Wolfgang Struck

A Message in a Bottle

A blank sheet of paper sets up the riddle around which an early short story by Bertolt Brecht revolves: “Die Flaschenpost” (The message in a bottle). Written in 1921 or 1922, but never published during Brecht’s life, it tells the story of a young woman who had been left by her lover right after he proposed to her. On the “evening of decision” he had told her that he could not marry her immediately, but only after a journey to “the tropics,” which might keep him away for several years. On his departure, he had given her an envelope and accepted her promise to open it only if, after three years, she had not received word from him.

Ich öffnete nach drei Jahren, und ich fand ein leeres Blatt. Es ist weiß und dünn und völlig geruchlos, ohne einen Flecken.¹

After three years I opened the envelope, and I found a blank sheet. It is white and thin and odorless, completely immaculate.

The absence of writing directs one’s attention to the paper itself. But this object, having no significant qualities, does not compensate for the lack. One elementary quality of the sheet remains, however, which becomes important in the woman’s further attempts to solve the riddle: its flatness, its geometric two-dimensionality. Rejecting the possibility that her lover just played a cruel trick on her, she finds consolation in a kind of thought experiment, which not only introduces the message in a bottle from which the story’s title is drawn but also performs an operation negotiating between one- and two-dimensionality:

Eine Zeitlang beruhigte mich folgender Gedanke: Schiffer, die an der chilenischen Küste untergehen, übergeben in einer Flasche dem Meer Aufzeichnungen über ihre letzten Stunden und chilenische Fischer entkorken vielleicht nach 20 Jahren die Flasche, und obwohl sie in keiner Weise die fremden Schriftzeichen verstehen, erleben sie doch einen Untergang auf fremden Meeren nach. Wasser und Gischt haben die Schreiber vertan, aber die Schriftzeichen, frisch wie am ersten Tag, verraten nicht, wie lange es her ist. Wie lächerlich wäre die Botschaft, wäre sie lesbar; denn wie unmöglich ist es, in einem Leben ein Wort zu finden, das die Stille nicht stört, die nach Untergegangenem entsteht und irgend etwas sagt, das nicht böse ist!²

¹ Bertolt Brecht, “Die Flaschenpost,” in B.B., *Werke*, vol. 19, ed. Werner Hecht et al. (Berlin and Frankfurt am Main: Aufbau and Suhrkamp, 1997), 166–168, here 167.

² Brecht, “Flaschenpost,” 167.

For a while, I was comforted by the following thought: seafarers going down on the coast of Chile seal the record of their last hours in a bottle and commit it to the sea. Perhaps twenty years later, Chilean fishermen open the bottle, and – although they have no way of understanding the strange letters – they vividly experience a catastrophe on strange seas. Water and spray have tossed the writers aside. But the writing, fresh as on the first day, does not reveal how long ago this happened. How ridiculous the message would be if it were legible. For how impossible it is to find, in a life, a word that does not disturb the silence after a catastrophe, while still saying something that is not evil!

This “thought” does not really explain anything, but it offers comfort simply because it suspends the will to understand. It is not reading and understanding a text that establishes a community between fishermen and seafarers, but a shared maritime practice of sending messages in a bottle in the moment of catastrophe. One could read this resistance to (hermeneutic) understanding, as I have done elsewhere, as a metaphor for poetic practice itself – a metaphor that authors such as Celan and Adorno elaborated in the course of the twentieth century.³ Here, however, I will follow a trace that leads to messages in bottles in a less metaphorical sense: as instruments of scientific research. Since the middle of the nineteenth century, (early) oceanographers made extensive use of bottles in order to track the ocean currents, and in the early 1920s bottle experiments were, though not without some objections, still considered to be useful tools of exploration.

In a first step to my reading, this practice may explain the – rather strange – analogy between the blank sheet found by the woman and the message in a bottle found by the Chilean fishermen, which is not blank at all but contains letters “fresh as on the first day.” Their strangeness, however, not only subverts an understanding of the writing. It even applies to the order of the symbols, which – being found at the Pacific coast – need not be Latin but could also be, for example, Chinese or Arabic, requiring them to be read in different directions. The importance of the arrangement is further highlighted by a wordplay that the text performs within its own sphere of Latin letters. Fishermen and seafarers, the collective agents staged by the thought experiment, not only share a semantic assignment to the maritime world. In the German words *Fischer* and *Schiffer*, they also share alphabetic letters that transform into each other, as – nearly – an anagram.

If one draws a graphic representation of this transformation, it forms a plane between the two linear syntagmas of the words. Here, the addresses of the individual graphemes are voided and reorganized. And it is this (transitional) loss of

3 Wolfgang Struck, “Ein Untergang auf fremden Meeren: Bertolt Brechts ‘Flaschenpost,’” in *Seenöte, Schiffbrüche, Feindliche Wasserwelten: Maritime Schreibweisen der Gefährdung und des Untergangs*, ed. Hans Richard Brittnacher and Achim Küpper (Göttingen: Wallstein, 2018), 443–460.

address that leaves the letters floating free within the interspace and transforms them into “strange letters”:

Fig. 1

The anagram creates a plane on which it is possible to perform certain operations – for example, by means of the vectors that point away from the direction of reading. In doing so, the anagram points to a process of change in the dimension between line and plane, which also marks a decisive difference between seafarers and fishermen: for seafarers, the sea is a space of transit between two harbors to be connected by the shortest possible line; for fishermen, it is a field they constantly plow, as it were, with peculiarities they know by heart from daily experience – not a “strange” sea, as for Brecht’s seafarers, but part of a hybrid home; not divided by the shore but rather united. Fishermen appropriate this space through daily practice; they also segregate it, as their own fishing ground, from that of other fishermen. Seafarers, by contrast, cross borders; they claim the right of passage, and they can do so precisely because they do not intend to stay, because they do not expand the line of their passage into a plane. To put it slightly differently: both move on a plane, the surface of the sea. But sailors tend to contract this space into a line, while fishermen expand it into the space of the depths.

A similar transformation from line to plane and space takes place in marine sciences during the nineteenth century. And bottle messages are the most significant instruments of this transformation. An example where this becomes visible is the *Bottle Chart of the Atlantic Ocean*, drawn in 1843 with a second, updated edition from 1852, by the English oceanographer Alexander Becher, which he constructed on the basis of 121 found bottles and other drifting objects. It is no coincidence that this chart bears at least some small resemblance to my representation of Brecht’s anagram (Fig. 2).⁴

⁴ Alexander Bridport Becher, “Bottle Papers,” *The Nautical Magazine and Naval Chronicle for 1843*: 181–184; Becher, “Bottle Chart of the Atlantic Ocean,” *The Nautical Magazine and Naval Chronicle for 1852*: 568–572.

Fig. 2: Alexander Bridport Becher, *Bottle Chart of the Atlantic Ocean*, second edition (London, 1852).

The *Bottle Chart* was praised as a major breakthrough in marine sciences. But it was also rejected with equal vehemence, although – or probably precisely – because no one was in fact able to explain what it actually shows. The polar explorer Sir John Ross, for example, pointed out that the bottles cannot be observed during their voyage and, therefore, that the representation of their supposed routes of movement can be nothing but pure speculation, or, as he polemically called it: “bottle fallacy.”⁵ This is true but also unfair, since Becher himself noted that the lines in his chart are by no means meant to represent real trajectories. Yet he himself failed to give an answer to the question of what they show instead. One possible answer might refer to evidence based on the large number of bottle finds, i.e., in terms of probability. But this would not have been acceptable to nineteenth-century hydrography, which was eager to show that the oceans are structured not by amorphous flows but by clearly defined currents. To provide evidence in this sense, the many lines (as drawn in Becher’s

⁵ John Ross, “The Bottle Chart,” *The Nautical Magazine for 1843*: 321–323, here 321.

chart) would have to merge again into single lines – as is the case in charts drawn half a century later.⁶

Fig. 3: Gerhard Schott, *Die Flaschenposten der Deutschen Seewarte* (Hamburg, 1897), plate 1: “Nordatlantischer Ozean: Die in den Monaten Dezember, Januar, Februar, März abgesandten Flaschenposten (Auswahl)” (North Atlantic Ocean: Messages in a Bottle Sent in the Months of December, January, February, March [Selection]).

In Becher’s chart, however, something else and more fundamental happens. In their multitude, the lines make visible what is between the points of departure and arrival: not one single known, well-defined line but an unknown space, the space of not *one* actual passage but of *all* possible passages. Thus, the *Bottle Chart* carries out a paradoxical operation: transforming a line into a plane – or, if one considers the complex interactions of wind, surface and depth currents, into a space. The sea itself appears through this operation – not as a space of transit or

⁶ Gerhard Schott, *Die Flaschenposten der Deutschen Seewarte* (= *Aus dem Archiv der Deutschen Seewarte* 20, 2 [1897]).

as the medium of connectivity between the continents but as an epistemic object; or to again quote Becher, as a “fair field for discussion.”⁷

In other words: what the chart makes visible are not lines of movement appearing as figures on the *ground* formed by a homogeneous surface of the sea but operators that let the sea itself appear as *figure*.

A striking embodiment of the reverse figure [*Kippfigur*] that inverts the relation of figure and ground can be found in a drift object that appears frequently in the debate about bottle messages: in 1892, the Canadian schooner *Fred B. Taylor* was rammed by the German express steamer *Trave* about 150 miles off the American coast and neatly cut into two pieces. Bow and stern both stayed on the surface for several weeks and drifted for nearly a thousand miles – but, to the puzzlement of the oceanographers, in opposite directions (as shown in the insert map on another one of Schott’s charts, see Fig. 4). There have been several attempts to explain this fact (one half was more exposed to the wind, the other more to the currents ...), but apart from such explanations there remains something more fundamental. Like the bottles in Becher’s chart, the two parts not only drifted into different directions, but into a different dimensionality. The collision with the express steamer, which continued undeterred on its course and arrived in New York twenty-four hours after the accident, transfers the schooner from the transit space of worldwide travel into a different space, a space defined no longer by the one, single line for traversing it but by the totality of all potential lines. The two opposite drifts are only two contingent actualizations of this potentiality.

Hence the drifting objects function as a medium enabling and compelling the sea to record and chart itself. In order to do so, however, bottle messages have to fulfill two preconditions. Their movements have to be relieved of human control (as happened with the two parts of the *Fred B. Taylor*). And they have to be relieved of the loquaciousness of humans who entrust not only the data desired by scientist to the bottles but also the individual stories they want to share with the world. To reduce such gossip, oceanographers invent forms that restrict the space for personal remarks to a minimum (see Fig. 5). Furthermore, they address their finders in different languages, thus distancing sender, relay, and receiver from their individual language and defining the sea as a space not so much of multilingualism (as was the case for so many ships in the nineteenth century), but beyond any individual language at all. As tools of scientific research, the standardized forms are operators of a reduction.

7 Becher, “Bottle Papers,” 181. In other words, the bottle experiments resemble what has been called an “open object” (see Lorenz Engell and Bernhard Siegert, “Editorial,” *Zeitschrift für Medien- und Kulturforschung* 2, 1 [2011]: *Offene Objekte*, 5–9) or an “epistemic thing” (see Hansjörg Rheinberger, *Experimentalsysteme und epistemische Dinge* [Göttingen: Wallstein, 2001]).

Fig. 4: Gerhard Schott, *Die Flaschenposten der Deutschen Seewarte* (Hamburg, 1897), plate 2 (extract): “Trift der zwei Wrackhälften des Fred. B. Taylor, 1892” (Drift of the Two Halves of the Wreck of the Fred. B. Taylor, 1892).

Copy 6/2394

Please send a copy of this to the Deutsche Seewarte, Hamburg.

DEUTSCHE SEEWARTE
DIVISION OF MARINE METEOROLOGY.

Ocean Current Report.
Rapport sur les Courants Océaniques.
Strömungsbericht des Ozeans.
Rapporto sopra le Correnti della Mare.
Relatorio sobre Corrientes Oceanicas.
Relacion de las Corrientes del Océano.

Thrown overboard by (give name, vessel, date, position).
Jeté à la mer par (indiquez le nom, vaisseau, date, et position).
Ueber Bord geworfen von (gleich Namen, Schiff, Datum, und Lage).
Gettato al mare del (descrivete il nome, nave, data, e situazione).
Lanzado do mar por (dar o nome, navio, data, e posição).
Echado en la mar de (dar el nombre, navio, fecha, posición).

Found by (give name, date, locality).
Trouvé par (indiquez le nom, date, localitè).
Gefunden von (gleich den Namen, Datum, Lage).
Trovato per (dare il nome, data, località).
Acheado por (dar o nome, data, paragem).
Encontrado por (dar el nombre, fecha, localidad).

Per. "Dora Evelyn" Capt. P. Tooren
1893, Feb. 24th noon. 1°44' N. 27°16' W. 1/2 E.

Inspector S. Caulker
18 Sept 1893 Laramie, Sierra Leone W.C.A.

Please send this to any United States Consul or forward it direct to Washington.
Ayez la bonté d'envoyer le présent à tout Consul des Etats Unis, ou de l'expédier directement à Washington.
Man wird ersucht dies an einen Consul der Vereinigten Staaten, oder direct nach Washington zu senden.
Abbia la bontà d'inviare questo ad un Consolo qualunque degli Stati Uniti, o mandarlo diretto a Washington.
Tenha a bondade de enviar isto a que dos Consules dos Estados Unidos da America, ou endereçar directamente a Washington.
Sirase enviar esto a algun Consul de los Estados Unidos, o adelantarlo directamente a Washington.

11-42 11-42
7-2-42 3954

Fig. 5: Standardized form for messages in bottles used by the Hydrographic Office of the US Navy, 1893.

The illustration (Fig. 6) shows a form used by the German naval observatory (*Deutsche Seewarte*) in Hamburg, whose first director, Georg von Neumayer, was one of the most prominent researchers using bottle messages. The collection he initiated in 1867 was continued by his successors until the 1930s and contains more than one thousand messages, embedded in voluminous albums that reserve the left side of each double page for numerical data (which can be ultimately translated into the coordinates of a chart), while the original forms and all the other writings that accompanied them on their journey back to the observatory cover the right side, often in several layers.

In the example shown in Fig. 6a/b, Neumayer's assistant Gerhard Schott noted on the left-hand page that the form has been "delivered by the harbor master of Fort de France (Martinique)" ("eingeliefert von dem Hafenmeister in Fort de France"), to then extract only the data relevant for his research, namely direction and speed: "Drift in 264 days WSW/2W 2628 nautical miles, average of 10.0 nautical miles per day" ("Trift in 264 Tagen WSW/2 W 2628 Sm, durchschnittlich täglich 10,0 Sm"). The left-hand pages of the notebook thus increase the process of reduction already at work in the forms themselves. Opposite those pages, however, everything remains visible that is hidden in the process of reduction, and that will finally become invisible in the grid of a chart. The harbor master, for example, did much more than fill in the form according to the order and send it to Hamburg. He (mis)used the empty spaces for extensive remarks on the circumstances under which the bottle was found and how it made its way to him; he translated the English and German versions of its text into French (for whatever reason); he pointed out that the same year two other bottles had already been found in Martinique. And he himself drew up a very neatly laid-out map illustrating the "parcours" of the three bottles.

The abundance of the material kept in Neumayer's and other collections does not contradict the logic of reduction at work in the standardized forms. Even though they are manipulated and supplemented in multiple ways, they function as operators of a reduction transforming not only voyages into data but also voyagers – professional mariners as well as tourists – and coastal dwellers into disciplined collectors of such data. In practices of collecting and interpreting – and consequently in the final form of a map – amateur researchers such as the harbor master become participants in a collective scientific project, transforming the sea into an observable and measurable space. But this happens in the multiple operations performed by skippers, passengers, beachcombers, fishers, promenaders, harbor officials, and everyone else, who all have not only forwarded bottle messages but left their traces in the documents and thus created a maritime culture, as assembled in Neumayer's collection.

Figs. 6a/6b: Pages from Georg Neumayer's collection of messages in bottles.

Leaving an empty document before setting off to his expedition to the “tropics,” Brecht’s lost traveler may or may not take part in a similar scientific project. At the very least, he extrapolates a tendency vital for the scientific *persona* in the nineteenth century as it is illustrated by the research on and through bottle messages, and by its forms that continually reduce the possibility of individual expression, namely the self-erasure of the scientist as an individual subject. In order to produce objective knowledge, researchers must withdraw themselves from the field of study.⁸

Brecht’s “Flaschenpost” translates this reduction into a space of *bio-graphy* and thus, in fewer than two book pages, revises the biographical model of the life path as it was cultivated by the *Bildungsroman*, probably the most successful genre in nineteenth-century German literature. In the voluminous novels of this genre, education is conceptualized as a journey through time and space, in which the protagonist’s often intricate paths finally become legible as one single teleological progression. At the end of the century, when the Wilhelmine empire longed for colonial power, this model was adopted particularly by colonial novels and directed to the “tropics,” now a prime subject for increasing imperial desire. Following this plotline, Brecht’s male protagonist would set off on a journey supposedly forming a powerful subject. And he would enter a world where seafarers on strange coasts might easily turn out to be potential colonial aggressors. Here, in this political and literary context, is where the evil resides that threatens the silence after the catastrophe, and which only the illegible message might be able to exorcize.

But the blank paper does something more fundamental than avoiding a specific context. At least as it is read by the female protagonist, it counteracts the linearity of the paths of education and of life with a plane in which the consecutive logic of promise and fulfillment, engagement and marriage, decision and consequence, dissolves. Furthermore, this plane becomes visible as a constitutive precondition – albeit in contradiction to the linearity of narration – of every *graphy*.

Like the line, this plane is not simply there; it has to be constructed. *Tropes* and poetic figures such as the anagram are the operators that obstruct the singularity of one direction (for example, in the process of reading) and one meaning. Traveling to the “tropics,” Brecht’s protagonist enters a risky territory.⁹ In the German imagination of the 1920s, the tropics are not only the aim of colonial desire. They are, like the sea, a space where an abundance of life erases any

⁸ See Lorraine Daston and Peter Galison, *Objectivity* (Cambridge, MA: MIT Press, 2007).

⁹ To borrow a phrase from Valérie November, Eduardo Camacho-Hübner, and Bruno Latour, “Entering a Risky Territory: Space in the Age of Digital Navigation,” *Environment and Planning: Society and Space* 28 (2010): 581–599.

individual trace (any trace of an individual subject, that is). In literary studies, tropes are the operators of a fundamental ambivalence. Confusing and manipulating the various – material and symbolic – aspects of the process of signifying, they direct attention to this process itself as a chain of practices: collecting, arranging, selecting, assembling, directing ... All these practices are intrinsically related to specific materials (paper, for example) and operators (those vectors, for example, that negotiate between one- and two-dimensionality). This is exactly what biography does. Tracing a (single) line through the jungle of life, it is first of all a *graphy*, an act of writing that transforms the plane (of the paper, of a multitude of connections and relations) into a vector between cause and effect.¹⁰ The idea that this transformation from one dimension to another is not irreversible is the final insight (or hope) of Brecht's female protagonist:

Wie Sie wissen, gibt es sympathetische Tinten, die eine ganz bestimmte Zeit lang lesbar sind, dann verschwinden. Zweifellos sollte dasjenige, was aufzuschreiben sich lohnt, mit solcher Tinte geschrieben werden.¹¹

As you know, there are sympathetic inks, which remain legible for a certain time and then vanish. Without doubt, anything worth being written down should be written with such ink.

While the strange letters of the bottle message, “fresh as on the first day” but illegible, do not betray the writer's identity and thus, probably, liberate them from an evil history in which their own biographies are embedded, the blank paper fosters an awareness of the contingency of every text. Without value is writing that hides this contingency under an authoritative gesture suppressing all other possible writing. Only that writing has value, in other words, which implies the self-erasure of its author.

Such a reading does not solve the paradox – the riddle – of the empty sheet of paper, which – another paradox – only appears on a paper neatly covered with (Brecht's) writing. In order to appear in its flatness as a precondition of writing, the plane has to be cleansed of writing. That is the operation that Brecht's female protagonist performs in a line of thought experiments leading her to the “sympathetic ink,” and thus to a conceptualization of writing that includes concepts of subjectivity, temporality, and of consecutive logic as the effects of specific scriptural operations. Stitching together writing and linearity, Brecht's “Flaschenpost” examines cultural techniques of connectivity. It exhibits not only the materiality of writing (that is, the arrangement of signs on a plane rather than on a

¹⁰ For the fundamental cultural significance of linearity see Timothy Ingold, *Lines: A Short History* (London: Routledge, 2007).

¹¹ Brecht, “Flaschenpost,” 168.

line) but the principal of linearity in a broader sense: in logic, in biography, in history ...

It may or may not be coincidence that Brecht designs his attack on the subjectivity of the *Bildungsroman* around a message in a bottle and thus an instrument scientifically used for – structurally – similar purposes. What is crucial is that he indeed has found an ally for combatting supposedly anthropologic universals with culturally and historically contingent cultural techniques – with quite specific practices that transform linearity and flatness into each other and process the difference between singularity and universality.

Following literature itself, the field of literary studies – at least insofar as it understands itself to be posthermeneutic – has developed a specific sensibility for the processuality, the proceedings [*Verfahren*] and the constitutive preconditions of writing. It is in this specific attentiveness to the material foundations of the symbolic that literary studies merges with research into cultural techniques. Both can profit from each other. Research into cultural techniques can profit inasmuch as it more fully considers those specific operations that take place in a vague space of potentiality – which in Brecht's "Flaschenpost" is the space of the thought experiment. And literary studies can learn to analyze poetic proceedings not only in relation to the self-referentiality of literary texts but also by developing a deeper interest in their epistemic effects. In this way, it may become possible to speak of a poetics of knowledge in a nonmetaphorical sense. Neumayer's atlas of bottle messages might thus become a *Bildungsroman* – in which, however, what is formed is not an individual person but a scientific collective.