

### **A3: Crowdwork Ethnography**

University of Washington: DATA 512 Human Centered Data Science

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#### **Introduction**

In this non-traditional ethnography, I examine crowdworkers (turkers) on the Amazon Mechanical Turk (Mturk) platform, focusing on what it is like to perform Human Intelligence Tasks (HITs) by previewing tasks, reading turker guidelines, and exploring turker forums. In particular, I consider the concept of fairness on the platform and what it means to turkers in the work they do. In doing so, I arrive at the idea that fairness to turkers is about accountability, timeliness, and trustworthiness, combined with fair compensation and the opportunity to take pride in performing Human Intelligence Tasks.

#### **Section 1: Prior Knowledge of Mturk**

To acknowledge my biases and predispositions before beginning this research, I participated in the DATA 512 prior knowledge survey about work on the Mturk platform. My assumption about crowdwork and clickwork in general was that it's tedious and done for little pay. I knew that researchers from a variety of domains, but particularly machine learning researchers, use the results of crowdwork and clickwork to label data to conduct supervised learning. I also knew, from having briefly browsed the Mturk platform, that turkers become eligible for higher pay as they build their reputation by completing more tasks, creating an incentive to be wedded to the platform.

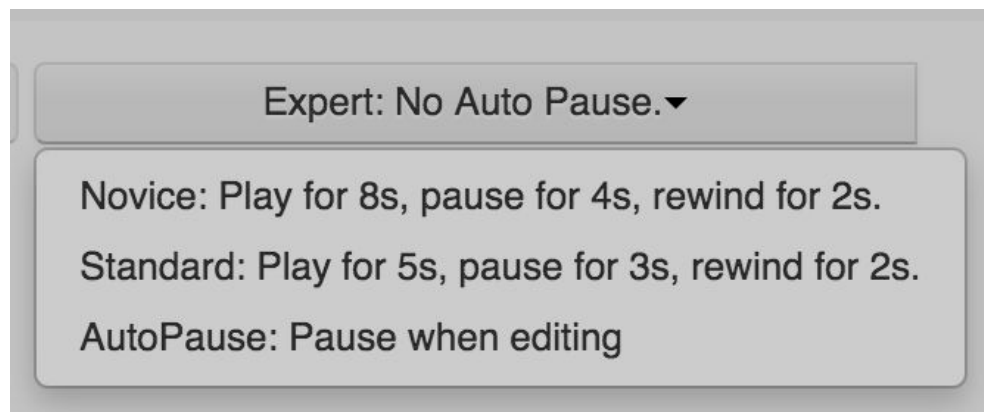
My assumption about turkers themselves was that they typically do crowdwork on Mturk for supplemental income, choosing this type of work because it can be done sitting at home. I had the vague assumption that these workers are a bit anti-social, not particularly interested in working a traditional job that requires leaving the house. This was indeed a big assumption, and perhaps a bit unfair. I myself work remotely and am a bit anti-social, preferring working alone to working in a social setting. I also imagined turkers as living in other countries outside of the US, perhaps in places where online work might be preferable to working for local companies either due to poor working conditions or low-pay in jobs outside the home.

#### **Section 2: Description and Reflection of HITs Previews**

Based on my assumptions about Mturk, I was expecting most of the HITs on the platform to be focused on text and image annotation. I was surprised to find a wide variety of tasks that were nothing like this on Mturk<sup>1</sup>. While some tasks were focused on annotation, or information augmentation, such as adding boundary boxes around items in pictures, or taking audio files and adding transcriptions, some tasks were focused on information retrieval from the web. For example, I found tasks focused on identifying finance professionals on LinkedIn and tasks focused on identifying emerging artists on YouTube. These tasks stood out as requiring domain-specific skills beyond basic reading and writing ability. For instance, the LinkedIn task required turkers to provide links to the profiles of finance professionals for two cents per profile. This was not merely about identifying as many profiles as possible, but also about being able to distinguish between finance professionals who had experience working with data in sell-side banks and hedge funds from professionals in consumer banking. Professional corporate recruiters may even find drawing these distinctions to be somewhat tricky, or at the very least, time-consuming. I discovered later that not providing the right types of profiles in a task like this can penalize workers, lowering their task acceptance rate following quality reviews.

Among information augmentation tasks such as audio transcription, I discovered that requesters and turkers alike acknowledge established levels of expertise. I found that turkers take tests to demonstrate their transcription abilities and use skill badges from these tests to take on higher paying, more desirable tasks. These skill levels also manifest in the way tasks are performed. A CrowdFlower audio transcription task I found had the option to play and pause audio at varying rates, depending on the skill level of the annotator, as seen below:

Figure 1: Audio Transcription Skill Levels from mturk.com



<sup>1</sup> "Amazon Mechanical Turk." Amazon Mechanical Turk. Accessed October 29, 2019. <https://mturk.com/>.

Artifacts in task previews such as this one indicate that requesters also acknowledge clear variation in annotation skills among turkers. This contributes to the notion that not just anyone can do these tasks effectively, gain reputation on the platform, and earn a decent wage in the process.

### **Section 3: Description and Reflection of Requester Guidelines**

Reading the turker authored guidelines for how to be a good requester on the Mturk platform brings to light what turkers look for in tasks, the rights they have outlined for themselves, and what sort of community they are seeking to build on the platform. In particular, the guidelines focus on accountability, timeliness, and trustworthiness as core components that make for fair requester, turker relationships and fair HITs. These are themes one might expect to find in any workplace and any employee, employer relationship. Reiterating a point from the “Guideline for Academic Requestors” page, requesters should, “Pay Turkers fairly. They are a workforce, not a volunteer study population.”<sup>2</sup> This quote demonstrates that while turkers are not totally disinterested in the fruits of their labor, they are definitely not working for charity. Just as full-time employees at for-profit and even non-profit companies show up and work to make a living, so too, turkers are motivated by making money.

Accountability of requesters is essential to maintaining steady and lucrative working conditions for turkers. The “Guideline for Academic Requestors” page asks that requesters provide their full names and details about their organization so as to be identifiable and responsible for what they ask of turkers.<sup>3</sup> They also ask that requesters provide reasonable time estimates for tasks, timely approvals during work-quality reviews, and direct communication links so that getting in touch with requesters when these conditions aren’t met doesn’t take too much time. These working relationship conditions contribute to the overall fairness of work on the platform.

The “Fair Payment” page reiterates that fair exchange of work for payment is essential for the platform, as “studies indicate the vast majority, perhaps 80%, of the HITs completed on MTurk are performed by turkers who are in the top 10% or so of productivity among active turkers, each completing hundreds or thousands of HITs per week; and many of those put forth that much effort because the money is very important to them to make ends meet, whether they have other significant sources of income or

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<sup>2</sup> “Guidelines for Academic Requestors” web.archive.org. Accessed October 29, 2019. [https://web.archive.org/web/20190912230027/http://wiki.wearedynamo.org/index.php?title=Guidelines\\_for\\_Academic\\_Requesters](https://web.archive.org/web/20190912230027/http://wiki.wearedynamo.org/index.php?title=Guidelines_for_Academic_Requesters).

<sup>3</sup> “Guidelines for Academic Requestors” web.archive.org.

not.”<sup>4</sup> Without paying wages that can support doing a large share of HITs on the platform, these high-productivity turkers are unlikely to stay on the platform. These examples from the turker authored guidelines help build a sense of what fairness means for turkers: the spirit of paying a living wage, respecting turkers as a workforce and not volunteers, and reasonable and conservative task time estimation as well as timely responses by requesters. Unfair working conditions are identified as: having to take unpaid time on things like demographic surveys which do not pay, researcher anonymity and distance (being difficult to contact), and harming the reputation of turkers by rejecting work when directions did not clearly state requirements.<sup>5</sup> As these all hinder the ability to earn a decent wage on the platform and maintain a good working relationship with requesters, they are in direct contrast to fair working conditions defined by accountability, timeliness, and trustworthiness.

## **Section 4: Description and Reflection of Turker Forums**

To gain a better understanding of turker culture and the experiences of turkers, I read through turker forums on Reddit as well as on the mturk forum.<sup>6</sup> On Reddit, I looked at popular and recent posts on r/mturk.<sup>7</sup> I also filtered for posts discussing fairness using the search bar. Additionally, reviewing posts on r/TurkerNation,<sup>8</sup> I found many threads from requesters on Mturk, seeking to understand the desires of turkers. Throughout these reviews, I was surprised to find a very active community, interested in discussing their work with each other. Many of these turkers live in the US, which also came as a bit of a surprise, though I suspect there might be more popular forums for non-US turkers.

On mturk forum I found that turkers are generally motivated by profit and independence that comes with doing HITs. Examples of this include discussion threads with lots of encouragement from other turkers to keep up earnings and stay personally motivated to achieve high daily wages.<sup>9</sup> The statistics section of mturkforum.com<sup>10</sup> focuses especially on daily wage counts and percentages of accepted tasks. Here,

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<sup>4</sup> “Fair Payment” web.archive.org. Accessed October 29, 2019.

[https://web.archive.org/web/20190609195656/http://wiki.wearedynamo.org/index.php?title=Fair\\_payment](https://web.archive.org/web/20190609195656/http://wiki.wearedynamo.org/index.php?title=Fair_payment).

<sup>5</sup> “Fair Payment” web.archive.org.

<sup>6</sup> “Mturk Forum” mturkforum.com. Accessed October 29, 2019. <http://mturkforum.com/index.php>.

<sup>7</sup> “r/mturk” reddit.com. Accessed October 29, 2019. <https://www.reddit.com/r/mturk/>.

<sup>8</sup> “r/TurkerNation” reddit.com. Accessed October 29, 2019. <https://www.reddit.com/r/TurkerNation/>.

<sup>9</sup> “First 10 days Turkn” mturkforum.com. Accessed October 29, 2019.

<http://mturkforum.com/index.php?threads/first-10-days-turkn.12672/>.

<sup>10</sup> “Statistics” mturkforum.com. Accessed October 29, 2019.

<http://mturkforum.com/index.php?forums/statistics.5/>.

turkers celebrate high earnings and lament insufficient earnings, sharing tips to replicate successes and avoid wasted time.

Throughout the forums I reviewed, I encountered strong beliefs in the free-market, and pride in the ability to navigate the platform to earn more as a skilled turker compared to a novice or generally less savvy turk worker. For instance, one turker writes: “If you want a job where the work is handed to you, and have all those benefits, then freelance/mturk/independent contract work is not for you. Mturk is for people who are willing to navigate the steep learning curve, network with the requesters, and make their money on their own time. Please stop griping about wage fairness when you are the one that can't work the platform. Mturk isn't for everyone. I make a fair and decent wage. I am glad for a market that weeds out people that can't manage their time or the platform.”<sup>11</sup> This post came as a response to a question about fairness. Similar posts appeared sympathetic toward Mturk as a free market, suggesting that if turkers don't want to get paid low wages, they should not accept low paying HITs: “Plain and simple. Don't do anything that does not pay \$15 an hour.”<sup>12</sup> Again, this emphasizes that turkers who apply themselves and hone their skills will be successful, and that wages will be governed through the natural supply and demand of both HITs and turkers of varying quality.

While this free market view is prevalent on turker forums, not all turkers appear willing to let the market totally dictate wages. The r/TurkerNation forum includes many requesters, interested in understanding what might be considered a fair rate for HITs. Here, turkers quickly correct the assumptions of would-be requesters, as in the following example where a requester was interested in paying turkers to play Hearthstone games as HITs. The turker replied, “When we log in, we log in as a “Worker”. So, it's all work and it's all taxed.”<sup>13</sup> Assumptions like these are far from the idea that turkers should be paid a wage that is consistent with workers in other industries. These assumptions contradict the idea dispelled by turker comments and guidelines that turkers work for money, not to be volunteers.

With a large part of these forums dedicated to discussing fair pay, one might be tempted to think that fairness in terms of pay is the only concern for turkers. While it is a major focus, turkers, like other workers, are invested in the fruits of their labor, and the

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<sup>11</sup> “How is the Pay Fair” reddit.com. Accessed October 29, 2019.

[https://www.reddit.com/r/mturk/comments/b56tl1/how\\_is\\_the\\_pay\\_fair/](https://www.reddit.com/r/mturk/comments/b56tl1/how_is_the_pay_fair/).

<sup>12</sup> “Researchers are Demanding for More Quality Work” reddit.com. Accessed October 29, 2019.

[https://www.reddit.com/r/mturk/comments/de6pj1/researchers\\_are\\_demanding\\_for\\_more\\_quality\\_work/](https://www.reddit.com/r/mturk/comments/de6pj1/researchers_are_demanding_for_more_quality_work/).

<sup>13</sup> “Hearthstone for Money What's a Fair Price” reddit.com. Accessed October 29, 2019.

[https://www.reddit.com/r/mturk/comments/clukff/hearthstone\\_for\\_money\\_whats\\_a\\_fair\\_price/](https://www.reddit.com/r/mturk/comments/clukff/hearthstone_for_money_whats_a_fair_price/).

idea that work can provide a sense of purpose. For instance, a turker on r/mturk brings up the fact that it appears that MLDataLabeler sets a task timer that is too short to complete HITs accurately, and questions how the data will be used by machine learning algorithms if inaccurate.<sup>14</sup> His concern is about whether or not his work will be impactful in addition to whether or not his HITs will be accepted. In a similar vein, a mother interested in providing her special needs son with an opportunity to earn income and pursue something engaging and meaningful in an environment that accommodates his needs, asks if Mturk is a good fit for someone like her son.<sup>15</sup> Fellow turkers respond saying that with a strong work ethic, her son, just like anyone on Mturk, will be able to find suitable tasks. Here we see what turk work means to turkers. It is a source of income but also something to take pride in, just as workers in other fields take pride in their work and consider the impact of what they produce, how it will be used, and whether or not their contribution will be meaningful. The ability to take pride in one's work contributes to the notion of fair and meaningful work on the Mturk platform, and the responses from turkers to this mother's question indicate their desire to make the platform a place where people like her son can succeed.

## **Section 5: Conclusion**

Turk work consists of performing HITs related to information augmentation as well as information retrieval, to name two main categories of work I observed on Mturk. In addition to performing these tasks, turker culture also consists of attitudes and beliefs regarding the conditions under which turkers should work and why, as well as what the work means to them. From turkers who support free-market sentiments and are driven by their desire to build and demonstrate skills on the platform, to those looking for a meaningful way to pass the time that provides both useful data as well as a sense of purpose, turkers take pride in their work completing Human Intelligence Tasks, and fair working conditions are conditions that enable this sense of autonomy and accomplishment.

Beyond autonomy and accomplishment, fairness for turkers means accountability, timeliness, and trustworthiness in relationships with requesters. Requesters who do not respect these principles, such as requesters who post surveys

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<sup>14</sup> "MLD Doesn't Care about Data Quality and here's Why" reddit.com. Accessed October 29, 2019. [https://www.reddit.com/r/mturk/comments/dmzagv/ml\\_doesnt\\_care\\_about\\_data\\_quality\\_and\\_heres\\_why/](https://www.reddit.com/r/mturk/comments/dmzagv/ml_doesnt_care_about_data_quality_and_heres_why/).

<sup>15</sup> "A Good Fit for Special Needs" reddit.com. Accessed October 29, 2019. [https://www.reddit.com/r/mturk/comments/dnja0s/a\\_good\\_fit\\_for\\_special\\_needs/f5bttdb/](https://www.reddit.com/r/mturk/comments/dnja0s/a_good_fit_for_special_needs/f5bttdb/).

with bugs that take up time without fair compensation<sup>16</sup> are called out by turkers as violating cultural values of the platform. While the behaviors of individual turkers will vary, these cultural values and attitudes are pervasive and focused. To this end I was struck by a quote in the “Guideline for Academic Requestors” page which references Paulo Freire’s “Pedagogy of the Oppressed,” indicating that by stating their rights as workers and desires for the platform as a whole, turkers, “Liberate themselves AND their oppressors”.<sup>17</sup> In this way turkers desire to be respected and compensated for their work on Mturk, but they also have a larger agenda to make the platform a hospitable, growth-oriented place. Turkers seek to build an environment and culture in which requesters too are lifted up and made better through adherence to these values and attitudes, that the entire community might thrive together and be an attractive place for dedicated researchers, as well as ambitious turkers interested in sustainable and meaningful work.

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<sup>16</sup> “Do Not Take a Survey from Hong Tsai” reddit.com. Accessed October 29, 2019.

[https://www.reddit.com/r/TurkerNation/comments/crbjhg/do\\_not\\_take\\_a\\_survey\\_from\\_ming\\_hong\\_tsai/](https://www.reddit.com/r/TurkerNation/comments/crbjhg/do_not_take_a_survey_from_ming_hong_tsai/).

<sup>17</sup> “Guidelines for Academic Requestors” web.archive.com. Accessed October 29, 2019.

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