

DATA browser 06
EXECUTING PRACTICES

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Established in 2004, the DATA browser book series explores new thinking and practice at the intersection of contemporary art, digital culture and politics.

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DATA browser 06
EXECUTING PRACTICES

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Snodgrass and Magda Tyżlik-Carver

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Shrimping under Working Conditions

Francisco Gallardo & Audrey Samson

We propose that mutated forms of death are emerging with neoliberalism's biopolitical financialisation of life. Thinking of such forms as commercial extinction and social death, how do we begin to frame these outside of a quantified rhetoric of surplus? These questions aim to provoke a discussion about these terms that can be interpreted as modes of exhaustion, while maintaining particular biological, social or economic conditions of life. When we are confronted with capitalism's failure to fulfil resource exhaustion, a model of conservation by *dispossession*¹ might emerge within what Rosi Braidotti calls "new and subtler degrees of death and extinction" (2013, 115). In this text we want to think with other conditions of death and extinction that can help to move beyond the missing item of an inventory, a carved rock along a fossil road or a set of pre-emptive actions to be executed beyond a certain threshold. Thus, we ask if there could be figures, which rather than narrating death as a biological or geological concept, open it up to other equally violent forces that are nevertheless materially situated. More importantly, will we ever be able to think of extinction beyond ideas of absence or frame death from social or economic realms as an emerging mode of living? In order to address many of these questions we dissect a critical example of extinction, that of the brown shrimp (*Crangon crangon*) as it flips between commercial (albeit not yet biotic) death in the ex-fishing grounds of the South East corner of the UK, and the social death embedded in the labour-power of the ex-processing factories of the Special Economic Zones of Tangier and Tetuan in Morocco.

***Crangon crangon*: the Undine of neoliberal numbers**

Let us start by saying that certain forms of devastation can be interpreted as a condition of being worn out towards the maintenance of life.² We understand devastation following Gilbert Simondon's formulation of the term "deadening". For Simondon, there are different modes of death, one of which is productive and integrated in the process of life (Barthélémy 2015, 48–49). In other words, in opposition to adverse death, there is a death that has a constitutive role in life itself. In this light, we want to differentiate our argument from others, such as those sustained by Elizabeth Povinelli (2016), for whom death is opposed to the notion of population—a group formed by individuals of the same species sharing the same geographical location.³

In this section, we discuss the ways in which—under neoliberal conditions—there are modes of death that do not oppose this concept of population. It is rather the deadening of a certain population that grants its survival. However, while Simondon's deadening considers the individual and its processes of individuation, our comments are focused around devastation as connective tissue between deadening and population.

By devastation we refer specifically to the survival strategy of a certain marine organism, the brown shrimp. Contrary to the survival strategies of most organisms, the brown shrimp sits ambiguously between wasteful redundancy and catastrophe. Populations school in the soft bottom of shallow coastal waters and are subjected to the strong tidal forces of the North Sea. Female shrimp reach maturity at ten months, after which they spawn millions of offspring twice a year. Densities of sixty individuals per square metre of seabed are common to find. *C. crangon* is a predator to young fish and crustaceans, by which it is later preyed upon. However, maritime predators such as whiting or sole, given their low tolerance to satiety, quickly assimilate large numbers of immature offspring (Campos 2012). Such mechanisms of quick turnaround and fast maturity sit at the core of sociobiology, linking what some experts term the “dilution effect” (Howard 1971) and “predator-saturation” (Molles 1999). In summary, the presence of any individual is diluted by the large cloud of a population, hence its risk to be predated is diminished. In other words, the brown shrimp finds safety in sheer numbers by feeding its predators with its neighbours. Rioting fecundity in addition to group living are forced mechanisms in order to cope with predatory pressure. For shrimp, the optimism transpiring from the force of maintaining population rests upon modes of quick death and wasteful life.

Such forces of devastation and optimism were at play in nineteenth-century efforts to reduce evolution by natural selection to a set of arithmetical questions (Magnello 1993). At that time, Charles Darwin's ideas posed a strong emphasis on deviation, a concept that was often unwanted and ignored, escaping mathematisation altogether until then. At the theoretical level, Darwin maintained that variation (deviation from the norm) was meaningful and hence should be accounted for, as variation allowed tracing species back to the tree of life. However, as Eileen Magnello (2011) reminds us, Darwin's biological variation required two key changes within the discipline of statistics. First, to regard variation as a resource, not as a source of error,⁴ and second, the notion of biological species needed to be defined not as average individuals but in terms of population. That is, a group that shares a geographical location and is formed of varying individuals. However, even though Darwin

introduced various types of mathematical tools that could be used to that effect, statistical methods remained at the level of sophistication of the rule of three (Magnello 2011, 34). As eugenicist and mathematician Karl Pearson declared, “every idea of Darwin, from variation, natural selection, inheritance to reversion, seemed to demand statistical analyses” (1901, 3).

Two thousand nine hundred and eighty brown shrimp from Sheerness and Plymouth were carefully counted, painfully peeled, measured and dissected by biologist Raphael Weldon during his stays at the Laboratory of Marine Biological Association at Plymouth (Pearson, 2011). *C. crangon* accumulates small changes rapidly through generations that are visible to the unaided eye. For each shrimp, Weldon took four measurements, concentrating on the main body parts (carapace, tergum and telson) (Weldon 1892). In order to deal with such an immense wealth of data, mathematician Pearson, a collaborator and close friend of Weldon, developed a standardised system of frequency distributions. Deviation, accumulated visibly through the rapid and wasteful life cycle of the shrimp thus provided the means necessary to develop mathematically-based statistics. Techniques such as correlation, regression and goodness-of-fit,⁵ all having deviation as a core, permitted systems of comparison and generalisation that were previously impossible. Evolution was no longer a matter of “causalisation”, that is, cause and effect, but of correlation. Nature was not a matter of collective things that hold through aggregates of individuals. In Alain Desrosière’s words, nature became a “thing that holds” (2010, 30).

The offspring of extinction

According to historical records, the lucrative business of brown shrimp first came into effect after the exhaustion of more valuable fisheries in the Thames Estuary such as oyster or cod (Lewis 1831). By the 1850s, the Leigh shrimp-net had become the main predator of the brown shrimp. During the age of sail, vessels were timed by the clock of the tide. The sandy shoals from the north bank of the Thames Estuary to the Nore were trawled by “bawleys”⁶ or cutter-rigged smacks,⁷ powered by westerly winds, and later by steam trawlers. Using from two to four beam-trawls at a time, they were kept down up to an hour or more at a time, depending on the extent of ground and sailing conditions (Holdsworth 1877). At the sail-age, this trade employed nearly one hundred boats with a crew of two, mostly during the summer months when wind and weather conditions are usually more favourable.

Today, after years of heavy trawling, shrimp fishing has become a rare activity in the Thames Estuary. The dwindling density of shrimp grounds is to blame, in conjunction with sharp rises in fuel prices.

It could be said that together these have pushed the brown shrimp out from the Thames Estuary. As business jargon would have it, brown shrimp is, for most intents and purposes, *commercially extinct*. This is not a matter of concern for conservation, as other fishing grounds fill the guts of the national and continental seafood market, such as those of the Wash, Morecambe Bay and the Solway Firth. Commercial extinction is a concept rather than a fact. Every individual that is plucked from the seabed is virtually the last one, though this does not necessarily infer crisis. The commercial extinction of the brown shrimp is a force that helps to bring other fields such as statistics, economics or technology, among others, into more traditional accounts of extinction, which are restricted mostly to geology and biology. Commercial extinction still pertains almost exclusively to the concept of population measure. However, this mode of extinction can be better understood through the notion of environmentality (Agrawal 2005), which emphasises population within a space of financial power and the financialisation of life.

As the phrase implies, commercial extinction defines death from economic, social or cultural realms but not from the total (virtual) biotic inventory of marine life. It is acceptable loss, or better, a comfortable form of catastrophe.⁸ Drawing from Lauren Berlant, commercial extinction can be understood as a form a “slow death”, in the way in which it implies a “mass physical attenuation under global/national regimes of capitalist structural subordination and governmentality” (2007, 754). This mode of extinction shows, opposing Maurizio Lazzarato’s reading of extinction (2014), that the destructive nature of capital is relative, not absolute. While commercial extinction still reduces something like a fishing ground to a mere object of exploitation, it shows the very exhaustion of exhaustion. The commercial extinction of the brown shrimp collates what most addresses of extinction fail to do: to underline the failure of capitalism to consume, or to fulfil extinction. It infers that a slow mode of deadening is a possible mode of living. In short, the shrimp is still there, but it is not *sufficiently* there. After all, there are certain things that cannot be extinguished entirely within capitalism, such as unemployment.⁹

With neither biopolitics nor necropolitics fully capable of discerning between life, death and non-life, Povinelli (2016) puts forward her own three figures of extinction: the desert, the animist and the virus. The desert is a geographical entity denuded of life, though it can regain it. The animist collapses this division as nonsensical. Everything is alive. The virus gags at the notion of life; as for a virus it is the difference that makes no difference (Povinelli 2016, 14–18). These three figures interrogate extinction and help to think with them

through different discourses, questions and problems. In Povinelli's words, they do not reproduce the division between life and nonlife so relevant in the current modes of thought and practice that define late liberalism (2014).¹⁰

As compelling as Povinelli's figures are, they do not address the questions that commercial extinction might raise for us. By posing new figures within the realm of the brown shrimp's commercial extinction, we want to bring forward the notion of deadening within a neoliberal order as a mode of life and/or living. After all, a survey of species catalogued under the label of commercial extinction reveals that most of them are to be found in the ocean. This to us seems quite fitting, given that, as Christopher Connery notes, "[the ocean] is capital's favored myth element" (1994, 56).

Here we would like to propose the trawl, the price of liquid fuel and the railway as figures of commercial extinction. Petrol replaced altogether other traditional forms of power such as the cumbersome cotton sails and, later on, steam-coal. Formed by hydrocarbon chains of lesser complexity, hence of higher caloric content,¹¹ liquid fuel helped to detach horsepower from the power of a horse; a carrying capacity that affords greater dragging and heavier gear. However, as Timothy Mitchell (2011) argues, it was liquid fuel's physio-chemical properties that became constitutive of political agency. In other words, liquid fuel is easier to manipulate, distribute and store. Oilfields, pipelines, refineries and pumping stations are by effect, and by design, immune to organised labour, unlike the systems that had governed the extraction and distribution of coal (Mitchell 2011, 108). Turner Prize artist Jeremy Deller would find his petrol-equivalent *Battle of Orgreave* (2010) re-enacted with slight differences at every peak in oil-price in the form of mass-killings.

The best way to catch a cloud of brown shrimp is with another cloud. Throughout seven centuries, the trawl's evolution as a technical object has afforded thicker and more turbid clouds of detritus, deposits and by-catch. When alarmed, *C. crangon* buries itself in the sand with a fan-like tail movement. However, under vibratory stimulus such as a predator's presence — i.e. cod, or the approaching bottom contact of a pounding beam — it is known to trigger a startle escape response. The trawler's bottom contact has widened seven fold from the early beam-trawls of Barking,¹² which later developed into tickler chains, chain matrices, bobbin ropes and the otter trawl.¹³ Gear for white and pink shrimp in the distant bays of Florida can deploy otter trawls with each door weighing almost a tonne and a net spanning thirty metres. As the pounding of a beam or chain approaches, the shrimp spring upwards, clearing the bottom bar and jumping straight into the net.

The combustion engine reminds us that supply and demand were not always related. Railways dithered to appreciate the radical potential their system could have on the marketisation of highly perishable commodity. Railway industries originally focused on high-tariff fish traffic such as large cod, sole and turbot (Robinson 1986). Shipments integrating multiple companies were awkward at first. Too far from waterways and shorelines, it wasn't uncommon to see supply glutting markets at the same time as severe shortages, caused primarily by poor harvests. Cobles¹⁴ would be laid up and tons of protein-rich white fish dung were sown over vast fields. However, as some historians have noticed, increases in the trawled-fish trade were related to the construction of railways (Blackman 1992). Robb Robinson (1986, 32) brings to attention the correlation between the opening of the North Sea to trawling in the nineteenth century with the explosive construction of railway infrastructure, dubbed as the two railways mania.¹⁵ The expansion of the railway was needed for the overabundance of fresh fish that trawling could deliver in order to grow, while at the same time the trawling industry needed a mode of connection between ports and markets.

At the dawn of the twentieth century, traditional Greek boat-building knowledge couples the figures of extinction into what is today the modern trawler (Edenfield 2014)—a.k.a. the world's most disruptive, as well as the most economically productive, fishing technology.¹⁶ Austrian artist duo Ubermorgen have used the mediagenic capital of British Petroleum's (BP) Deep Horizon explosion and subsequent spill catastrophe as material.¹⁷ Pointing at abundant aerial images captured during this dramatic episode, they claimed the return of oil as "the supreme discipline of art" (Ubermorgen 2010). For the artists, this comeback had forced oil painting to evolve into a kind of sickly generative bio-art.¹⁸ Similarly to Ubermorgen, we would like to consider the scraping and digging of the roots of seabed life by trawlers to be the Earth's biggest work of printmaking. Trawl marks remain observable by side scan sonar two years after they were first ploughed. It is perhaps more cynical that these scars remain while shrimp schools are generally too hard to ensonify by echo-sound. A shrimp is too small a target and lacks an air bladder,¹⁹ unlike most fish. One step ahead of Andy Warhol's famous efforts to mechanise and automatise the work of art, the three figures of commercial extinction—the trawl, the price of liquid fuel and the railway—turn into art the work of mechanisation and automation. Freed from the clock of the tide, these figures have left trails and carvings, many of them visible to satellites and SONAR.²⁰

Peeling

The collagen-rich shell of the brown shrimp sits at one of the last frontiers of mechanisation. The shrimp's abdomen is largely filled with muscle and connective tissue. Comprising almost half of the total shrimp's weight, it accounts for a powerful muscle used only in predator avoidance. While protein bonds in the epidermis²¹ are known, the route resulting in the breaking of such bonds is not well understood yet (Crawford 1980). Currently, the processing of shrimp covers a multi-step process, including the ageing step before peeling, which takes up to six days and occurs partially during transportation to the peeling factory. Ageing loosens meat from the shell as a result of the breaking of protein bonds in the membrane before peeling by hand. So far, and despite repeated engineering efforts, peeling has escaped mechanisation all together. Unlike other kinds of shrimps, the brown shrimp still requires the dexterous thin fingers of unskilled, typically female workers (Perez 2010; RNW 2010). To a certain extent, the brown shrimp claims that there are still some limits to the ability of mechanisation to take command (Giedion 1970).

The processing of brown shrimp sailed away from Europe in the early 1990s. In the mid 1980s, The Netherlands banned shrimp hand peeling altogether when a dysentery outbreak killed fourteen homeworkers (Kayser and Mosel 1984).²² As a result, shrimp processing was offshored from Dutch unregulated work-homes to the uncontrolled outskirts of Europe. They moved first to Bulgaria and Poland. However, after the constitution of the Economic European Area limits, companies needed to scout still further for cheap labour, creating offshore and nearshore²³ hubs. The Free Trade Zones of Tangier and Tetuan in the early 2000s became the new bastion for the *neoliberalisation* of many economic activities servicing the single market, shellfish manufacturing being one among many.

As claimed by Aihwa Ong (2006) and Michel Feher (2014), neoliberalism promises the extinction of manual labour by the ghostly workings of its invisible hands. The recipe is apparently simple. It first requires the implementation of temporal "sacrifice zones of exception" in clogged economies, or as the authors reframe them: UNDER economies—economies rated as Underperforming, Non-Developed, Expropriate-able or Ruined (Toban et al 2014). Industrial capitalism was originally imported into these regions by promising the transfer of technical and capital knowledge in exchange for the capitulation of labour protection, duty impositions and environmental regulations, among others. The current promise for these zones is that the industrial economy will be absolved by a financial substitute: advanced capitalism. The former international

zone of Tangiers is now emerging as a host to offshore banking activities resembling those of Gibraltar, Hong Kong, Bahrain, Luxembourg or the Cayman Islands.

In the field of photography, Allan Sekula (2014) reflected upon the threat of the automatising of the image as opposed to the iconic significance of the organ of drawing. He highlighted Roland Barthes' (1980) protesting of the ubiquitous presence of the human hand in Diderot and d'Alembert's *Encyclopédie*, published in France between 1751 and 1772. In many plates, hands without bodies accompanied the encyclopaedic objects, almost as another component, in each complex mechanism or artisanal work. From Sekula's remarks, it is not difficult to see how these plates were, perhaps unintentionally, turning every citizen—or better every hand—into a kind of expendable technological organ. Transferring this reflection to a more contemporary economic order, hands could be said to be the “sacrifice zones” marketed for the promises of a new economic order. The exploitation of forms of *inhuman* energy can be understood as another way to understand “slow (social) death”. As an aside, it might be useful to recall the role that the hand has played in processes of criminalisation and/or socialisation. Jailed prostitutes were put in forced workhouses to pick oakum in nineteenth century England (Mayhew and Binny 2011, x). Homosexuals were sent without trial to stitch soccer balls in Spain under Francisco Franco's dictatorship (Ugarte 2005). The hysterical woman was medicated by the masturbating hand of the psychotherapist, or what Foucault referred to as the “laying on of hands” (Micale 2008). Against the optimistic rhetoric of progress, repetitive, menial and injuring tasks have been a weapon throughout history for the re-socialisation of outcasts, sexual deviants and prostitutes.²⁴ These moving limbs are part of the execution of neoliberal systems' fetishising traditional labour power in order to lead to a new order from the industrial capitalism of the labouring hands in which money would be created out of money (Mulvey 1993).

Conclusion: Death as a mode of living

Do not despair. The destructive nature of capitalism under neoliberalism is not absolute, but relative. “[N]ew and subtler degrees of extinction” are mobilised by new practices of “life” (Braidotti 2007, 2). Throughout this chapter we have introduced several instances of *operative* modes of death. We are particularly drawn by those that consider the exhaustion of exhaustion, such as in the concept of commercial extinction. In this light, commercial extinction is an example of exception to the concept of extinction. The life-cycle of the commercially extinct brown shrimp, *C. crangon*, is based on

quick turn-around and group living as a way to reduce predatory risk. In fact, such a life-cycle was key to the mathematisation of Darwin's ideas of evolution by natural selection. It helped to kickstart a revolution in statistics that rely on the appreciation and translation of variation to a set of arithmetic questions. Together with our protagonist, *C. crangon*, we re-staged commercial extinction in such a way so as to open it up to a wider process of movements by our proposed three figures of extinction. These key players in the emerging modes of neoliberal death bring forth the notion that economic life can also be a threatening force in a discourse usually focused on biology and geology.

The collagen-rich shell of the brown shrimp is an exception to the long assumed command of mechanisation (Giedion 1970). The peeling of brown shrimp still demands the dexterous hands of unskilled labour power in the Special Economic Zones of Tangier-Med, in Morocco. For us, the execution of neoliberal forces relies on both industrial capitalism and its financial counterpart, represented in this chapter by the invisible and the labouring hand. What are these hands without bodies *executing*? Conservation and dispossession become associated tropes by which movement of capital and accumulation are measured and defined. With forms of deadening emerging through neoliberalism, death as a mode of living invites us to consider the maintenance of economic life through social death and commercial extinction as operative. In short, comfortable forms of catastrophe.

Notes

1. Ten year ago, Marxist geographer David Harvey introduced the motto “accumulation by dispossession” in various texts (2003, 2004). With it, Harvey described that under neoliberalism, capitalism best operates not by developing modes of creating wealth, but by divesting it from its source. More current work on this direction highlights the role of sustainable models (the economics of ecosystems, biodiversity, the Green Economy, etc.) as a more stable mode of accumulation — accumulation by securitization, or accumulation by conservation (Büscher and Flecher 2015; Massé and Lunstrum 2009). With conservation by dispossession we want to place the emphasis on the contradiction not of extorting nature to pay for itself. We are trying to address modes of conservation outside of conservation, or conservation not as an end but as a by-product.

2. As Gerry Melino (2002) points out, part of the explanation for the slow understanding of apoptosis processes lays in its mode of execution. Apoptosis is a process of controlled cellular death which occurs twenty times as fast as cell division or differentiation, well below of the limit of detection. Unlike its counterpart necrosis, unprogrammed or premature death, apoptosis leaves no residues.

3. In discussing the concept of extinction, Elizabeth Povinelli (2014) explains that the opposite of species is not death, but non-life. The opposite of population is not non-life, but death.

4. As Alain Desrosières (1998, 103–105) explains, vital statistics such as those in Robert Malthus, Adolphe Quetelet or Émile Durkheim emphasised means and averages, thus treating deviation from the mean as a source of error.

5. Goodness of fit test, also known as chi-square test, is used to determine sample data consistency in the face of a hypothesised distribution. See <http://stattrek.com/chi-square-test/goodness-of-fit.aspx?Tutorial=AP> for details.

6. According to E.W.White (2013), the development of this type of boat is uncertain. It is originally from the North side of the Thames Estuary and usually referred as the Thames shrimper. Its developments are associated with the Thames “Peter-boat”. Early bawleys were clincher-built and contained a wet-well to keep the cargo alive. A later development type of bawley was carvel-built, which reduced hull friction against the water. The well was later supplanted by a copper cauldron, hereby preparing the catch for the market. The name bawley is speculated as being a corruption of the English for boiler, in reference to the on-board boiling apparatus.

7. A rig refers to the arrangement of types of sails, lines and mast(s) in order to harness wind power. A cutter-rigged watercraft is characterised for its speed and sail manoeuvrability. This rig allows turning windward in an easier fashion than any other kind of rigging. It is especially suitable for navigation on creeks, under shallow waters and against strong tides. On the other hand, they are poorly suited for fishing purposes (White 2013, 16).

8. Derrida worked in his last years on the subject of thought extinction as consequence of impending nuclear catastrophe. (Derrida et al. 1984). Paradoxically, the threat of human extinction allowed a period of “military peace”. Conservationists have examined some of the odd ecological benefits of the Cold War, such as a reduced number of species invasion resulting from the interruption of trade between Eastern and Western Europe (Chiron et al. 2010). Another effect of the Cold War threat was, as Jacob Darwin Hamblin describes it (2013), the spawning of the environmental movement, as much of modern environmental thinking originated with the scientists and military strategists during the dark days of the cold war.

9. Unemployment was a monetary policy first proposed by economist Milton Friedman under the concept of natural rate of unemployment. It was

successively expanded into what today is known as non-accelerating inflation rate of unemployment, or NAIRU for short. The main underlying concept is that a certain level of unemployment is necessary to keep inflation low. See William Mitchell and Joan Muysken (2008).

10. Povinelli (2011) usually interchanges the concept of neoliberalism for late liberalism as a mode to highlight the continuity of the process, not the rupture naming. This argument is further developed in Povinelli, Coleman and Yusoff (2014).

11. The higher chemical complexity, the lower energy content (measured in unit of energy per unit of mass, i.e. Mj/Kg or j/g). Beyond fuel, drugs work similarly followed low chemical complexity higher effect.

12. The beam-trawl has its ancestor in England as “wondyrchoun”, as recorded by a Petition elevated by fisherman from Barking to the Parliament in 1376–77. The name is believed to be a deprecation of the Dutch words “wonder” and “shoe” or “sock”, which leaves us with the speculation of whether the genealogy of this technical object dates back to footwear customs.

13. In an otter trawl, two doors or otter boards function as underwater kites by generating and maintaining the spread of the net. For further details see Davis (1958).

14. The term coble refers to a type of open fishing boat, originally from the North East coast of England. The use of the term is currently extended to most fishing vessels. As in many working boats, the particular conditions in this area, such as prevailing winds, the hardness of the sea-floor, wave strength, tide, etc., are embedded in the adopted shape.

15. In order to give an indication of the magnitude for such a bubble, from 1840 to 1846 (the effective end for this event) the proposed routes totalled 9,500 miles of new railways. This mileage contrasts with the current UK railway network of around 11,000 miles (Wolmar 2009). Surprisingly enough,

communication infrastructure bubbles or manias such as this one have occurred approximately every other century. First with the Canal Mania in the early eighteenth century, the Railway Mania of nineteenth century and the Telecom and Internet “dot-com” bubbles of the late twentieth century. Interestingly, the telecom boom was prompted after companies became aware that railway rights-of-way could be reused to install and service an extensive length of telecommunication network, affording low costs for fibre optic conduits.

16. The most economically important single species in the world by weight is the shrimp species *Acetes japonicus*, which is used in the production of the akiame paste shrimp in many countries around the Southeast Sea of China; see Rudloe & Rudloe (2009). The industry of trawling also produces the higher by-catch ratio (by-catch:shrimp), ranging from 2:1 in colder waters to 15:1 in tropical seas.

17. See Goriunova & Fuller (2017) on “Devastation”.

18. The amount of novel forms of life benefiting by the oil spill has been documented now to a great extent by, for instance, Dombrowski et al. (2016). Key to the findings are a higher than expected biodiversity of polycyclic aromatic hydrocarbon-degrading bacteria, chief among them being *Alcanivorax borkumensis*.

19. The air bladder in Osteichthyes or bonefish is an organ filled with gas for buoyancy control as well as producing and receiving sound, due to its resonating characteristics. It is usually located at the dorsal position, the mass centre is below the volume centre, hence acting as a stabilising system. J. Z. Young, in the Department of Anatomy of University College London, among others, points to swim bladders as the material of earliest contraceptive sheaths or condoms, even before sheep's caeca. See Huxely (1957).

20. See Palanques et al. (2001). The biggest trawling gear, spanning 30 m wide, can be, technically speaking, perceived from orbital

space. 30 m x 30 m is approximately the standard resolution of today's satellite systems, such as the Landsat program used for meteorological purposes.

21. In anatomic studies of invertebrates such as in molluscs, crustaceans and echinoderms, epidermis usually refers to the membrane between the muscle or meat and the shell.

22. A small epidemic of dysentery caused by *Shigella flexneri* 2 occurred in the Netherland between December 25th, 1983 and January 7th, 1984. It caused death in 14 patients. See Kayser and Mosel (1984).

23. Nearshoring zones are not much dissimilar to offshore zones. Predominantly, they are dedicated to outsourced service industries, i.e. call centres, banking, insurance or software maintenance. They have become increasingly popular due to the consumer pressure of moving beyond full globalisation. The first two nearshores of Tanger MED were created in 2007, a model that is planned to double by 2020.

24. See Mayhew and Binny (2011). Picking oakum is the colloquial term used when referring to the manual labour of untwisting and loosing old cords or ropes. Oakum, after tarring was used in sealing cast iron plumbs and caulking timber joints in wooden vessels and later on planking iron and steel ships. Under Spanish dictatorial regime, from 1954 to 1976 Spanish homosexuals were prosecuted and sentenced without trial under the 'Ley de Vagos y Maleantes' [Vagrants and Crooks Act]. They were either sent to prisons on Badajoz or Huelva according to a sorting system between "actives" or "passives". See Ugarte (2005).

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DATA browser 06

EXECUTING PRACTICES

Edited by Helen Pritchard, Eric Snodgrass
& Magda Tyżlik-Carver

This collection brings together artists, curators, programmers, theorists and heavy internet browsers whose practices make critical intervention into the broad concept of execution. It draws attention to their political strategies, asking: who and what is involved with those practices, and for whom or what are these practices performed, and how? From the contestable politics of emoji modifier mechanisms and micro-temporalities of computational processes to genomic exploitation and the curating of digital content, the chapters account for gendered, racialised, spatial, violent, erotic, artistic and other embedded forms of execution. Together they highlight a range of ways in which execution emerges and how it participates within networked forms of liveliness.

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