The paper "The Wizard of Oz and the Oz of Wizard in Human-Robot Interaction: A Framework and Guidelines" delves into the realm of Human-Robot Interaction (HRI) experimental methodologies, introducing and exploring the Wizard of Oz model, proposing a new model, Oz of Wizard, as a complementary approach to propel advancements in HRI technology. The paper advocates for accepting the Oz of Wizard methodologies in the HRI community, providing a structured framework, insights, and guidelines for researchers and scholars.

The paper starts by naming some situations where human involvement can be an issue due to impracticality, logistics, or safety reasons. With this, the point is transmitted clearly, the use of robots can be considerably beneficial in scenarios since it facilitates humans to solve problems that we wouldn't be able to otherwise.

The paper then presents its framework, which categorizes HRI experiments into distinct combinations of Wizard and Oz states, each representing a different level of realism and involvement of actual human participants: Wizard of Oz, Oz of Wizard, Oz with Wizard, Wizard with Oz, Wizard and Oz, and Wizard nor Oz.
Each of these options enables the examination of numerous possibilities ranging from situations in which only one of the human and robot behaviors is simulated to others in which both human and robot behaviors are genuine and evaluated in the envisioned environment. Each of these categories is investigated, and the study provides advantages and downsides, organized information on applicability, highlighting each iteration and its subtleties, and examples to further illustrate each paradigm.
Furthermore, the paper underlines the need to recognize the multidisciplinary character of HRI research and advocates for the adoption of different approaches based on the individual problems and aims of each study.

Overall the paper offers a clear and organized approach to categorizing HRI experiments, the guidelines provided facilitate the decision-making process when selecting methodologies, considering factors such as risk, logistics, and access to precise human models. However, one detail that could be added was the moral and ethical consideration of this type of work. Ethics is a considerable topic of discussion in robotics and HRI, and diving into the philosophical side of conducting this type of evaluation without the intervention of humans in some cases could have enriched the paper and given another perspective to this framework, promoting even more discussion and awareness on the topic.

In conclusion, the paper offers a valuable contribution to the HRI community by presenting a structured framework and guidelines for categorizing experiments, as well as promoting the use of "Oz of Wizard". While the approach is commendable, a reference to the ethical and moral side of this framework would have been a great addition, since some of these methods could be faced with fear or questions by the scientific community, for reasons such as involving activities in HRI where no human is involved.

Affordances:

Touch Screen: A touch screen where the user/client can order, browse drinks, and select them easily

Status Indicator: The touch screen can also show a progress bar of the order being made

Microphone: To communicate with the user/client, giving him updates on the order preparation and small comments to entertain

Card Reader: The robot can have an easy and seamless way to pay for the order, like a built-in card reader

Friendly Appearance: Design the robot with a friendly and approachable appearance to encourage positive interactions.

Arms and legs: to be able to grab objects and move across the bar, the robot should have humanoid features such as arms and legs

Design patterns:

Mobility and Dexterity: with its arms, the robot would be able to grab, mix and serve drinks to the clients, and with the help of the legs it could also reach out for drinks in the whole bar and go from one client to another at the counter.

Usage Analytics: Collect data on popular drinks, peak hours, and user preferences. Also, this could be used to inform if any drink was out of stock and block the option of ordering it on the touchscreen

Multilingual interaction: To cater to everyone, the robot should be able to communicate and have interfaces adapted to various languages.