

Analysis of Open-Ended Questions

We analyzed the open-ended questions using *reflexive thematic analysis* with a combination of inductive and deductive orientation to data. We first inductively coded the data and generated individual codes. We then grouped them into code groups. We clustered the code groups into three main themes, one related to each dimension of the ABI model. In this analysis, we seek to highlight the findings that help us better interpret our quantitative results. For the dimension of *Ability*, participants highlighted the need to ensure the reliability of algorithmic systems by warranting data quality and output correctness. For the dimension of *Benevolence*, participants presented doubts on whether it is possible to have benevolent decision-makers in algorithmic policy enforcement and emphasized the importance of enabling a dialectical exchange between decision-makers and decision subjects. For the dimension of *Integrity*, participants highlighted the need to ensure effective *human discretion*. We refer to quotes from the respondents who participated in the survey as S-Pj. *S* refers to *survey* to differ the following quotes from the ones we summarized in the interviews.

Reliability: Need to Ensure Data Quality and Output Correctness Responses to open-ended questions indicate that, similar to the interview-based study, participants of our survey appreciated the fact-based and consistent nature of AI systems (51/223) (e.g., “*I do [think AI is capable of correctly identifying illegal holiday rentals] because it is able to look through data in an unbiased way, which will result in identifying illegal holiday rentals in an unemotional and methodical way.*” S-P83). They considered AI a great computational *tool* to help triangulate data by combining data coming from different sources to get a more complete overview of the phenomenon (28/223) (e.g., “*I think the AI considers useful data when making it’s judgement, e.g. number of suitcases, access during working hours, etc. A civil servant would not*

normally be able to record this data as quickly and efficiently. Nor could they use it to judge multiple households. However, the civil servant can also directly engage with the property owner to determine if there are logical explanations for the AI’s observations. Between the two, there is a high probability of correctly identifying illegal holiday rentals.” S-P80). This was seen as a great opportunity for a human civil servant to make informed decisions (e.g., “*In my opinion, the human civil servant, together with help from the AI, can process a lot more information (by viewing the footage, the AI counting the number of suitcases or number of people entering the building, etc.) to make an informed judgement about whether the building is being used as an illegal Airbnb rental*” S-P119).

Despite acknowledging the potential of AI, many participants highlighted the risk for AI systems to make mistakes (76/223). Some of those participants indicated the need to ensure good quality data and correctness of AI outputs to avoid false positives that could have devastating effects on impacted communities (e.g., “*I would think they are somewhat capable [of correctly identifying illegal holiday rentals] depending on the accuracy and reliability of the data the AI system presents. It is not clear whether the AI is 100% accurate on their findings*” S-P207). Even if human civil servants were seen as key elements to detect and correct false positives—as also claimed by participants in our interviews—, challenges like overreliance were additionally mentioned (e.g., “*The technology itself, while still being impressive, often makes mistakes that the human agent wouldn’t know about (...). A human civil servant will usually be told to trust the process and trust the machine, which will make them less open to there even being mistakes made. Someone says that they weren’t bringing suitcases into their house is met with data saying that they did, and a human told to trust the data. What sort of reaction are they going to get?*” S-P219).

Empathy: Doubts about Benevolence in (Algorithmic) Policy Enforcement and Need for a Dialectical Exchange Another major theme in the open-ended responses was that of empathy. Many of our participants considered AI to be incapable of showing any emotion, empathy or benevolence towards decision subjects (78/223) (e.g., *“From what i understand, the Artificial Intelligence system will be there to carry out one job, to evaluate the probability of illegal rentals, therefore I don’t believe the AI will consider or act on any ”feelings” towards the home owner, including kindness.”* S-P6). AI was considered to be an objective program that sticks to the task it has been programmed for (e.g., *“No as AI is programmed to carry out a task, cannot deviate away from set of instructions. AI is not human cannot use judgement, benefit of the doubt or sympathize or understand what is fully happening”* S-P21). Even if a human made the last decision, and as opposed to the responses in our interviews, there were doubts whether the decision-maker would be benevolent (56/223).

Some participants claimed that the civil servant has no responsibility towards the decision subject, since it is the decision subject who has been found to be renting illegally (e.g., *“They will apply the procedure dictated by the local authority, which includes an initial warning. I would not expect kindness to be applied to illegal holiday lettings due to both the illegality and morally questionable nature of the issue.”* S-P47). Some other participants, in contrast, highlighted that benevolence of the decision-maker depends on the interaction and the attitude of the civil servant themselves (e.g., *“I do not know it depends on the attitude of the human civil servant and what questions they will ask the owner”* S-P145). The need for decision subjects to have voice and engage in a dialectical exchange with the decision-maker was further stressed (34/223) (e.g., *“The process for decision-making could be considered ”right” if it included input from owner and renter, together with an appeals process.”* S-P118).

Beyond Proportionality: Need for Effective Human Discretion Responses to open-ended questions indicate that the combination of an AI system and a human making the final decision was positively perceived. Participants highlighted that such a workflow benefited from complementary skills for decision-making (e.g., *“Yes [it is right that the municipality relies on the human civil servant using an AI system and their own judgement for the decision-making process], it has a balance of rigidity, and hu-*

man compassion. With the right management these go hand in hand and can reduce workload and stress for the civil servant” S-P73). Human discretion was considered to be key for the combination of an AI and a human to be fit for decision-making (142/223). Humans were seen as capable of reflexively enforcing policy (e.g., *“A combination of neutrally gathered information — AI will have no bias— as well as a more adaptable interpretation of the facts (by a human) is a good combination”* S-P205). However, many participants highlighted the need to make sure that both the output coming from the AI system and the final decision made by the human, are causally related to the input (158/223) (e.g., *“For the most part yes. They have the observational data over a period of time to analyse and look for key red flags. If the signs are there and they are able to know that the homeowner is not in possession of a license. There is however room for mistakes such as in exceptional circumstances where there may be a different reason why it someone appears to be letting out a room. Those would obviously be infrequent and in most cases it would not seem necessary for further investigation. Obviously though, an appeal system would be necessary and the idea of looking at camera footage of someone’s house seems a gross breach of personal privacy - laws regarding this point will vary from country to country so it also depends where this system is being implemented.”* S-P217; *“It’s including dangerously pointless data like anonymous reports. This means anyone could target a rental by submitting enough reports based on nothing, and the AI is taking that into consideration as if it’s fact.”* S-P3). Getting access to such input should not come at the expense of decision subjects’ privacy, though (42/223). The combination of rule-based models and data coming from cameras, for instance, was found to be excessive and a violation to decision subjects’ privacy by many (e.g., *“I find it intrusive and a little Orwellian to have cameras surveilling who goes into and out of a property”* S-P23).