

Research on development of artificial intelligence and its role in social life shows that the presence of solutions based on “intelligent” algorithms is visible in many areas of life. AI shapes consumer choices (Makridakis 2017), has an impact on music preferences (Prey 2018), supports healthcare (Coccia 2020), but is also important in legislation (Eubanks 2018), or employee recruitment (Raub 2018). There are many examples in AI solutions, which also demonstrate discriminatory aspects of technology because of race, accent, sexual orientation or gender identity (Zhang et al. 2021: 127, UNESCO 2019). Conversation interfaces can also reinforce prejudice and gender stereotypes through different device anthropomorphizing practices (Costa 2018; Perez 2019). In this case, machines acquire human character by being given names, i.e. ELIZA, Alexa, Siri, by defining their tone of voice, or images, e.g. boty Cyberella i Valerie (Weber, Bath 2007). The aim of the planned research is to identify and analyse gender models generated in the process of designing artificial intelligence systems, which are based on human-machine communications. Such machines are systems, which are understood by me in the project as conversation interfaces, both voicebots and chatbots, i.e. computer programs that, by adequate design, are used to keep conversation with a human going and to imitate human speech (McTear et al. 2016). e.g. Siri, Alexa, Google Assistant. The underlying assumption for the project is the statement that genderisation of interfaces also takes place in their design process. Having this insight in mind, I want to analyse in the project, how conversation interfaces (chatbots and voicebots) are developed and what models of gender, understood as social practices and rules, are produced and reproduced in the process of designing conversation interfaces.

Being inspired by integration gender theories, I will analyse, therefore, the process of creating conversation interfaces in terms of gender rules and practices that shape gendered structures, which are termed (2009; 2013) *gender regimes* by Connell. These will be the power, labour division and body-emotional structures, where specialists from different stages of the design process, e.g. designers, developers, analysts, project managers of organisations that design AI-based solutions are involved. The process of designing conversation interfaces is, therefore, a multi-dimensional structure, a unique undertaking composed of different stages and tasks, for which embodies social actors – men and women – are responsible. Therefore, the objective of the planned research is to learn and identify models of femininity and masculinity, which are practised by specialists involved at different stages of creation of conversation interfaces: from concept stages through design to works on development of a ready solution. The research will consist in conducting in-depth interviews with authors of bots involved at different stages of designing bots, participatory observation in the organisation that design conversation interfaces for Polish audiences, content analysis and analytical autoethnography of one selected bot design process.

In spite of increasing interest in the subject of the relationship of gender and new technologies, there are no in-depth studies, which would analyse the process of designing conversation interfaces itself in terms of producing and reproducing gender models there. Artificial intelligence as a field of science is often studied in the context of technology, but not from the perspective of social analysis, which take into consideration their process of their development in detail. In addition, in the existing studies on the relationship between gender and technology, i.a. Science Technology and Society (Adam 2006; Lagesen 2012), Feminist Technology Studies (Wajcman 2004) and studies on gendered technology, gender is treated as a default and intuitive category and not as a complex and multidimensional structure. Therefore, gender has often been an analytical category, which is presented in studies on communication with bots (Curry et al. 2018), cooperation in IT teams (Bear, Woolley 2011), but also as a category which differentiates practices of using technologies (Nomura 2017). Nevertheless, it has not been discussed in sociological categories as a category that co-generates a technology design process.