The Inner Shock Doctrine: Life Strategies for Resisting the Second Tsunami

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Abstract

Through revisions to the law that define land as 'dangerous and not suitable to live in' due to disasters, the wealthy can legally deprive the poor of their land. In her 2007 book "Shock Doctrine", Canadian journalist Naomi Klein names this phenomenon visible in the neo-liberal world 'disaster capitalism', and warns against reconstruction grounded in neo-liberalism. In particular, she refers to the deprivation of land in the wake of natural disasters such as tsunamis as a 'second tsunami'.

Applying this concept to the Great East Japan Earthquake of 2011, interventions such as the establishment of disaster risk areas, fisheries industry revival special zones, and construction of enormous seawalls show typical examples of the 'shock doctrine' piggybacking on disasters.

However, from joint field work along the entire length of the Miyagi prefectural coastline that the author has been involved in, this paper finds that disaster recovery called the 'inner shock doctrine' is in practice. That is, rather than merely recovery from a disaster, efforts are being made in each locale under their distinctive circumstances to address the structural problems (such as of succession, fishing rights, over-intensive aquaculture, and tsunami vulnerability) in each community. Increasing wealth of productive means via emergencies is referred to as 'creative destruction', as it involves temporarily disrupting the normal daily order until that time. It is clear that the inner shock doctrine, as a consequence of this creative destruction, acts to prevent the emergence of neo-liberalism. This paper discusses regeneration in devastated communities and the possibilities therein.

Keywords: The inner shock doctrine, freedom and security of life, Sanctuary theory of the sea

1 The Shock Doctrine

Canadian journalist Naomi Klein perceives disaster response in the aftermath of shocks due to terrorism, wars, or natural disasters such as hurricanes or tsunamis as an unparalleled market opportunity, and gives the name 'disaster capitalism' (Klein, 2007: 6) to actions that intervene in the public sphere with legitimacy. The neo-liberal actors who promote this type of disaster capitalism do not treat

disasters or tragedies as temporary events, but instead stockpile free-market ideas for emergencies or large-scale disasters just as households store canned food or bottled water. By rapidly putting these concepts into action in the immediate aftermath of large-scale disasters, they increase the importance of these concepts so that what had been politically impossible becomes politically inevitable. Chicago School economist Milton Friedman predicted that if unexpected economic transformation was pursued quickly and on a large scope, the

public's reaction to change would become smoother. The rapid and thorough promotion of free-market economics in disaster emergency situations is called the 'shock doctrine', and disasters that enable the opening of free markets are considered an essential element in achieving a laissez-faire economic environment without using democratic means.

Taking tsunamis as an example, when a collective shock from such an enormous natural threat occurs, the establishment of buffer zones is prescribed from predetermined plans based on stated aims of recovery and risk prevention. This enables the legal surrender of fishermen's land to certain industries, which previously had been proceeding only with difficulty. Miyagi Prefectural Governor Murai Yoshihiro suddenly advocated fisheries industry revival special zones (suisangyō fukkō tokku) very soon after the occurrence of the Great East Japan Earthquake. This policy involved the equal allocation of fishing rights (which until that time had been prioritized to fisheries cooperative associations) to private enterprises as well, and far from helping fishermen who had suffered in the disaster, it generated a chorus of criticism as an illadvised policy that would hinder rapid recovery.

Such methods of revitalizing industries through allowing entry by corporations into special zones in exceptional cases was described by fishermen as 'taking advantage of chaos', and can be considered a typical example of the 'shock doctrine' of piggybacking on disasters. In that sense, for the governor, who had the opening of the fisheries industry to the private sector firmly uppermost in mind from the beginning, the Great Earthquake, which created a psychological *tabula rasa* for the fishermen and a *tabula rasa* for the fishing grounds, was an unparalleled opportunity to test his performative abilities and skills.

However, when considering individual examples of recovery policies in the wake of the Great East Japan Earthquake, none of these plans have come to fruition, and the implementation of the special zones has been delayed by over two years on a 'wait-and-see' basis. That is to say, even though re-

covery policies resembling the shock doctrine were praised in the mass media as brilliant examples of reform and liberalization in recovery economic policies, it can be said that far from moving into the implementation phase, these policies are being rejected by the related fisheries industry parties¹⁾. While it may be true that these developments are not unrelated to the shock doctrine, it can be pointed out that, in fact, even given the pressure of the shock doctrine, it is in practice not easy to implement recovery policies while ignoring the will of the community concerned. Put another way, it can be said that in this sense communities effectively function as 'bulwarks' against the shock doctrine. However, given such a large-scale disaster, what has occurred is not recovery to the previous state, but, with regard to the fundamental unaddressed structural problems faced by the likes of local communities and related fisheries industry parties, an attempt to conduct reform in a shape suited to the stature of those concerned via thorough democratic discussion involving all participants. As a result, this contributes to not allowing the liberalistic and external shock doctrine into their own communities.

This paper will briefly introduce the distinctive recovery initiatives in four examples of the Inner Shock Doctrine in the face of calamity, being the Momonoura and Kitakamichō, Jūsanhama districts in Ishinomaki City, Karakuwachō, Kesennuma City, and Tokura, Minamisanriku Town, all in Miyagi Prefecture, elucidating the reality of the Inner Shock Doctrine stemming from discussions of indigenous risk avoidance²⁾. They will further be positioned as 'creative destruction', and regeneration in devastated communities and its latent potential will be discussed in this paper from the two perspectives of the external shock from a natural disaster and internal structural reform in opposition to the 'second tsunami'.

2 Examples of Four Regenerating Communities

2.1 Why was Momonoura, Ishinomaki City the Only One to Agree to 'Fisheries Industry Revival Special Zones'?

While most fisheries cooperative associations were opposed to the fisheries industry revival special zones advocated by the Miyagi Prefectural Governor Murai Yoshihiro, only one community was in agreement - that of Momonoura, Ishinomaki City, located on the Oshika Peninsula. The concept of a fisheries industry revival special zone attempts to expand the allocation of 'fishing rights' (Article 18 of the Fisheries Act), which until that time had been allocated exclusively to fisheries cooperative associations, to also include private enterprises on the same standing. Fishing rights follow on from the custom of fishermen using the waters offshore from their community and these rights are enshrined in modern law in the shape of the Fisheries Act.

The aim of the implementation of the special zones is to promote the rapid recovery of the coastal areas that suffered vast damage in the disaster and the reconstruction of the Japanese fisheries industry (which had been in decline) through enabling the entry of corporations into fishing grounds and harnessing their financial resources. The endorsement of the entry of external corporations by the Momonoura district can at first glance seem an initiative in line with market principles, but it comes to appear in a completely different shape from within the community itself (Shoji, 2013).

Situated at the base of the Oshika Peninsula, the population of the Momonoura district had dwindled before the disaster to 65 households and 150 people due to the aging society and lack of successors. Even without the shock from the disaster, it can be said that its aquaculture industry was in danger of disappearing. This situation can of course be applied to many communities connected with coastal fishing industries, but even more than general cases, in the Momonoura district the only

farmers of aquaculture products remaining were in their 70s or older, creating a deep crisis situation in the community. The 2011 tsunami washed away 58 houses, leaving a mere three households and four people remaining.

Directly after suffering devastating damage from the tsunami, the residents began work to remove the rubble and clean up the shoreline that their forefathers had developed for them, but even at that stage initiatives to reopen the aquaculture industry appeared. However, the circumstances did not permit the recommencing of individual-based aquaculture industry. The 'fight hard aquaculture recovery support initiative' (Gambaru yōshoku fukkō shien jigvō) recovery plan was proposed by the national government; while it would have seen a grant paid for three years, it was abandoned as not addressing the issue of development of successors faced by the Momonoura district. As a result of six months' worth of discussions, the 'Momonoura Oyster Producers Limited Liability Company' (Momonoura kaki seisansha gōdō kaisha) was established at the end of August 2012 with the agreement of all those connected with the aquaculture industry, and applied for fisheries industry revival special zone status. It obtained fishing rights in September 2013 after a tabula rasa renewal. The farmers, most of whom are aged 65-79, agreed to the revival special zone advocated by the governor by being motivated not by the economic principle of 'earning', but based on the community principle of 'work' through not allowing the local aquaculture industry to disappear.

The philosopher Uchiyama Takashi differentiates between the concepts of earning and work as earning is 'the money necessary to make a living', whereas work is 'an activity that includes all human relationships and nature in the area concerned' (Uchiyama, 2001). To borrow the words of the local people, "it would not be acceptable if someone in the [Momonoura] district were to suffer a loss in order for someone else to benefit", and, as a community internal norm, this principle has been adhered to.

So why did the Momonoura district emphasize

not earning, but rather work on initiatives and responsibility towards community continuation? A conventional view of fisheries industry revival special zones is that they emphasize earning, and strongly emphasize their role as catalysts of recovery. Therefore, high-priority regions are selected to generate profit, with the expectation of later spreading that profit to lagging regions. As a result, a certain degree of economic disparity is acceptable.

However, the Momonoura district had a historic characteristic that meant that intra-district disparities were not desired. The speaking rights of farmers were not determined by the size of their earnings, but the district's unspoken rule was that everyone was to be treated equally. In the Momonoura district, the revival special zone system was not utilized so that only certain wealthy farmers could become wealthier, but as a result of pursuing an arrangement in which all farmers could obtain work. The farmers had originally been raising ovsters with a minimum of investment which did not require taking out loans, producing branded farmed ovsters. As a result, the district fisheries cooperative association itself had been operating in the black, and had never had a confused management strategy. This stance is another reason why work had been emphasized over earning.

The governor's intention was to reorganize small businesses based on the principle of economic rationalization, but in the Momonoura district, the special zone system was used towards a very different aim. That is, the residents of the Momonoura district aimed to develop arrangements which would allow continued work in the bay and ongoing involvement in the aquaculture industry which included the entire district.

This is because it gradually became apparent that, as recovery proceeded, it would not be simple for the farmers or any other residents to return to the village. The area inundated by the tsunami was designated as a disaster hazard area, and as building of houses in the designated area was not permitted, a plan to relocate to higher ground within the village was proposed. Directly after the

disaster, 24 households (half of the total) requested to relocate to higher ground, but this number ultimately fell dramatically to nine. Reconstruction of public facilities such as schools, hospitals, and public offices destroyed by the tsunami was a difficult matter, and only small plots of land were available for households to relocate to higher ground. Given the inconvenience of relocation, the majority of residents were forced to live in temporary accommodation etc. in the Ishinomaki City urban area without returning to the village.

Farmers who have given up relocating their small fishing village to higher ground and who have to live in the urban area are currently permitted to 'commute to farm' as a temporary measure. However, it is possible that, when their fishing rights are due for renewal in five years, the farmers may be deprived of their fishing rights as they are no longer living in their original area onshore from their fishing grounds. In the current situation, the Momonoura district would disappear, and continuation of the aquaculture industry would be impossible. However, even if their fishing rights were lost (despite the special zone system) they could be employed by the participating corporations and continue farming, making an ongoing relationship with the coastline possible. Agreeing to the special zone was a result of searching for such arrangements.

In the above way, the fisheries industry revival special zone has a greater meaning for the Momonoura district than simple recovery of the aquaculture industry. The farmers are aware that the zone has a critical role to play in the recovery of the area. The farmers are actively thinking of protecting their district through resuming their farming activities. It is clear that the area will not profit from the special zone system, but that the use of the special zone system in the area was a strategy for the farmers to usher in structural reform.

2.2 Building a Co-operative of 96 Members – Tokura, Minamisanriku Town

The district of Tokura is located on the southern side of the greater Shizugawa Bay in Minamisan-

riku Town, Miyagi Prefecture, and is comprised of nine individual bays. Its population directly before the disaster was 2,411 people in 680 households, but is currently 1,846 people in 574 households. It faces the inner bay, and in Tokura, which is some distance from the open sea, most of the 1,075 boats as of March before the disaster were destroyed or washed away, with a mere 55 remaining.

Looking out over the Shizugawa Bay, the close-ly-packed pontoons for farming aquaculture products were clearly visible. Before the disaster, the over-intensive aquaculture meant that there were so many pontoons that, upon emerging from the tunnel connecting the inland areas with the coast-line, it almost seemed as if the road continued out over the sea. As a result of much discussion, the Tokura district, in which many houses, aquaculture equipment, and farming boats were washed away in the disaster, decided to employ the national government's 'fight hard aquaculture recovery support initiative' subsidy scheme to promote building a co-operative.

A characteristic of this district is its distinctive co-operative format (Saito, 2013). That is, farmers who previously typically cooperated in groups of 4-5 people applied after the disaster to form one whole large cooperative of 96 people. The largest issue in building a co-operative is (due to the salary system and grouping) the motivation to work declining due to a certain amount of income being guaranteed even if each individual does not apply themselves to their work. The labor of farmers was standalone work as individuals, premised on production work aiming at high quality and principles of competition. Building a co-operative would not naturally be compatible with the attitude of farmers, who affirm the concept of labor directly leading to income. However, for farmers who had suffered a disaster unparalleled in scale and which completely obliterated the foundation of their aquaculture industry, building a co-operative was an essential and indispensable means to making a living 3).

What significance lies in building not a small group, but one encompassing close to 100 people?

From the point of view of market principles (which affirm competition), initiatives such as building a co-operative of a large number of people which lead to the motivation to work declining would seem to be the antithesis of competition.

Building a co-operative of 96 people was in fact an initiative consistent with maintaining quality and promoting competition. Aquaculture in the Tokura district historically focused on the farming of wakame seaweed, but as large quantities of farmed wakame came onto the market and the price fell, oyster cultivation was introduced. Wakame was farmed successfully without much separation between the locations of each farm, but ovster cultivation, which is conducted by the suspension method, requires large separation between each location. Despite this, as oyster cultivation was begun at the same separation as the farming of wakame, over-intensive aquaculture progressed. The farmers all understood that 'something must be done about this', but many voiced opinions of close to resignation that if only their group reduced the numbers of farming ropes, the overall number would not change.

This is to say nothing of the prioritization of demands to maintain household income by increasing the number of farming ropes by even a little to produce a certain volume of product (even at the lowest quality level) and achieve a minimum level of profit. On the other hand, activities that involved setting up farms in nutrient-rich currents outside the designated farming area to increase a farmer's personal catch, nicknamed 'black' farming, were common. That is, while over-intensive aquaculture could raise each farmer's income, oxygen deficiency in farming areas leading to lack of circulation of plankton (the oysters' food) and the obtaining of only poor-quality, unprofitable catches, was causing a so-called 'social dilemma', that was deepening directly before the disaster.

Even after the Tokura district was struck by the tsunamis in 1960 and 2010 caused by earthquakes in Chile, and moreover suffered other repeated natural disasters such as hurricanes and explosive low-pressure systems, the structural problems in-

cluding over-intensiveness were not addressed at all. The only visible response to each disaster was the repairing of individual aquaculture pontoons. This was an example of the tragedy of the commons (Garrett Hardin, 1968) in the common lands known as the sea. Precisely because the massive tsunami had washed away anything and everything, everyone concerned understood that this shock created an opportunity that could not be overlooked.

The farmers of the Tokura district had been raising several types of aquaculture products at the same time in order to spread the risks from natural disasters. However, in building a co-operative structure after the disaster, allocation of the subsidies would become complicated if co-operatives were divided by product type, so farmers raising wakame, oysters, and scallops combined to form one joint co-operative. By all of the farmers producing all three products participating in the 'fight hard aquaculture recovery support initiative', the co-operative membership ultimately numbered 96 people. A co-operative of 96 people formed an arrangement with the participation of almost all of the farmers remaining in Tokura after the disaster.

Forming such a co-operative was a convenient measure to allocate the subsidies, but it also led to promotion of structural reform to escape overintensive farming. One-third of the aquaculture equipment in use before the disaster was arranged appropriately to effectively utilize the fishing grounds, and also to aim to increase the quality of farming by increasing the separation between equipment. With an outward aim of restoring the catch to the same state as before the disaster, changing the demarcation of fishing rights to prioritize the maintenance of quality represents reform at a deep level. In this way, the reversion of individual usage rights over a delineated farming area to a blank slate involve creating the 'commons of the sea'. The farmers did not yield to a disaster unparalleled in scale; rather, they tried to use it as an opportunity to solve existing problems in one fell swoop and open new future possibilities.

2.3 Granting Rights of Living for the Inferior or Poor Members in Times of Disaster – Kitakamichō, Jūsanhama district, Ishinomaki City

Kitakamichō, Jūsanhama district, Ishinomaki City, Miyagi Prefecture suffered terribly from the massive tsunami. All of the houses were destroyed, and 90% of the boats were either washed away, sunk, or damaged. The local residents' sense of loss after the disaster was so deep that they had no hesitation in abandoning the land that had been passed on to them. Even despite this, they recommenced, in particular, the farming of the *wakame* which had become established as a specialty local brand (Kanebishi, 2011, 2013).

The Jūsanhama district is built around its core industries, principally the farming of wakame. Being a core industry means that business successors are developed, and that people are able to make a living there. Before the disaster, reliable cash income had been secured, with the overall fisheries cooperative association achieving annual turnover of 300 million yen through joint sales, and over 100 million ven through independent sales channels. These were the highest levels of farmed wakame turnover in the prefecture. In the 1970s the former Kitakamichō had the highest number of migrant workers in the prefecture, and making a living in this district was very tough. In order to resolve the issue of migrant workers being isolated from their families, part of the association focusing on a group of young members trialed the farming of wakame, and, while spreading risk by farming scallops and kombu kelp together, they established a year-round aquaculture industry. Furthermore, the community elected not to become involved in the farming of the silver salmon brand, which was flourishing in the 1970s, as the salmon food would pollute the sea and cause a decrease in the quality of wakame etc. In addition to such evolving farming practices, they increased quality over time by competing with each other. By doing so, they established Sanriku wakame and more specifically 'Jūsanhama wakame' as a brand.

The process of establishing the farmed brand

accompanied the technological innovations of individual farmers. Specifically, this involved the transition from the suspension method to the farming technique known as the 'horizontal method'. By positioning the wakame closer to the surface of the sea, this technique promotes photosynthesis, and while the volume that can be harvested decreases, it achieved increases in the quality of the wakame, and also enabled kombu to be farmed underneath the wakame. When farming was first begun, the wakame was shipped in dried form, but in order to differentiate it from other districts, this district was the first to work on steamed salted wakame, locally called boiled wakame. The changeover to boiled wakame satisfied the needs of consumers. who have a preference for preservation of nutrients, feel, and flavor, as well as a delicious-looking green wakame.

The pursuit of quality extended to the variety of wakame farmed. There are currently three varieties of seedlings that wakame is farmed from: those grown in Naruto, Shiogama, and Iwate. The Naruto and Shiogama varieties grow sooner and can be harvested earlier, and while the volume harvested increases, the quality suffers by comparison. By contrast, seedlings grown in Iwate have a thick mesophyll and are a good-quality variety, but the harvesting period is later than the Naruto variety. This harvesting period precisely coincides with the river snowmelt flood that flows into the Jūsanhama region. While extensive use of early-growing varieties would be advantageous, a quality-driven sense of competition was active within the community between each bay and each farming family to "produce something better than that family" and that "we can't put out something of [a] lesser [grade]". As a result, while a variety of measures to spread risk were taken, they had taken on the mindset of going beyond those risks to produce quality products using the later Iwate variety.

While facing the risks from the natural environment, the first farmed product that was addressed in building up the recovery and spread of the aquaculture industry in the Jūsanhama district after the disaster was *wakame*. However, the damage suf-

fered in the Jūsanhama district varied by bay, and in some bays, some houses and boats were almost unscathed. During the process of building a farming co-operative, those co-operative members who had not suffered damage expressed reservations to the co-operative, stating that it would be acceptable to carry out standalone work as previously (as in normal situations). From the point of view of the family-run nature of oyster-farming businesses, it can be considered natural to attempt to protect one's family's own lifestyle. People who have the foundation of their livelihood suddenly taken away from them by the tsunami and who have lost everything therefore have no right to speak about standalone work, individual holdings (such as boats), etc. The decision made by the co-operative was to reject such references to the principles as in normal situations, and to choose the route that 'we cannot accept one person to advance 100 steps. 100 people should each take one step forward,5, and therefore bring opinions together towards choosing the building of a group co-operative. Although most of the farmers had seen their boats, work spaces, and houses washed away, being left simply standing on bare ground, this judgment meant that it would be unpleasant for a minority of economically-strong people to gain further profit, and for only the opinions of those people to be listened to and put into practice unchanged.

The rights of living for the inferior or poor members discussed in previous theories of the commons held that some people struggling to make a living on low incomes (the economically weak) would possess rights of priority access to obtain resources for common lands that formed part of the common ownership that did not belong to any particular individual (Torigoe, 1997). However, the response visible in fishing villages in times of emergency such as the Great Earthquake was not limited to allowing priority access rights to the weak. It aimed for equality between all members of the community, including both the weak and the strong.

This was the will of the entire community – to not make even one person leave the district by

making all members completely equal, even if it meant reducing the incomes of those members with financial strength to spare. This particularly shows how such initiatives are also effective if the economically weak comprise the majority of people in the local community. For people who had lost their family, their assets, and their job, having some perspective on the future regarding whether they can continue to live in this district or not is a psychological pillar of support as important as economic support.

In the bay, it is necessary to think of elements of the farmer's mentality, such as the spirit of mutual assistance and the sense of competition, with a delicate balance. In this community, there is a saving that "if you are going to work together, fight over it!" - the loss of motivation and hence lower productivity in joint work was understood from past experience. All work from removal of rubble to the installation of ropes was carried out co-operatively, but the ropes used for wakame farming were made longer than usual, and allocated to each individual. Careful consideration was given to determining the number of ropes managed in advance in order avoid reducing the motivation to work hard. The balance was maintained even when the availability of equipment and labor was significantly disrupted by the disaster. Despite the lack of manpower in the fisheries co-operative, which was covering all aspects of operations with a staff of two, including the management committee chairman (compared to approximately ten before the disaster), and the farming boats having been reduced to a tenth of their previous numbers, the order was given to "make sure not even one person is left unable to make a living here", and the method of operation (catching and allocation) of the boats was entrusted to the co-operative members. The spirit of cooperation lived on, and it can be considered that this commitment was founded on the trust that living in this bay had fostered.

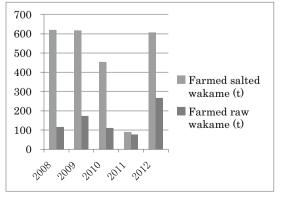
Measures were also taken towards co-operative members who had lost family members (and hence whose workload decreased) including priority allocation of work huts built by support organizations, and the co-operative paying for repairs to worn equipment to allow extra use of the remaining boats. In these ways, a social safety net that allowed the most disadvantaged people to make a living was developed in a distinctive manner by the bay community, and it enabled them to overcome (however narrowly) a disaster unparalleled in scale.

2.4 The Culture of *Okidashi* that Supported Rapid Recovery - Karakuwachō, Kesennuma City

Located at the northern end of the Miyagi prefectural coastline and abutting a ria coast, Karakuwachō, Kesennuma City is so vulnerable to tsunamis that there are stone monuments marked 'beware of tsunamis in the event of earthquakes'. Past experience of relocating villages due to tsunamis was utilized to minimize the damage in the 2011 disaster.

After the disaster, in order to first secure somewhere to live and income to cover urgent living costs, the aquaculture product that the various bays of the Karakuwa district began to farm first as part of the recovery was *wakame*. Given the need to rebuild on-shore processing facilities which had suffered land subsidence, as well as the issue of the harvesting period, considerable time would be required to restart production of scallops, oysters, and *nori* seaweed etc. By focusing on *wakame*,

Table 1. Harvesting of farmed *wakame* (FY 2008 – FY 2012: Created by the author based on data from the Miyagi Prefectural Fisheries Co-operative Karakuwa Branch)



which grows on one rope in half a year, shipments of wakame were able to be made in the spring of 2012, the year after the disaster. Moreover, shipments grew to be approximately 50% more than those in 2010, the year before the disaster (Figure 1). The extent of recovery in the aquaculture industry in general one year after the disaster was reported as the likes of 30-40% of that before the disaster, leading to a public perception of the recovery being still en route. Given these circumstances, what significance is there in the abnormally high growth in the Karakuwa harvest compared to other districts? Apart from the advantages of intensive cultivation, the growth has a background in the okidashi culture distinctive of the Sanriku region (Konno, 2013).

Okidashi, or 'putting out to the open sea', is the technique of promptly moving boats after an earthquake offshore to waters 50m deep, where it is said that they will not be damaged by a tsunami. To that end, in the regions vulnerable to tsunamis centered on the Sanriku coastline, there is a custom of *okidashi* when an earthquake occurs⁶.

Of course, *okidashi* can be considered extremely dangerous, and the fisheries co-operative strongly urges self-restraint. It is prohibited under the Fisheries Agency's guidelines, with the highest priority put on protecting farmer's lives.

However, for the farmers of the Sanriku region, which has suffered multiple tsunamis throughout history, okidashi is not a snap judgment, but part of the culture of their livelihood (=embodiment). Okidashi is not a self-sacrificial action in which the farmers risk their own lives, but a self-protective action, in order to save the boat, which is a 'second life' for both themselves, their families, and the other farmers. One reason that okidashi is considered dangerous is because the presence or absence or forecasting of tsunamis is not conducted scientifically, but judged and carried out solely on the basis of a farmer's experience. However, as the majority of the Karakuwa farmers succeeded in their attempt at okidashi, 80-90% of the farming boats remained after the 2011 disaster.

The case of Tokura, Minamisanriku Town forms

a clear contrast. Facing the inner bay and some distance from the open sea, of the 1,075 boats in the latter district in March before the disaster, most were destroyed or washed away, with a mere 55 remaining. Although Tokura is currently receiving support from the national government through the 'fight hard aquaculture recovery support initiative' etc., even two years after the disaster only 151 new boats have reached Tokura (one-third of the 460 requested) due to a rush of orders. Their boats being washed away and orders of new boats being delayed are a major hindrance to the farmers of Tokura as they work to rebuild their lifestyle⁷⁾.

For the farmers, *okidashi* is not an action to protect their own lives. A typical action to protect oneself from a tsunami is to evacuate to higher ground. If someone were on a boat near the shore when an earthquake struck, heading out to the open sea to avoid the danger of tsunamis would be understandable, but farmers who were on land at the time of the earthquake then putting their boats out to sea and heading directly towards a tsunami would seem to be highly unusual behavior. However, there are many customs and taboos attached to boats, which have a special significance for farmers.

All of the farmers speak of how "the recovery was accelerated because the boats were saved (by doing *okidashi*)", and even now aquaculture and commercial fishing is being conducted on an individual basis. For farmers, being able to head out in their own boat to their fishing grounds holdings and work at their own pace brings hope for tomorrow. *Okidashi* is an action that, as well as preserving the boats (and their own lives), is connected to raising their family, and satisfies the hope to continue the livelihood passed down from their parents. It is an unshakeable fact that *okidashi* has been a highly effective force in the recovery after the disaster.

Put another way, for the farmers, the open sea (oki) is a 'sanctuary (place of evacuation)' of the sea, which assures their freedom and lifestyle (Amino, 1996). This is not why it is a special place; if the part of the sea where aquaculture production etc. is normally conducted to earn income

is near the shore, the open sea is the part of the sea where they catch fish such as sunfish for their family's consumption in June and July, when they have comparatively more time available. Therefore, the open sea is not an unknown part of the sea, but somewhere they are familiar with. The open sea is then positioned as an emergency evacuation point in their hour of need⁸⁾.

If farmers were to flee to higher ground on land their lives would be saved, but by their boats being washed away, the basis of their livelihood would subsequently be lost for an extended period. Evacuating to the open sea not only saves their lives, but also protects how they make a living, preserving both at the same time. Expressed in a different way, after the disaster the farmers were able to help themselves, without relying on the support of governments. Moreover, okidashi functioned to prevent the fall into poverty after the disaster, which can be called the 'second tsunami'. Okidashi functioned as an experience-based disaster countermeasure to have the farmers of the Sanriku coastline, who have suffered multiple tsunamis in their history, not avoid the sea but face it, and thus receive a great benefit. It is an integral part of their culture.

3 Structural Reform as Creative Destruction

The above four examples have highlighted the distinctiveness in each bay. By then referencing each example to Klein's Shock Doctrine, some deeply interesting points become evident. Despite the intense enthusiasm of the Miyagi Prefectural Governor, the fisheries industry revival special

(Cooperative fund + individual materials e)

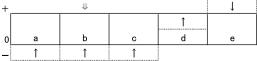


Figure 1: Where all farmers fishermen receive an equal share (forming a cooperative)

zones are currently in a state of realistically not being applied (they are only being applied in one case, where the zone was arranged by the prefecture). That is to say, the piggybacking market liberalization that the Shock Doctrine 'warns' of has not come to pass. Put another way, the result of the various distinctive recovery initiatives taken by fishing villages was to completely prevent the one-sided exploitation of resources by the market before it occurred. This paper will now take some time to further investigate the social implications of this development.

If they simply wished to recover to their previous states, it is likely that the various bays (that is, the fisheries cooperatives and fishing villages) would have used the standardized recovery policies put forward by the national government. However, each bay carefully selected those recovery policies that suited their situation as they required them. In this way, the various recovery systems such as special zones can play a role in providing support for the aquaculture industry. By contrast, the recovery distinctive to each bay can be considered from the perspective of creative destruction, which takes a disaster unparalleled in scale as an opportunity to solve structural problems.

In the Momonoura district, which agreed to a recovery special zone, the use of the special zone system was only a method to develop successors and continue the community. In the Tokura district, where a co-operative of 96 people was built, the farmers shared an awareness of crisis regarding the 'tragedy of the commons' that they faced for some time. Before the disaster, farmers looked out at the bay and commented that "unless a tsunami comes, I don't think there is anything we can do about these fishing grounds". The farmers 'already' knew

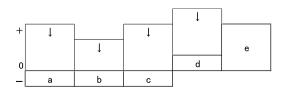


Figure 2: Where each family looks to maximize their catch

a method to solve the problem. That is, they built a co-operative without applying for the 'fight hard aquaculture recovery support initiative', instead taking the structural change in their production base as an opportunity. Thinking about it in a limited sense, it is as if the natural disaster of a tsunami has aspects that can be artificially manipulated. Converting external conditions imposed by nature into human culture and social internal conditions provided a golden opportunity for creative destruction to turn structural problems in a positive direction.

Continuing in order through the four examples to the Karakuwa and Kitakamichō, Jūsanhama districts, the fishing villages and families moved away from the policies of the central and local governments and increased their own distinct efforts to help themselves. At the Omoe Fisheries Co-operative, where all its members had become economically weak, they devised a last-resort plan to find a way to make a modest yet happy living on the coast, based not on the logic of the land but on the logic of the bay. In the fishing villages, at the time of the calamity the logic that 'the catch belongs to everyone', in which all farmers receive an equal share (Figure 1), and the logic of regular times that 'the catch belongs to the individual', in which each family looks to maximize their catch (Figure 2) were in coexistence. Through their use in different cases depending on the conditions present, making a living in that district become possible⁹⁾.

In an environment where the national government was hesitating regarding recovery policies that guarantee a livelihood, and the prefectural government was implementing completely opposite shock doctrine policies, these two types of logic functioned as a substitute way to guarantee livelihood. By the use of the commons called the sea embracing the economically weak and on the other hand gently excluding the economically strong, it can be said that it provides social value function in the form of avoiding the risk of increasing social instability due to economic disparity.

4 Communities that Avoid Indigenous Risk

At present, when the latent tsunami risk has manifested, the Ministry of Land, Infrastructure, Transport and Tourism has taken a variety of initiatives based on the perception that coastal districts are dangerous. These include the construction of seawalls exceeding 10 meters, the establishment of disaster hazard areas in which building houses is prohibited, and policies which promote relocating to higher ground inland, such as the establishment of relocation promotion areas, the preparation of housing developments, assistance for people relocating, etc., linking into programs to promote relocation of disaster-prevention groups. This suite of policies, when considered as disaster countermeasures, are based on the concept of 'risk free'; that is, being able to eliminate risk wherever possible. All of these policies position tsunamis as external factors, and are concerned with how to 'avoid them' or 'create distance to the sea'.

Putting individual cases to one side, it is clear from the following statistics that this concept is remarkably disconnected from reality. If the areas inundated by the tsunami in the Great East Japan Earthquake were extrapolated to the scale of all of Japan, this would include land within 10km of the coast and of an altitude of up to 30 meters. It is evident from analysis by the Ministry of Land, Infrastructure, Transport and Tourism that this area would in fact cover 10% of Japan's land mass (approximately 37,000 square kilometers), and a resident population of 44,380,000 people, 35% of Japan's total population¹⁰⁾. Furthermore, when including risks from a variety of natural disasters such as heavy rain, landslides, land subsidence, active fault lines, volcanoes, or in recent years large typhoons and tornadoes, it can be said that there is nowhere to live that is totally safe from natural disasters in the majority of Japan. Regardless, public administration and professional city planners have an orientation towards 'safety and peace of mind', and are always trying to build a risk-free 'utopia'.

The actions of the people actually living near the

sea stand in contrast to this attitude. This is evident in how the local residents of the Sanriku coastline, a region vulnerable to tsunamis, have lived together with the sea while coping with risks of disasters through having been warned by their parents that "at least two tsunamis will come during your lifetime, so beware". That is, disaster prevention 'on the ground' envisages that risks cannot be reduced to zero, and rather the issue is in methods to apply when unavoidable risks are manifested, i.e. securing and upgrading disaster countermeasures.

The folklorist Suga Yutaka calls society sharing awareness of natural disasters and environmental risks and trying to avoid danger 'indigenous risk avoidance' (Suga, 2005). According to Suga, the greatest feature of indigenous risk avoidance is precisely how local communities and their members minimize danger by recognizing risks, are regulated and assured by that recognition, and 'share' knowledge and techniques (Suga, 2005: 75). The members share gains and losses to a certain degree. and have risk observation in common. Society has the power to build and maintain systems that shape individual actions. In that sense, it can be said that the subject of avoiding risk is the intermediate group in the location, being the local community, which manifests itself on an intermediate scale between the state (a public actor) and the individual (a private actor).

It can be considered that the systems of indigenous risk avoidance in local communities develop and have been maintained principally as societal mechanisms to satisfy the necessity for a minimum standard of living¹¹⁾.

These systems do not avoid risk itself, but rather are lifestyle strategies and disaster countermeasures to ensure recompense when damage is suffered. It cannot be said that these systems improve the productivity of society, but are useful in stabilizing lifestyles 'without seeking profits' by an independent internal economy and self-sufficiency. Examples of these have been reported regarding many bays in Miyagi Prefecture.

For example, in order to farm oysters in the Kesennuma region, it is necessary to purchase

seed oysters from the Ishinomaki City (Watanoha area of the Mangokuura Sea) and Matsushima Bay farming areas. For raising ovsters in Kesennuma, the quality of the seed oysters from Matsushima Bay is higher than those from Ishinomaki. However, the absolute volume of Matsushima Bay oyster production is low, with a poor harvest approximately once every ten years when no oysters can be harvested at all. If Matsushima Bay were to be relied upon for the entire seed oyster supply, then in those poor years the minimum necessary volume would not be able to be secured from Ishinomaki, with whom Kesennuma farmers had had no business relationship. In this case, the oyster farmers of Karakuwa would not be able to make a living in those years.

Therefore, the reason why Kesennuma oyster farmers did not just attempt to source high-quality seed oysters to maximize their profits is so they could maintain a trusting business relationship with Ishinomaki (even if the product quality decreases a little) in order to secure the necessary production volume in the event of poor harvests, while using high-quality Matsushima Bay seed oysters alongside them. The use of products from different regions for alternately volume and quality achieved a good balance of business relationships, with on the one hand a trusting business relationship securing volume, and on the other a market-based business relationship emphasizing quality (Tanno, 2009).

Similarly, even after the disaster the farmers of Ogatsuchō, Ishinomaki City, avoided conducting any temporary market-based business for their scallops to secure the foundation of making a living, and went so far as to trade by negotiation with the intermediaries they had previously worked for. This is because a trusting business relationship had been established, so that the intermediaries would buy a certain amount even when scallops harvested in Ogatsu were in excess supply and could not be sold on the market (Nakatsubo, 2013).

Thus, in the Ishinomaki district, in order to reduce the risk from poor harvests and excess supply and therefore establish the foundation of making a living, the maintenance and renewal of a trusting

business relationship, that is, the minimization of danger, has become indispensable. Arrangements that stabilize lifestyles without seeking profits, comprehensively, and over the long term are included within the business relationship. If this indigenous risk avoidance is hypothetically not carried out, the community would find itself exposed and defenseless to natural disasters¹²⁾. Through developing the likes of production adjustments and business relationships of trust, it is avoiding natural disasters and environmental risks as much as possible.

In the above ways, arrangements that avoid indigenous risk contribute to the temporal, spatial, and technological maintenance and reproduction of aquaculture resources and securing productive means, and are established and adhered to as the indigenous logic in each community.

5 The Inner Shock Doctrine

Even if an external shock doctrine launches a surprise attack and finds an opening, the securing of productive means for everyone in the community (prepared in advance in the form of avoiding indigenous risk) functions thoroughly as the 'order of the sea'. The rule and principle of the shock doctrine is the craftiness to coolly put into place, before order recovers, the principles of market economics 'prepared in advance' that take advantage of breaches where risk has increased as the order of the land has been disrupted due to the shock from a disaster. However, communities which have experienced many disasters such as those examined in this paper can repel an external shock doctrine via thorough preparedness. This is therefore the Inner Shock Doctrine, in which creative destruction is converted into internal structural reform. Furthermore, the communities were by no means fragile in the face of shocks from disasters; rather, it can be said that they deployed lifestyle strategies and disaster countermeasures based on the risk awareness handed down to each generation within the communities. This is indigenous risk avoidance in action within a community.

What is the sanctuary (place of evacuation) of the sea at times of disaster? It is the sanctuary theory of the sea that assures the farmer's freedom and lifestyle, and the essence of the sanctuary theory can be found in the way that the people of the fishing village continued with their livelihood after the disaster almost as if nothing had happened. It seems that the behavioral norms that the farmers follow are rooted in the highly unusual situation of a major disaster, detached from the world of the everyday. These norms include conducting okidashi with the boats to avoid tsunamis, arranging the logic of equal shares to allocate catch to the economically weak, and taking the initiative to create a self-reliant space of salvation on the devastated shoreline. That is, the farmers' behavioral norms are not based on external economic principles, but are constructed and adhered to based on an indigenous logic. While it is latent in everyday situations, it is a standard of values that becomes manifested and activated in emergencies such as disasters.

It avoided long-term social stagnation due to the large-scale and widespread damage from the Great Earthquake before it occurred, and compared to the current situation where protection of the national government cannot be relied upon for certain, the farmers assured themselves of their lifestyle after the disaster. By doing so, the farmers secured freedom of productive means and decision-making after the disaster by their own hands.

Some farmers called the tsunami "a storm", but this is no slip of the tongue. This is because tsunamis are an unforeseeable natural phenomenon (a super unusual situation), and though while a storm is unlike the placid sea in normal times, the farmers treat storms as purely a phenomenon within their life cycle. Farmers in Karakuwachō, Kesennuma City related how "it's normally placid, I wonder why it got rough (as a tsunami)?" Normally, those of us on land would not use the expression 'rough' about a massive tsunami. Those who never turn their back on the sea while making their liveli-

hood would not live apart from the sea. Even the extreme cases of their lives and homes being swept away by a tsunami are incorporated into the continuity of the everyday. In a sense, the everyday of people who have come to tame the highly unusual event of a tsunami by becoming close to the sea can be found there.

Regarding techniques to incorporate disasters into the world of the everyday, the anthropologist Susanna M. Hoffman takes up the example of the 1991 Oakland firestorm, which Hoffman herself was caught up in. Most people analyzed this natural phenomenon by first attempting to relocate it into culture. Then, regarding why the victims of the disaster return to a devastated area, and why people continue to live in an area that suffers chronically from disasters, apart from economic reasons, being excluded from safe places etc., it was pointed out that researchers of the expression of religious symbols had elucidated that metaphor had brought about the function of possession (Hoffman, 2002). That is, when people who had experienced such great danger considered it on a conceptual level, they drew on images provided by long-standing traditions which allowed them to make sense of and feel some ownership of such a difficult matter.

Considered from a sociological standpoint, the incorporation of disasters into people's life cycles by making them something they 'possess' enables controlling of the risk of disasters, and creates arrangements that enable the prompt recovery to the everyday after a disaster. These methods of recovery to the everyday are apparent in the above words of the farmers. Avoiding indigenous risk in this way forecasts the danger from natural disasters to a certain degree, and has a static system stabilization function that builds long-term lifestyle strategies. Thanks to the stability of this system, local communities are able to reject the intrusion of exclusive capitalism even under the onslaught of an external shock doctrine.

Moreover, in large-scale disasters where the community itself would seem to be completely destroyed, a dynamic internal structural reform was apparent that was not evident from the perspective of indigenous risk avoidance. That is, it has been considered how the geographical community is stabilized by avoiding risk, but there is also the possibility that prescriptions for recovery from meeting head-on the risk of large-scale disasters that could destroy the community are incorporated into the community as securing productive means.

Such countermeasures in times of emergency include creative destruction that temporarily disrupts the order of the everyday until that time. The building of a co-operative of 96 members in the Tokura district involved the unprecedented action of taking conventional demarcations of fishing rights back to a blank slate, but the plan itself had already received tacit understanding within the community. Additionally, in Kitakamichō, the aquaculture industry custom, being the system in which each family looks to maximize their catch, was temporarily loosened by the decision of the fisheries cooperative, enabling disaster response that secured productive means for all members through all of the farmers receiving an equal share.

As this paper has demonstrated, the internal structural reform that takes disaster as an opportunity is the inner shock doctrine, and it is not limited to the avoiding of indigenous risk that resists the external shock doctrine. Furthermore, the inner shock doctrine is not limited to recovery from disaster, but is also evident in the coordinating power of the community to search for and implement solutions to varying structural problems (such as of succession, fishing rights, over-intensive aquaculture, and living with the sea in regions vulnerable to tsunamis) suited to the situation of each community¹³.

It is clear that the activation of the inner shock doctrine acts to prevent the emergence of neo-liberalism in the shape of the external shock doctrine. Furthermore, whereas the external shock doctrine reduces the independence of local communities and encourages reliance on external economic and political systems, the inner shock doctrine by contrast works to preserve independence in the face of changing external conditions. Without relying on a one-way system of pork barreling, creative

destruction is generated by incorporating a largescale disaster (an external imposition from nature) into internal systems, and converting it into cultural and social internal conditions. In this way, it can be said that the inner shock doctrine plays a key role in resistance and recovery.

Notes

- 1. As of 2014, the 'fisheries industry revival special zones' advocated by the Miyagi Prefectural Governor have only been implemented in one location, the Momonoura district. Amid fierce opposition from the Japan Fisheries Cooperatives, it was implemented in the Momonoura district as at September 2013, precisely at the timing when the fishing rights (renewed five yearly) expired. Fishing rights were originally a regulation in public law to guarantee a fisherman's right to make a living, including the fishing industry over a certain area of water. However, it has been pointed out that the Governor (as the license accreditor) has excessively increased his authority with the intention of introducing industrial capital, distorting the system itself (Kawai, 2011).
- Among these, the analysis of Momonoura, Ishinomaki City, Karakuwachō, Kesennuma City, and Tokura, Minamisanriku Town is based on the Miyagi Prefecture fisheries industry survey data from the 'Tohoku Gakuin University Kanebishi Seminar – Disaster Record Project' survey team.
- 3. The farmed aquaculture product for which building co-operatives was particularly advanced was *nori* seaweed. Mechanization has advanced in addition to the progress in farming techniques, and to purchase all of the aquaculture equipment, machinery for landbased seedling collection, *nori* processing facilities, *nori* drying machinery, work boats, etc. requires several hundreds of millions of yen. Because farming *nori* as a standalone operator is therefore extremely difficult,

- each bay took up the method of purchasing through cooperatives to reduce production costs. At one point, many farmers had given up on resuming business, but oral surveys showed how they had used subsidies from the 'fight hard aquaculture recovery support initiative' to work towards resuming the farming of *nori*.
- 4. A social dilemma refers to a situation encompassing a structural tension where rational actions by the individual lead to irrational outcomes for society. Hardin called this the 'tragedy of the commons', referring to the parable of herders overgrazing their sheep on common land to raise their incomes, leading to depletion of the grass and failure.
- 5. "(Some cooperative members) protested that they should be allowed to work in a way that directly reflects their efforts [in their incomes], but I told them straight out that that was unacceptable. In this situation (boats, work spaces, and houses washed away) with most of the farmers left simply standing on bare ground, it would be unpleasant if only a few strong people were to profit, and if only the opinions of those strong people with loud voices were to be listened to and the rest ignored. It is fine if you do not want to own a boat, but people's boats were taken away (by the tsunami) and now they have none. We brought (the cooperative) together with the concept that we cannot accept one person to advance 100 steps. 100 people should each take one step forward. Even the people who did not suffer any damage and who were dissatisfied are now coming around to this point of view. They are working as a group (together)" (November 20, 2011, Fisheries Cooperative Management Committee Chairman Satou Seigo).
- 6. On the day of the disaster, Mr. Kohama Yasuhiro, who farms *wakame* and scallops in Ishihama, Karakuwachō, Kesennuma City, had finished his work unloading materials at the port to be used in harvesting *wakame*

the following day, and was taking a break at his house on high ground. At the moment the terrible shaking came, he checked on the safety of his family and house, and quickly thought of putting his boat out to the open sea. He sped in his car down to the fishing port where his boat was moored, put on his raincoat, boarded his farming boat, and headed out of port. The tsunami drawback was already arriving, and the boat traveled so fast the tachometer almost went all the way around, and the boat's engine made a very strange noise, the likes of which he had never heard before. He arrived at the open sea approximately five minutes after that, and he was spared from being swallowed up by the wave. The open sea, which he had rushed to reach, was calm as if nothing had happened, but on looking back towards the bay, he could see that a giant wave the size of which he had never seen before was swallowing up their fishing port (from an interview with Mr. Kohama Yasuhiro, November 20, 2012).

- 7. According to surveys by Miyagi Prefecture, 3,156 of the boats moored before the tsunami were launched up on land, and over 9,800 remained. This is approximately 80% of the boats registered with the prefecture. There are opinions indicating that at least a majority of the farmers may have conducted *okidashi* (Sugawara, 2011).
- 8. Compared to the 'villages, fields, and mountains' in analyses of farming villages, Takakuwa Morifumi divides areas of the sea into 'villages, bays, coastlines, offshore, and open sea' (Takakuwa, 1994).
- 9. While guaranteeing a livelihood through the rights of living for the inferior or poor members is a temporally-limited function at times of disasters, it has a certain universality. During flooding of settlements surrounding Lake Biwa in Shiga Prefecture, the environmental sociologist Furukawa Akira discovered that the mechanism called the 'system of fisheries for the poor', which judges all the people of

- the village to be fishermen, was an expression of the natural rights of the people of the village (Furukawa, 2004). It can be called a latent system of guaranteeing a livelihood which envisages that anyone in the village could become economically weak.
- 10. The Ministry of Land, Infrastructure, Transport and Tourism, National and Regional Planning Bureau 'National Land Use Enabling Safety and Peace of Mind Considering Disaster Risk', June 14, 2011 http://www.mlit.go.jp/common/000147412.pdf
- 11. Actions to stockpile necessities such as provisions in households for the event of an earthquake also unmistakably constitute risk avoidance. However, as these are conducted on an individual level based on experience and information, regardless of whether direct or indirect, they constitute individual risk avoidance (Suga, 2005:7).
- 12. The folklorist Kawashima Shuichi has had debates with many fishermen, and they relate how they go out to sea every day having acknowledged the fundamental risk that being a fisherman involves exposing their lives to risk (Kawashima, 2012). Building on this, and while referring to the story of how 'we were killed by the pilchards but kept alive by the squid', we can perceive (setting scientific explanations to one side) the great catch of pilchard before the tsunami and the great catch of squid after the tsunami as the symbiotic relationship between the lives of fish and other marine organisms on one hand and human life on the other. This indicates how for fishermen the sea is both a subject of fear and a source of favor (Kawashima, 2012: 96-7). This can also be considered as how fishermen relate to the sea - through taking on such risks to their 'bare life'. Based on the ideas of the Italian philosopher Giorgio Agamben, the bare life indicates a state of a 'subjectivity without subject, deprived of any rights' (Kanebishi, 2008).
- 13. The cultural anthropologist Matsuda Motoji

gives the name 'soft resistance' to the use of securing and increasing wealth of productive means as a weapon of the weak within the migrant worker society in Nairobi, Kenya (Matsuda, 1999). Soft resistance does not mean that the structurally weak surviving is in itself an act of resistance, but instead emphasizes the dissimilar process of how, using the laws and norms imposed on them, the weak focus on diverse creations separate to the original intention.

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