

Docking Infrastructures

All traffic, at one time or another, has to pass through a dock. A dock is a medium of exchange, not only as a passage of intersection, but also in its transformative impact on material forms and their distribution in time and space. All that leaves a dock has changed. Nonetheless, it guarantees connectivity. How this connectivity is produced is the topic of this short essay.

The following preliminary collection of ideas and remarks on docks and infrastructures of exchange circles around three aspects of, generally speaking, operations of containment: the temporality of docks as storage, the standards necessary to maintain them as media of distribution, and the logistics employed to control their contents. Historically, these three elements of containment cannot be separated. Containerisation has become an indispensable characteristic of globalised infrastructures. It ensures transfers, transportation and distribution, but has to be differentiated into separate operations. A closer look at these interrelations will give an idea of the current changes in docking triggered by new media of tracing and tracking.

In order for goods, humans or data to come and go, they must be stored at some point in the process of transportation. To be a site of storage, the dock has to be a place of exchange between different orders and modes of transport. Each dock necessarily has its own transportation system to deliver whatever arrives according to its models of distribution. Thus a dock is a place where objects are classified and categorised. It is, in other words, the unexchangeable basis of exchange, because it connects and distributes by setting standards, storing and controlling. Modes of production may differ, travel may develop new forms, and data transmission may have new media, but they all rely on networks with nodes at which processes of docking take place. But a dock is more than a node: it is a place of identification, control, connection and separation. It might not be iconic, but the dock has become one of the central spaces of the late nineteenth and twentieth centuries. At a time of increasing global traffic, declining needs for long-term storage, and facing new technologies of control, its status in the twenty-first century still has to be determined.

As a port of exchange, a dock serves as a site of storage for goods, humans or data that are scheduled to be transmitted or transferred to another place, even if they pass through it in a few seconds. As such a place, a dock provides a temporary storage that is in itself continuous, since it is continuously on the run. It is continuous in its temporary character. Imagine a warehouse, imagine a port, imagine a library, imagine perhaps even a kitchen ... Storing involves more movement than the resting objects, containers or packages would suggest. Everything has to be controlled steadily. To have objects available, the docking operators need information to monitor their position. The position of every object has to be recorded constantly in order to be available at any given time. In its ideal form, since it is never omniscient, the dock should be the opposite of a black box.

In a wider sense, every transmission needs storage for processing, and thus docks are essential for all exchange. Because all transmissions happen in time and are never instantaneous, the object that is transmitted (a good, a person, or data) has to be stored somewhere because it cannot be in two places at the same time. In this sense, though they might *transmit* them, a cable stores electricity and a ship stores containers. A computer needs both a hard drive and memory, because it cannot deal with all bits at the same time. Consequently, a dock has a specific mediating and containing function in time.

A dock serves as a point of entry or exit, of arrival or departure. Every object that enters a dock must have special properties or attributes. The dock is a place of standards, norms and protocols. It needs gatekeepers. There have to be strict rules about what is allowed to enter or leave and about the forms that are compatible. Not everything can be contained in a dock in its natural form. For this reason, containers, passports and binary code are the most prominent standards of docking.

Furthermore, and in a historical perspective, in this function of distribution and standardisation docks are closely related to what James Beniger called the 'control revolution'.¹ In different forms they are bound to the birth of capitalism as a global circulation of goods and people. Nineteenth-century docks

show how material wealth has become synonymous with the emergence of global transportation. In the late twentieth century, storing large amounts of goods became inefficient and the tendency was to free goods from the needs of storage in order to accelerate the rates of exchange. Consequently, production modes like *on-the-fly* or *just-in-time* used the dock as a short-term storage: the shorter the objects stay in the dock, the higher the economic benefits. Nonetheless, the process of docking is necessary for a functioning economy. Still today – maybe even more than ever considering the global interconnectedness of trade routes – the operating grade of docks is a strong early indicator and symptom of the economic situation. As every good has to pass docks, they are one of the few places to observe and inscribe what circulates. They reflect the changing rhythms of capitalism, and while their importance as sites of storage decreases, they gain more influence as a site of passage due to new technologies of distribution and tracking.

A dock needs an inventory that registers the structure of ownership of all the objects stored, and it also needs a directory of the destinations of these goods. Since they circulate not only on their global routes, but also inside the dock, and since this circulation is unobservable in its temporal character, recording and inscribing become feasible solutions for emerging needs of control. Put another way, the history of docks remains shallow without taking into consideration the history of accounting and bookkeeping, as Swiss historian Monika Dommann has elaborated.² The repository needs a memory. Its scope reaches from inventory books and file cards over early computing flowcharts to barcodes, GPS-coordinates and RFID-tags (radio frequency identification) today. As these technologies became more and more sophisticated, it became more and more possible to follow the tracks of individual containers or even to trace individual packages equipped with a code or a tag. Today, no good is shipped without one of them, and each container has a unique RFID-tag that identifies its contents, destination, owner and other information. This tag can be read from a distance without actual access to the container.

When confronted with such technologies, we are witnessing a revolution in global and local distributions and circulations due to locative media, new trade routes and adaptive infrastructures. The space of the dock has to adapt to all these changes, while it also allows us to investigate these histories of distribution as a key element of globalisation. In this sense, the dock and its current transformations are both a sign and a symptom of the seemingly invisible circulations that are happening all around us, for us, and even with us. But despite the new developments of tracing and tracking, docks have been around for some time. Their history shows that while we may think that distributions and circulations are specific to twenty-first-century societies, docking is in fact deeply embedded in our self-understanding. It is, in other words, an elementary cultural technique.

¹ James R. Beniger, *The Control Revolution. Technological and Economic Origins of the Information Society*, Harvard University Press, Cambridge, 1986.

² Monika Dommann, 'Wertspeicher. Epistemologien des Warenlagers', *Zeitschrift für Medien- und Kulturforschung*, No. 2, 2012, p.32–50.

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