified in this paper: the resemblance between the audience and the YouTuber, the perceived credibility and editorial consistency of said YouTuber, landscaping, the structure of the video, and emotional tactics.

Moreover, YouTubers, through their content, also participate in media effects. Combined with other media, including other digital content creators and traditional media, they can create, alter or reinforce cognitions, attitudes, beliefs, affect, behaviour, and the physiology of individuals, the public, institutions, and the media themselves. YouTubers also have to be aware of media representations to remain ethical in the messages they are spreading.

BIBLIOGRAPHY

Ajzen, I. and Fishbein, M. (1975) "Attitude-behavior relations: A theoretical analysis and review of empirical research.," *Psychological Bulletin*, 84(5), pp. 888–918. Available at: <https://doi.org/10.1037/0033-2909.84.5.888>.

Aksan, N. et al. (2009) "Symbolic interaction theory," *Procedia - Social and Behavioral Sciences*, 1(1), pp. 902–904. Available at: <https://doi.org/10.1016/j.sbspro.2009.01.160>.

Albarracin, D. et al. (2005) "Attitudes: Introduction and scope," in *The Handbook of Attitudes*. Psychology Press, pp. 3–19.

Bell, K. (2013) "Society," *Open Education Sociology Dictionary*. Available at: <https://sociologydictionary.org/society/> (Accessed: March 3, 2023).

Cialdini, R.B. (2009) *Influence: Science and practice*. Harlow: Pearson Education.

Çobaner, A.A. (2021) *What is media representation*, IGI Global. Available at: <https://www.igi-global.com/dictionary/representation-of-syrian-children-in-turkish-media-from-a-child-oriented-rights-journalism-perspective/78635> (Accessed: March 16, 2023).

Dodds, K. and Funnell, L. (2020) "Popular culture," *International Encyclopedia of Human Geography*, pp. 223–228. Available at: <https://doi.org/10.1016/b978-0-08-102295-5.10854-6>.

Fedorak, S.A. (2009) *Pop culture: The culture of everyday life*. Toronto etc.: University of Toronto Press.

Ferreira, C.M. (2019) "Sociology and digital culture," *International Journal of Social Science Studies*, 7(3), p. 101. Available at: <https://doi.org/10.11114/ijsss.v7i3.4221>.

Form, W. and Faris, R.E.L. (2022) *Sociology*, *Encyclopædia Britannica*. Encyclopædia Britannica, inc. Available at: <https://www.britannica.com/topic/sociology> (Accessed: March 3, 2023).

Forte, J.A. (2010) "Symbolic Interactionism, naturalistic inquiry, and Education," *International Encyclopedia of Education*, pp. 481–487. Available at: <https://doi.org/10.1016/b978-0-08-044894-7.01529-3>.

Freberg, K. *et al.* (2011) "Who are the social media influencers? A study of public perceptions of personality," *Public Relations Review*, 37(1), pp. 90–92. Available at: <https://doi.org/10.1016/j.pubrev.2010.11.001>.

Höijer, B. (2011) "Social Representations theory," *Nordicom Review*, 32(2), pp. 3–16. Available at: <https://doi.org/10.1515/nor-2017-0109>.

Human, L.J. *et al.* (2011) "Your best self helps reveal your true self," *Social Psychological and Personality Science*, 3(1), pp. 23–30. Available at: <https://doi.org/10.1177/1948550611407689>.

Lupton, D. (2020) "Digital Sociology," *Public Sociology*, pp. 475–492. Available at: <https://doi.org/10.4324/9781003116974-25>.

Mankekar, P. (2015) "Popular culture," *International Encyclopedia of the Social & Behavioral Sciences*, pp. 528–532. Available at: <https://doi.org/10.1016/b978-0-08-097086-8.12133-6>.

Moscovici, S. (2000) *Social Representations: Explorations in Social Psychology*. Cambridge: Polity.

Potter, W.J. (2012) "Media effects." Available at: <https://doi.org/10.4135/9781544308500>.

Pratkanis, A.R. (2007) *The Science of Social Influence: Advances and Future Progress*. New York: Taylor & Francis.

Pratkanis, A.R. and Aronson, E. (2001) *Age of propaganda: The everyday use and abuse of persuasion*. New York: Henry Holt and Company.

Schudson, M. (2011) *The sociology of news*. New York: W.W. Norton & Company.

Sherif, M. and Sherif, C.W. (1967) "Attitudes as the individual's own categories: the social- judgment approach to attitude and attitude change," in *Attitude, Ego-involvement, and Change*. John Wiley & Sons, pp. 105–139.

Tsfati, Y. (2011) "Media effects," *Communication* [Preprint]. Available at: <https://doi.org/10.1093/obo/9780199756841-0081>.

University of North Carolina (2023) *What is sociology?, Department of Sociology*. Available at:

<https://sociology.unc.edu/undergraduate-program/sociology-major/what-is-sociology/>
(Accessed: March 3, 2023).

Young, J. (2012) "Social Capital and Trust for a web environment," *Personal Knowledge Capital*, pp. 81–90. Available at:

<https://doi.org/10.1016/b978-1-84334-700-2.50007-5>.

YouTube (2023) *How YouTube creators earn money - how YouTube works*.

Available at:

<https://www.youtube.com/howyoutubeworks/product-features/monetization/#advertising>
(Accessed: April 11, 2023).

"Cognitive psychology" (no date) *American Psychological Association*.

Available at: <https://dictionary.apa.org/cognitive-psychology> (Accessed: February 10, 2023).