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Areas of Tohoku, Japan

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Possibilities and Limitations of Social and Solidarity Economy in the Post-disaster Affected Areas of Tohoku, Japan*

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1. Introduction

The Triple disaster of earthquake, tsunami, and the nuclear power plant accident hit Tohoku, Japan on 11th March, 2011. The occasion of “3.11” accelerated the long-term structural changes of rural Japan: depopulation and decay of local communities. With eight years since 2011, while there has been some noticeable progress on rebuilding physical infrastructure, rejuvenating rural communities now faces daunting challenges. This difficulty is particularly acute now in Fukushima, because urban consumers in Tokyo and other cities prefer not to purchase Fukushima’s agricultural products even if they are proven safe. One positive sign that has emerged in the post-disaster Tohoku is that there have been noticeable strengthening of relationship between rural producers and urban consumers. Before “3.11,” such relations were very weak, and did not provide a foundation for effective risk communication. Since “3.11,” this ineffectiveness has been devastating for both producers

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and consumers. However, some primary producers started to engage in innovative activities, through which not only direct sale to consumers using the Internet, for example, was realized but also mutual understanding through farm visits and joint activities was fostered. It appears that these new activities may still be a vulnerable but promising seed of social and solidarity economy (SSE). This paper critically examines both possibilities and limitations of SSE in post-disaster Japan, with particular focus on a new monthly delivery package of magazine and food, Tohoku Food Communication (TFC), whose first issue was released in July 2013. TFC can be interpreted as an emerging case of SSE. Currently, SSE may potentially be significant in making rural societies more resilient and sustainable than before. It is also hoped to promote food sovereignty. However, in order for such new attempts to be really successful, the government and the society as a whole need to support these activities so that the economy can become more plural than before, instead of being monolithic -- an economy dominated only by market capitalism.

2. “3.11” as a Triple Disaster

In the cold afternoon of 11 March 2011, a mega-earthquake of magnitude 9.0, the most powerful in the history of disaster-prone Japan, hit the eastern coast of the Tohoku region. About 30 minutes later, an area of more than 650 km along the Pacific Coast of Tohoku was hit by a tsunami (tidal wave) of unprecedented scale, whose height was about 10 meters. The tsunami inundated an area of more than 550 km. These natural disasters

also triggered the nuclear power accident in Fukushima Prefecture. Three nuclear reactors at Fukushima Daiichi Nuclear Power Plant operated by Tokyo Electric Company reached level-7 meltdown quite quickly. While the earthquake and tsunami were natural disasters, the nuclear power plant accident was clearly man-made. Thus, “3.11”, or the Great East Japan Earthquake Disaster (GEJED), is now widely known as a triple disaster (Birmingham and McNeill 2012; Fukushima Booklet Committee 2016).

The affected area was widespread, but the casualties and damages were concentrated in Iwate, Miyagi, and Fukushima Prefectures. As of March 2019, the death toll was nearly 20,000. The number of wounded was more than 6,000. Those who were still missing were about 2,500. The number of houses either totally or partially damaged was approximately 1.15 million (Fire and Disaster Management Agency 2019). As “3.11” was also the nuclear accident, the wide areas surrounding the power plant were contaminated, and the evacuees, both voluntarily and involuntarily, from these areas were numerous. The number of evacuees peaked in December 2012 with 62,000 being outside of Fukushima Prefecture and 100,000 being within the Prefecture. The numbers as of January 2019 reduced to 33,000 and 9,000 respectively (Nikkei Newspaper 2019.03.17).

The “3.11” disaster undoubtedly affected Tohoku in many different ways. While the proportionate share of Tohoku in the national GDP was less than 10% prior to “3.11,” the region was still important for the primary industries of agriculture and fisheries. The areas of Tohoku continued to supply not only food and natural resources but also human resource to Tokyo, all of which were especially needed for the rapid economic growth that Tokyo and its

surrounding areas experienced since the 1960s. It is thus may not be an exaggeration to say that Tohoku served as a kind of colony for the Tokyo metropolitan area. Within the unequal relationship between Tohoku and Tokyo, metropolis was considered more important than the rural areas. Indeed, arguably one can say that the extent of capitalism development in Japan has reached its full maturity over the last 150 years, during which imperialism, war and domestic colonization were all employed (Shinoda 2013).

This background has further inscribed some important psychological effects on the minds of the people. It has created a mindset in which primary industries are not attractive as a good job for young people. Even if primary industries, particularly in Tohoku, have been very important, the youth have tended to look for office jobs in the cities. For youngsters in Tohoku, white-collar jobs in Tokyo appeared more appealing than staying at home and succeeding agriculture or fisheries from their parents. Indeed, if the youth decided to become fishermen, they were ridiculed as “going to the fridge” (Takahashi 2016). This was the situation of the primary industries in Tohoku before the disasters.

Tohoku before “3.11,” therefore, had already started to suffer from serious socio-economic illnesses. As the primary industries could no longer attract the youth, those who remained in Tohoku were mainly the elderly. It was precisely the elderly who were bearing the burden of tough manual labor in the primary industries; in many instances, once they stopped their business, there would be little prospect that the next generation would carry it forward. Depopulation and aging were more than demographic phenomena. Rather, they had serious implications from political, economic and social aspects.

The “3.11” disaster accelerated the trends in many ways. Due to the compounded disasters, many jobs were lost, and it has been far from easy to re-establish many business activities. The problems that had already become apparent before “3.11” become even more serious in the post-disaster period (Bacon and Hobson 2014, 198).

This is the context in which recovery and reconstruction have been pursued. In Fukushima, radiation issue made the matter worse. Many people came to be deeply anxious about whether they can continue living in their homeland. More specifically, primary industries were banned shortly after the nuclear power plant accident, as health effects due to radiation were very uncertain. Many primary producers lost their sources of income. But their income losses were not compensated by the government. It is because the official government view was that the government would assist the victims but is not concerned with income and wealth of individuals. The government justified its position that in market economy, each stakeholder is responsible for his or her acts, and no government tax can be used to supplement income or wealth (e.g. rebuilding individually owned housing) even in cases of severe natural disasters.

The government economic policy, together with other actions, understandably had a big political impact on Japan. After “3.11,” it soon became apparent that public trust in the government had significantly reduced. This distrust led to revitalize civic political movements (Fukushima Booklet Committee 2016). It is therefore not be a pure coincidence that of all the efforts that unfolded in the grassroots of Tohoku, Japan, some innovative experiments were born without relying on government support. These innovations have been seeking some

sort of alternative to mainstream market capitalism. Although “3.11” affected the whole economy, it fundamentally affected the ways in which the primary industries were perceived among urban consumers.

3. Fukushima’s Agricultural Produce

Shortly after the Nuclear Power Plant accident, the government of Japan banned agriculture in Fukushima. This ban meant that farmers were not allowed to grow any rice or vegetables, nor sell these through markets. The ban even included cultivation of farmland for self-consumption. Normalizing farming practices has been a complex story. The government set up the radiation standard for agricultural produce shortly after the “3.11” accident, due largely for health reasons. A radiation monitoring system was introduced, and the Governor of Fukushima Prefecture declared that all rice from Fukushima was safe in October 2011. However, it was subsequently found that some rice produce was above the radiation level set by the government. This situation made consumers very anxious. Thus, from the harvest of 2012 till now, Fukushima farmers agreed to test every single rice and vegetable package before it goes to markets. This monitoring system is very laborious and costly. Furthermore, this method is scientifically unnecessary; it is sufficient to conduct sample testing for rice packages. However, farmers have been convincing themselves that in order to gain consumer confidence on their produce, this kind of extensive monitoring is the only realistic pathway to normalize agriculture of Fukushima (Hamada et al. 2015).

Because of tireless endeavors of farmers, the level of agricultural production in Fukushima has been recovering probably reasonably well. The production level (seen as the sales revenues) has almost regained the level of pre-disaster period. For example, rice is a staple food in Japan, and is one of the major produce items in Fukushima. Its production level, being compared with the national average in post-2011 period, has been recovering well. Taking 2007 as a base year of 100%, the national average of rice production in 2016 was 88% and that of Fukushima was 75%. A farmgate price for Fukushima rice compared with the national average was approximately 10% lower in 2014 and was 5% less in 2016 (Ministry of Agriculture, Forestry and Fisheries 2018). While the gap between the national average and Fukushima still remains, the situation may not be too bad considering the extensive suffering of Fukushima agriculture in the post-“3.11” period.

However, the current situation as of 2019, in which agriculture in Fukushima is surrounded, is very complex – probably more complex than the time immediately after the disasters. This complexity arises from two inter-related factors: the first one is the fluctuating level of understanding among urban consumers toward Fukushima produce; and second, the increasing unfairness in how the produce is marketed in major retail channels. First, it is important to understand the perceptions of urban consumers. At the time immediately after the disasters, consumers’ reactions were divided into two types. One was to purchase Fukushima produce of pre-disaster harvest in order to show their support to disaster-affected primary producers. The second one is to try and avoid any Fukushima produce as much as possible because of radiation fear. As the time passing by, the first kind of purchase was

losing momentum. The problem relates to the second type of reaction. Several data by the government show that the proportion of the consumers to avoid agricultural produce of Fukushima has been declining with time in the post-disaster period. Yet, among the disaster-affected prefectures, Fukushima is clearly still least preferred by the consumers. What makes the situation more complex is that even if the government tries to disseminate information about the testing and monitoring of agricultural produce of Fukushima with regard to radiation contamination, with time passes by, *more* consumers demonstrate their ignorance about the extensive monitoring system in place. Alarming, the level of ignorance has been *increasing* recently, according to the periodic reports by the Consumer Affairs Agency (2019). This unfortunate situation may not be so surprising. With more than eight years since the “3.11” disaster, more consumers came to be disinterested in what is happening in the primary industries in the disaster-affected areas, including Fukushima.

Second, the recent marketing situation of Fukushima agricultural produce is very complicated. On the one hand, the productions of rice, vegetables and fruits have not totally regained the pre-disaster levels. But, it has been recovering probably reasonably satisfactorily. For example, the Prefectural data shows that the 2016 total production sales amount was about 207 million yen compared with 233 million yen in 2010 (a year before the disasters). On the other hand, this regaining level of production has not been fully rewarding the farmers in spite of their tortuous efforts to fight against crises in post-“3.11” era.

Consumers in major cities in Japan still prefer not to buy Fukushima rice if they see the packages in supermarkets. Thus, the price level is approximately 10 – 15 % lower than the

comparable quality of rice harvested in Japan. But indeed, the quality of Fukushima rice is one of the highest in Japan. Thus, in recent years, significant proportion of rice was bought by major distributors and operators of supermarkets and convenience stores that make and sell rice balls, one of the very popular food items in Japan. Consumers in fact buy the rice balls that is made of Fukushima rice, but without knowing it. Why? It is because that in Japanese regulations, rice balls sold in supermarkets and convenience stores are asked to make a distinction whether rice is domestically produced or not. The product label does not need to show from which prefecture rice is coming from. Then, who benefits from this reasonably large amount of sales of Fukushima rice? It is the major distributors and operators of supermarket and convenience stores and not the farmers in Fukushima. This situation entails that the current economic transaction is totally unfair to the Fukushima farmers. Furthermore, arguably, as a system as a whole, this injustice is partly deriving from indifference and ignorance of consumers. Thus, the current economic situation of Fukushima agriculture is far from simple. It needs much more nuanced understanding, if one considers that this injustice needs to be rectified.

4. Tohoku Food Communication

The notion of SSE is crucial to implement economic justice. There are several examples of SSE in post-disaster Japan. Probably the most noticeable endeavor is Tohoku Food Communication (TFC). TFC is a package of magazine and food, monthly delivered to

the doorstep of subscribers. The magazine features unique stories of primary producers. A limited amount of food produced by those who appear in that issue of the magazine is included in the package. The first was issued in July 2013, about two years after “3.11”.

TFC was started by Mr. Hiroyuki Takahashi, who was born and raised in rural Tohoku but attended college and worked in Tokyo for several years. Upon returning home, he served as a lawmaker for the prefectural assembly and was eager to revive primary industries in Tohoku before the disasters (Takahashi 2016). Then, “3.11” provided a critical occasion for him to launch TFC, which he believed as an effective means to re-connect primary producers in rural areas and consumers in urban centers.

In the TFC magazine, Mr. Takahashi has featured unique primary producers, including farmers and fishermen. Farmers usually adopt organic farming, and their produce includes rice, vegetables, dairy products and mushrooms, some of which are often avoided by conventional farmers because of the difficulties in cultivation and/or their unsuitability for marketing. The fishermen can also tell unique and very interesting stories. All of their stories are very illuminating, precisely because they are all fighting against the tide in which the primary industries have seen an extended decline as the Japanese economy has become significantly industrialized.

The monthly subscription price is now ¥2580 (about \$23). According to the office of TFC, more than half of the subscription fee goes to producers. There is usually no price negotiation between producers and the TFC office, which signifies that the prices are comparatively higher than conventional market prices. The rest of the fee remains in the

office for handling all sort of administration costs including packaging and shipping. This business model is beneficial for producers, but does not allow big profit for the TFC office. It would be safe to say that the passion of Mr. Takahashi and colleagues are the main driver for running the TFC regularly.

The number of subscribers is limited to a maximum of 1500, and by the end of its first year in 2013, the subscribers grew to more than 1000. Rcently it stands around 1200. There is roughly an equal number of men and women among the subscribers. Most of their ages are from 30s to 50s. Geographically, about 70 – 80% are in Tokyo and surrounding areas, but some are in Tohoku, while others in southern parts of Japan as well. The subscription fees and membership numbers are decided based on the fact that many of the primary producers featured in TFC are small in scale and run by family members who could not meet the large demand that ordinary marketing might create. The most common reason for those who cancel their subscription is the small amount of food delivered in each issue.

The overall concept behind TFC is interesting. Their vision is, “Read, Eat and be Connected”. “Think with both head and tongue” is also their favorite expression. The TFC is not to spread information about unique and tasty food from Tohoku to urban consumers. Indeed, although the magazine does have some pages of cooking recipes which show how the particular item can be best enjoyed, it tells nothing about taste itself. Instead, the story is all about farming and fishing, which are mostly conducted against harsh natural climate. For instance, organic rice cultivation sounds nice, but it is an extremely laborious form of farming as producers do not apply pesticides and chemicals. The farmers have to pull the weeds out

manually. Instead of telling how tasty each item is, TFC focuses on encouraging consumers to learn what primary industries are all about through real-life stories of producers.

The organizers of TFC prepare various opportunities for mutual interaction between producers and consumers. Often, events are hosted either at places of consumption or production. For example, featured producers join parties attended by consumers in Tokyo. Consumers can also partake in farming activities on the farmers' places. In addition, TFC also presents various opportunities for interactions through SNS. Official TFC subscribers are allowed to login to a designated website in which they can comment on monthly food items. Through these occasions, relationship between producers and consumers has become significantly strengthened, although there has not yet been a survey to verify this numerically. For producers, securing limited yet direct access to consumers contribute to their marketing. For consumers, improved understanding of farming helps them exercise their choice not only benefitting themselves (via healthy diet) but also opening new opportunities for thinking much bigger issues such as food sovereignty and sustainability. This is precisely what TFC advocates: "Remaking the world is reworking your food".

As the reasoning behind TFC has increasingly been shared by many in Japan, there is now 39 FCs throughout Japan (out of 47 prefectures). The way in which FC is organized varies from one area to another. The subscription price varies slightly from place to place, and in some cases, FC is monthly, but in other places bimonthly. Furthermore, the organizers of FC include a diverse range of actors such as information and media entities, restaurants and hotels, and associations that have been supporting farmers. These 37 FCs also

organizes regular league conferences as a forum for information exchange and discussion. Because many of them face similar problems such as how to increase subscribers, these conferences help the FCs alleviate their problems. The extent of spreading FC from Tohoku to other parts of Japan and to other countries is also of significance. (Indeed, there are now four similar FCs in Taiwan as well, because Takahashi's book (2015) was recently translated into Taiwanese.) Even if primary industries are no longer the biggest wealth creator in the Japanese economy, many people are now realizing its importance than before. This initiative, together with the continued and noticeable tendency of people to return from urban areas to rural areas, can open up a new type of window for social change.

5. Accessing Food Communication Initiatives

How can we access the new initiative of TFC? This was born in the context of the triple disaster, including the Nuclear Power Plant accident, of "3.11" in Fukushima, Japan. Thus, the example may appear to be unusual for case study. Nonetheless, structural problems of depopulation and ageing in rural communities in Tohoku, Japan started before "3.11" and the compounded disasters rapidly deepened these problems. Thus, it is too short-sighted to treat Fukushima problems as local issues. Instead, the Fukushima agenda signifies high relevance to rural livelihood issues in Japan and in the world.

TFC clearly demonstrates both possibilities and limitations of promoting SSE in Japan. Among the several achievements, TFC has so far received several prestigious awards,

including the Good Design Award in 2014 and the Regenerating Locality Award in 2017.

More fundamentally, the most significant achievement derives from their value-driven vision. Previously divided primary producers in rural areas and consumers in urban centers are now more connected than before. This emphasis on relationships is especially important in Japan. Before “3.11,” many of the urban consumers in Japan did not understand primary industries very well. But many of them insisted on affordable and healthy food. While there have been some limited attempts to enhance the mutual understanding between producers and consumers before 2011, they have not been very effective. As a result, there has been limited mutual trust between producers and consumers. The lack of reciprocal respect became very apparent due to the radiation issues of agricultural produce in Fukushima, particularly due to one of the most serious nuclear accident in human history. Effective risk communication presupposes mutual respect between stakeholders, as messages should be well understood in both directions, not just one way. Unfortunately, this sort of foundation was not the case between producers and consumers when it came to primary industries in Japan before “3.11.” This meant that once the government banned all agricultural produce being distributed to supermarkets and other stores, even if the level of radiation subsequently became significantly reduced and was proven to be negligible as a hazard, only very few who used to purchase Fukushima produce before “3.11” came back to repurchase it (Hamada et al. 2015).

With TFC and other like-minded initiatives, the relationship between rural farmers and urban consumers is now becoming closer and more visible than before. Through these

connections, their mutual understanding has steadily grown. With a better understanding of each other, the producers and consumers can now strive for primary industries which not only play the role of food production but also fulfil other important functions for long-term sustainability. While it is not at all easy to induce behavior change on both sides of producers and consumers, a significant proportion of those who are engaged in TFC and its affiliated activities now think about primary production and sustainability more seriously than before. Some of them even started to introduce small but real changes in their daily behavior. For example, some producers have become keener to educate the youth about their production. Some consumers pay more attention to the value of money in their daily shopping as well as to sustainable consumption.

Through increased interactions between producers and consumers, each is regaining its respective autonomy. Prior to “3.11,” many producers depended on the widespread and dominant marketing channels such as producer cooperatives. (Cooperatives in Japan are organized according to industrial division of labor, and are strongly linked with a relevant regulatory government authority.) While there are some exceptional producers such as organic farmers who pursued their own vision of agriculture, many felt more comfortable following the mainstream primary production policies and mechanisms. However, this dependence, in reality, also tended to undermine their autonomy. “3.11” stripped them of their comfort, and many of them faced serious survival challenges. The crises forced many to consider their future role. Some started to sell their produce directly to consumers via the Internet, for instance. For consumers, whereas they rarely doubted the regulatory standards

on health and food operated by the government prior to “3.11,” their confidence was shattered after the severe nuclear accident. Many of them are now compelled to decide what to buy independently using information from non-governmental sources. This situation has propelled some to fall in line with the thinking behind TFC.

The future of TFC, however, presents some serious challenges as well. The achievements of TFC partly derive from the leadership of Mr. Takahashi, who rightly understood that without securing primary industries, our society will seriously deteriorate in years to come. His passion became more apparent due to the triple disaster of “3.11.” As with other cases of serious social reform, the crises provided a good opportunity for rethinking. However, with the passage of time in the post-“3.11” period, many urban consumers are now no longer necessarily sympathetic to the disaster victims in Tohoku. In the post-“3.11”, several other natural disasters have taken place, and a significant number of people in Japan were affected. Fukushima and Tohoku are not the only areas that have been suffering from disasters. The frequent calamities unfortunately equalize different regions within Japan. Once society started to accept disaster-proneness as a part of normality, the extent of capitalism can reassert its usual influences. Urban consumers nowadays tend to pay more attention to price signals and may start purchasing daily items without necessarily considering what their purchase may mean for the producers whom they hardly had a way of knowing. In return, many of the producers have to compete with large-scale supermarket chains. In this sense, the real challenge lies ahead of us. Mr. Takahashi said he feels that he is fighting “a battle of withdrawal”.

This concern is even more highlighted by looking at the fact that Fukushima rice has recently been purchased by supermarkets and convenience stores as a low-price and high-quality commodity in order to make and sell rice balls to consumers, who in fact are buying the rice without knowing it. Combined with the persistent ignorance among the consumers about the radiation monitoring system, the current situation demonstrates that the economy in Japan consists of two different types of transactions: one is the mainstream market economy; and the second one is SSE promoted through TFC and other new initiatives. Unfortunately, in this dual economy the first one is more powerful and dominant. The battle between the market economy and SSE may not be favorable for the SSE, particularly as more time passes by since “3.11.” The situation is further problematic because of the unfairness in profit-sharing in rice ball sales. The most who benefits from rice ball revenues are supermarkets and convenience stores and not small-scale farmers in Fukushima. This unfairness is very comparable to unjust agricultural commodity trade between small-holder producers in developing countries and consumers in rich societies. Thus, in order for the SSE initiatives to gain more influence over the mainstream markets, something more fundamental may be needed.

This issue brings us back to the bigger picture. In order for the seeds of SSE to grow, it would be desirable for government policies to become more supportive, as in other countries such as Brazil and Korea. However, precisely because the Japanese economy has reached a very high degree of maturity in mainstream capitalism, there is little scope in the thinking of both government leaders and private entrepreneurs that some sort of alternative

economic system is necessary in order to make the economy more resilient and sustainable. The “3.11” triple disaster provided a good opportunity to reorient our thinking. But as time passes by, and people move from crises to normality, it then becomes more uncertain if there will be a continued incentive for a paradigm shift – shift such as from market capitalism to SSE. This is the kind of dilemma that Japan faces as of now.

6. Conclusion

The case study of TFC suggests important lessons, when one wishes to contemplate the future of rural livelihoods, food sustainability and sovereignty in this ever increasingly volatile world that is affected by economic impasse as well as environmental disasters. The first lesson related to the notion of agency. The conventional economics treats human agency in such a way that each entity is rational regardless of their socio-cultural background. While this has been a powerful logic in the current globalized economy, the results are not entirely satisfactory to all of us. On the occasion of disasters such as GEJED, this sort of atomistic understanding clearly reveals critical fraud, and many are forced to rethink social and humanistic aspects of economic activities. The primary producers in Tohoku after the “3.11,” who are relatively poor and the less influential, suffer most on the occasions of crises. This injustice suggests that agency should be understood more in terms of embedded autonomy. As illustrated by the example of TFC, improved stakeholder relations enhance human agency. Thus, agency should not be isolated from its social

network. While this sort of understanding is never new, it clearly merits emphasizing that due attention needs to be paid to autonomy embedded in social relations in general and producer-consumer relations in particular, when one considers food and agriculture.

Secondly, our notion of rationality needs reconsideration as well. With our articulation of embedded agency, one feels life-satisfaction more on occasions of self-fulfillment of multiple entities at the same time. While atomistic agent may be pleased with his/her own needs fulfillment, embedded one feels more comfort when others are satisfied at the same time as well. Again, as revealed by the TFC story, its subscribers feel grateful to the very fact that both producers and consumers are pleased through being connected through food items. In short, human pleasures are anchored in particular contexts, in which other entities are mutually satisfied by sharing similar aspirations. These reconsiderations of agency and rationality constitute the key foundations of much desired SSE.

Although the case study of TFC is very interesting, it apparently shows both possibilities and limitations. In order to overcome the shortcomings, TFC and other SSE-minded initiatives need to be supported by more wholistic regulatory and policy frameworks, including information disclosure/dissemination and well-being-based economic prosperity. Therefore, primary industries and rural communities in Japan and in the world are now at critical crossroads. Accordingly, although TFC is not a quick fix to the complex issues of sustainable rural livelihoods and food sovereignty, it is a leading example to diversify economic activities beyond invisible market transactions. It is therefore important to keep paying attention to the TFC examining whether it will lead to much broader social movements

across Japan and possibly in East Asia, which are undergoing deep structural changes.

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