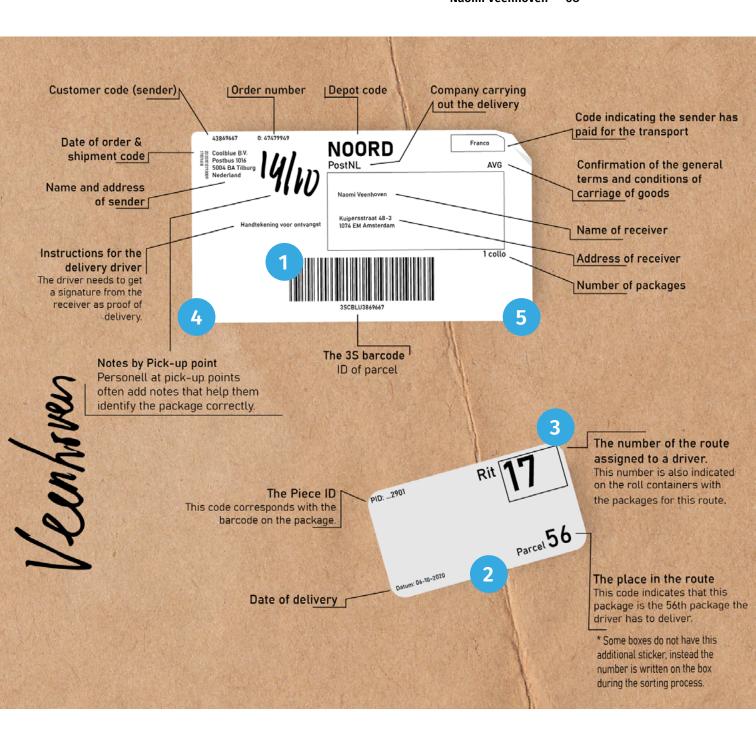
How to Read Logistical Traces

Naomi Veenhoven

In this multimodal, annotated piece, I explore the ways delivery labels are read, deciphered and utilized in order to understand the experience of operational workers in the field of delivery. Delivery labels show multifarious traces of logistics labor: from the place within a sociotechnical assemblage, to the repetitive nature of the work itself, the segmentation of the logistical process, as well as workers' strategies for dealing with the time pressure inherent in time-sensitive logistics labor and circumvent work surveillance that are prevalent in this field. The following annotations are based on my ethnographic research into the experiences of workers in delivery logistics chains in the Netherlands, spanning September 2020 to early February 2021, for which I interviewed workers in various logistical processes, drove along and worked with first- and last-mile delivery drivers, observed in a sorting centre, and worked in a fulfilment centre.



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The labels and scribbles on packages are artifacts of the sociotechnical assemblage of delivery.

They elucidate the presence of operational processes, computerized systems and various actors involved in the movement of a package from sender to receiver. In this assemblage, the social and technological are mutually constituted and reconfigured in a continuous process. Take the barcode: a collection of black lines of varying width

with white spaces in between accompanied by an alphanumeric code at the bottom. The barcode could be seen as the ID of the box: with this code, the box is "made legible to a computerized system" (Huggins 2020) used for planning and supervising logistical operations. But there is more. Allow me to share some observations:

- Without the software to give meaning and context to the barcode, the barcode means nothing.
- The barcode cannot be logged by this software without a scanning device used to read and log the code.
- If for any reason the barcode is illegible to the scanner, workers can help the computer system read the barcode by manually entering the alphanumeric code into the software.
- Most scanning devices, such as the mini-computers used by most delivery drivers
 and colloquially called "handheld," cannot operate on their own. As the name
 indicates: they are held by someone, operated by a worker with a certain amount
 of dexterity, such as the hand-eye coordination of bringing scanner to barcode.
- In turn, workers are often dependent on devices that are able to read barcodes so
 they can carry out their tasks. For example, when sorters scan a barcode they are
 provided with the location in the warehouse to where the package should be sorted.

This sociotechnical entanglement reveals the ongoing interdependence of human and machine reading in the logistical process of delivery.



Illegible and invisible links in a chain.

The label is one of the few direct links between the geographically and temporally separated links in logistical chain of delivery, and on it, one can observe the logistical traces of the whole operation. Operational workers, however, are only taught to read a selected part of the labels that their employers deem necessary for the workers to complete their task. This selective reading reflects how the workers understand (or better said, are denied access to the information necessary to understand) the logistical process of delivery in its totality. The following audio excerpts illustrate this:





The fragmented process of the logistics operation is supervised by managers that oversee everything through renderings of the data gathered by workers' devices. In contrast, workers concerned with the day-to-day operations of moving packages from one place to another are disconnected from the larger process of delivery. They do not see the full journey of a package from sender to receiver, and do not have access to the larger logic behind the tasks they must carry out. Much like the way they are taught to read the labels, they have to fully devote their attention to just a selected part of the operation.



The rhythm of a sorting centre.

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- Here you can hear the repetitive work of a sorter:
- 1. Grabbing a parcel from the conveyor belt.
- 2. Scanning the barcode.
- 3. Checking the two numbers displayed on the handheld scanner.
- 4. Writing the first number on the parcel with a marker.
- 5. Placing the parcel on the assigned spot that is indicated by the second number.

Like a carefully choreographed performance, these five steps are repeated continuously. The sound confirming that the scanner has successfully read the barcode forms a beat that workers use to keep up the required pace of sorting. As Kenzell Huggins (2020) argues: "[w]ithin warehouses, such [scanning] noises provide the rhythm of labor, providing the grooves that help workers recognize if they are setting a pace to hit target times."



Speculative reading to chase seconds.

Delivery drivers are required to follow a tight schedule that often does not match with what happens in the world around them. Roadblocks, traffic jams and overly chatty customers are just a few examples of things that can disrupt this schedule. In order to deal with these various rhythms impinging on the schedule, drivers are forever chasing seconds – a temporal negotiation of constantly trying to make up for lost time or to save time that will inevitably be lost.

Efficiently reading labels and selecting and deciphering potentially useful information is such a practice of chasing seconds. For instance, as I drove along with Jade during her delivery rounds in the Dutch province of Zeeland in early October and late December, I noticed how she used the logistical traces on the labels to speculate about potentially time-consuming hurdles or moments in which time could be won. When encountering a

box with a brand label associated with elderly people, Jade expected that this delivery would take longer than the allotted sixty seconds for drop-off: "old people often want some small talk." She also shared that whenever she noticed a Chinese label, she anticipated a longer delivery time since often "the customers would have ordered it so long ago they probably forgot about it." The presence of a code that indicated 'track and tracing' services, however, was a relief for Jade: this service notifies customers about the expected time of delivery, so anticipating her arrival the customers would sometimes be ready and waiting, saving her the time it takes to ring the doorbell and wait for someone to open the door.

Yet the logistical traces proved to be poor predictors of the actual number of seconds Jade would spend or save on a given delivery – speculating about them did not actually help her save time. Rather, the speculative reading of logistical traces helped Jade cope with the extreme time pressure she was under: the mere idea of having some sort of control over these seemingly uncontrollable rhythms helped her to believe in the possibility of keeping up with the tight delivery schedule.



Strategic invisibility: the disappearing act.

At the beginning of our second shift together, Jade and I had to scan all the packages assigned to our route with a handheld - the mini-computer that runs the routing software - and stack them in the back of the van. When the roll containers assigned to our route were empty, Jade noticed there was one package in the schedule that we had not scanned yet. The software on the handheld only allows drivers to start their route once all packages have been scanned, so we had to find this missing package. But time was ticking as, simply put: starting with a delay results in not delivering packages within the scheduled timeslots, not delivering packages within the scheduled timeslots results in a low performance score, and ultimately, low performance scores can lead to being sacked. Hence, it was vitally important for Jade to find this package as soon as possible. After a couple of minutes of frantically searching the depot, Jade told a co-worker about the issue. This co-worker looked over his shoulder to check if the supervisors were out of hearing range and whispered: "just re-print the label." Visibly relieved but without uttering a word, Jade quickly walked to the sorting station, looked up her planned route, selected the code of the missing package and printed a label. As we left the depot, she broke her silence and explained the plan: the machine reads the presence of the barcode, not the box. So by scanning the label she had just printed Jade could finally begin the route and the supervisors would not find out that the package was actually missing.2

When workers acquire more knowledge about logistical processes, they also gain an understanding of what actions are registered and thus what is seen by their supervisors and what is not. By experimenting with the affordances of technological tools, such as the possibility to re-print a label, and by cleverly using the gaps in how labels are read – gaps between human perception, machine scanning and software logging – workers are able to dodge some of the surveillance of their work.

Notes:

- ¹ Credit: Soundscape produced by Naomi Veenhoven und Gianluca Koeswanto.
- ² Because Jade had scanned the barcode, she could provide proof of delivery by showing her scanning history. In the end, however, this was not needed: when we came back to the depot later for another load, we found the parcel after all and so were able to deliver it.

References:

Huggins, Kenzel. 2020. "Seeing Like a Scanner." *Allegralab*. https://allegralaboratory.net/un-boxing-fulfillment-a-field-guide-to-logistical-worlds/

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Author:



Naomi Veenhoven is a Dutch ethnographer, designer and teacher. She recently graduated (cum laude) from the Research Masters in Social Sciences at the University of Amsterdam with an ethnographic study on the logistical processes of delivery in the Netherlands. She focuses on the anthropology of technologies and infrastructures, and has recently developed an interest in the experience of workers in partly automated labor. Naomi is fascinated by the things that appear mundane: she likes to uncover the hidden worlds behind the things we take for granted and show how sometimes the seemingly simple is captivatingly complex.

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