**Module 4: Social Contact Theory - Rawls’ Theory**

Brady Chin

Colorado State University Global

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Dr. Dong Nguyen

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**Social Contact Theory**

John Rawls’ social contract theory, particularly his concept of "justice as fairness," provides an ethical framework that can be directly applied to modern software engineering practices. Rooted in the idea of making decisions from behind a "veil of ignorance" — where individuals are unaware of their personal circumstances — Rawls’ theory promotes the creation of fair and equitable systems (Stanford Encyclopedia of Philosophy, 2023). In software engineering, this approach encourages the design of technologies that treat all users justly, without bias or discrimination. Whether it involves artificial intelligence or user accessibility, Rawls’ principles push engineers to prioritize fairness, especially for the most vulnerable members of society.

**Artificial Intelligence Systems**

Rawls’ concept of “justice as fairness” emphasizes that systems should benefit the least advantaged. With respect to software engineering, this concept can help develop ethical guidelines in the development of AI systems. The “veil of ignorance” thought experiment encourages software engineers evaluate principles and make decisions on the basis of general considerations (Weidinger et al., 2023, April 24). Because the software engineers do not know their social or economic position, it encourages them to consider the broader societal consequences of their choices resulting in a more fair decision.

An example of this in today’s society would be using AI to automate jobs. AI is taking jobs from people in industries like manufacturing and customer service through robotic systems and chatbots, respectively. While these systems increase efficiency and reduce operational costs in the long term, it is leaving workers without jobs.

In this case, the veil of ignorance would force engineers to ask themselves: How would I design this AI system if I didn’t know if I would be one of the workers to be replaced? With this thought in mind, engineers could develop an AI system that assist and work along side humans rather than replace them. This creates opportunities for workers and enhances their efficiency.

**Accessibility in Software Products**

An important concept of Rawls’ social contact theory is the importance of equal opportunity, especially for the least advantaged and the minorities. Software developers can use this concept to ensure that the digital applications that they develop are accessible to all users regardless of their physical abilities.

A great example of this is closed captioning on mobile devices. Closed captioning provides text of the audible content in videos making this form of media more accessible to individuals who are deaf or hard of hearing.

Closed captioning promotes equal access to all individuals which aligns with Rawls’ principle of equal opportunity as well as justice and fairness to ensure that everyone has access to the same resources and information (Silvers, A., Stein, M.A., 2007).

**My Opinion**

Both the examples I provided are examples that resonate closely with me. I currently work in the manufacturing industry and I have seen assembly line operators stress about loosing their jobs to new robotic systems with AI integrated. In the other example, my university roommate was hard of hearing so I have witnessed some of the daily struggles that these individuals experience.

I think it is very important that software developers remember Rawls’ social contact theory to continue to enhance technology by creating systems to help humans rather than replace them while continuing to promote equality and fairness.

**Conclusion**

Rawls’ social contract theory provides ethical guidelines to new technologies and accessibility in software engineering. By applying Rawls’ justice as fairness, veil of ignorance, and equal opportunity concepts, software engineers will fulfill ethical obligations and by creating more inclusive products.

**References**

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