Artificial Intelligence and Us

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I asked *RambamGPT* to argue about the permissibility of using a free electric self-driving taxi on Shabbat within the city limits. I did this while understanding why our halachic decisors have forbidden its use. The answer it provided is below:

> **Question**: *Is it permissible to use a free robot electric self-driving taxi on Shabbat, provided it operates within the city limits and does not involve any human intervention?*
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> **Response**:
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> *It is written in the Torah, "You shall not do any work on it [Shabbat]" (Exodus 20:10). Our sages expounded upon this prohibition and established the categories of melakhot, the forbidden labors, which guide our understanding of the actions prohibited on Shabbat.*
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> *Regarding the use of a free robot electric self-driving taxi on Shabbat, we shall examine the relevant sources and apply our understanding of the principles of Jewish law.*
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> *Melakhah of Driving:*
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> *One of the established categories of melakhot is the prohibition of driving or operating a vehicle on Shabbat. This prohibition arises from the melakhah of "kindling" (mevarer), which includes igniting a fire or causing a similar effect. The sages extended this prohibition to encompass the operation of vehicles powered by combustion engines.*
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> *However, in the case of a free robot electric self-driving taxi, powered by electricity rather than combustion, we find a distinction. The prohibition against kindling a fire does not directly apply to such a vehicle, as it does not involve the combustion of fuel. Therefore, we may argue that the melakhah of driving, which stems from the*

prohibition of kindling, does not directly prohibit the use of an electric self-driving taxi.

Operation by a Non-Human Entity:

A key consideration is the absence of human intervention in operating the self-driving taxi. If the vehicle is designed and programmed to function autonomously, without any direct human involvement during its operation on Shabbat, it can be seen as a non-human entity performing the driving action. In this case, the prohibition of driving on Shabbat, which applies to human activity, may not be violated.

Within City Limits and Fixed Point-to-Point Travel:

Another relevant aspect to examine is the restriction of the taxi's operation within the city limits and its limited scope of driving from one fixed point to another. Our sages enacted the concept of tehum shabbat, which restricts one's permissible range of movement on Shabbat. If the self-driving taxi remains within the city limits and its operation is confined to fixed, predetermined routes, it aligns with the permissible parameters set forth by our sages.

Conclusion:

Based on the analysis of the sources and application of the principles of Jewish law, it can be argued that the use of a free robot electric self-driving taxi on Shabbat, which remains within the city limits and only drives from one fixed point to another without human intervention, is permissible. This ruling maintains adherence to the essence of the Shabbat laws while accommodating the unique circumstances presented by technological advancements.

It is important to note that this ruling is presented for theoretical purposes and should not be the sole basis for practical decisions. Each specific case may have unique considerations that require the guidance of a wise and knowledgeable halachic authority. It is recommended to consult with a qualified rabbi who possesses expertise in Jewish law for a comprehensive understanding of the practical applications in individual situations.

While *RambamGPT* does not yet exist, the answer is not bad, and that is what's both frightening and exhilarating. The truth is that *RambamGPT* will exist, it will be much better than the example above, and it will be used by observant Jews for a better understanding of our texts, even to the point of making a halachic decision. That's a prediction both on the future evolution of AI, and how much impact that evolution will have on Judaism. As we look towards the future and approach Artificial General Intelligence (AGI), we must decide what role these technologies take in our lives. Will AIs be our tools, agents, and/or decisors or proxy for past decisors?

Before delving into more detail on a few AI applications, I've asked ChatGPT to provide a short explanation of AI:

Modern AI refers to computer systems that can perform tasks that would typically require human intelligence, such as recognizing patterns, making decisions, and understanding language. These systems are powered by algorithms that can process

> *vast amounts of data and learn from it to improve their performance over time. These systems can make predictions and recommendations based on patterns they have learned from data, which can help humans make more informed decisions. While AI has the potential to bring about many benefits, there are also concerns about its ethical implications, particularly in areas such as privacy and bias.*

The internet revolutionized how we study Torah, providing vast resources and opportunities to all who participated. Websites like *Sefariah* have thousands of traditional sources, easily accessible to anyone with a smartphone or computer. AI promises a great semantic leap forward. For instance, neural machine translation, a subset of AI focused on language translation, has enabled readers to access and understand sources that were once difficult to obtain due to language barriers. We might soon see AI's ability to mimic writing styles applied to our commentators. Imagine the power of AI language models to write like George Orwell or DALLE's generation of artwork in the style of Picasso applied to Rabbinic sources. We could have an English-Hebrew Tanakh "written" by Ibn Ezra or ask the Rambam a contemporary halakhic question. With recent advancements in deepfakes, an AI technology that creates manipulated video or audio clips that appear real, we could recreate the Talmudic debates between Hillel and Shammai or have Maimonides teach his class on the Guide to the Perplexed. We could even have our hakhamim opine on non-halakhic subjects. Imagine Sunday Night Football with color commentary by Rabbi Akiva or calculus taught by the Vilna Gaon.

We may soon push the boundaries of halakhic discourse by asking AI to write modern responsa like historical figures. What would Rav Saadiah Gaon think of electricity on Shabbat? What if he knew of the contemporary responsa of Rav Shlomo Zalman Auerbach? Would the responsa of an AI be binding? Could rabbinic responsa quote or use an AI interpretation? The possibilities are exciting, but the impact of AI on halakhic decision-making is yet to be seen.

Not all uses of AI might prove so contentious. We've seen websites like *Allhatorah.org* make textual exercises more engaging and comprehensive. Soon, we may have AI that develops whole curricula and classes. Imagine personalized curricula for students, engaging them in our texts, leading to more learned and interested community members. The recent advances in large language models and other language-based AI should excite us about new possibilities to engage with and learn from our history.

AI's uses will extend past learning and text study. In the 21st century, observant Jews have developed various tools and techniques to comply with religious laws and customs while using electricity and appliances during Shabbat and holidays. These tools include timers for lights and air conditioners and unique modes for fridges and ovens. However, all these tools require human intent and manual intervention. The emergence of AI technology offers a promising solution to this issue, enabling automation of much of the busy work performed weekly and providing us with predicted help.

For instance, an AI app synced to our calendars, emails, and apartment appliances, which is also aware of the restrictions of Shabbat, would be an invaluable asset. For example, it could detect that you have invited Friday night guests and therefore turn off the lights at 11:00 PM instead of 10:00 PM in anticipation of a more extended meal. The app could also remind you verbally to bring a rain jacket to the synagogue since it predicts rain on your walk back. Although such an app is not yet available, its underlying principles align with current AI methods.

In the years to come, much will undoubtedly be written about using sensors on Shabbat and holidays and the role of commands versus predictions. Already, a wealth of responsa exists regarding the use of elevators on Shabbat and the Shabbat elevator. With the advent of AI technology, this issue becomes more complex. What happens when not the doorman presses the button for you but an AI that predicts or senses when you will leave and return from the synagogue?

We accept that non-Jews can take actions on Shabbat that we benefit from as long as they are not done explicitly for us. Will the same paradigm apply to AI? Could we live in a building with AI temperature control? Turning on the heat would benefit us, but it is for the benefit of the entire building. What if we programmed the AI to feel discomfort in the cold? In other words, what halakhic status will an AI have? More like a cellphone or like a non-Jew. Will the relative intelligence of an AI make a difference? While we're still in the nascent days of consumer AI, we should be prepared for its impact on our day-to-day life.

I'm excited about the coming AI revolution. It will significantly enhance our learning and study of the Torah through translation, data mining, and analysis. AI will make our lives easier as observant Jews by automating the friction with our homes and appliances. With this in mind, we must answer what role AI can and will take. Will AI be able to perform mitzvoth for you, like maatanot l'evyonim or brit milah? Will we ask AI halakhic questions, and will our hakhamim and leaders ask AI halakhic questions? Ultimately, the intersection of AI and Judaism offers a unique opportunity to explore how technology can enhance our religious practice while remaining true to our traditions and values.