

※ This article was first published online at the Iwanami B Side website, of Iwanami Publishing. It was uploaded as a PDF with the author's permission. This PDF may be freely printed and copied. Please allow as many others to read its contents as possible.

April 8, 2020

Tatsushi Fujihara: Guidelines for Life in a Pandemic

- A historical approach

- 1 Level-headed thinking for all eventualities
- 2 Should we put our hopes in the state?
- 3 Should we put our hopes in the home?
- 4 Spanish influenza and COVID-19
- 5 Lessons from the Spanish influenza
- 6 The judgement of Clio

(Articles 1 – 4, which are referred to herein, can be accessed using the QR codes at the bottom of this piece).

1 Level-headed thinking for all eventualities

Human beings are filled with all sorts of theories, and have the unfortunate habit of clinging to vague and distant hopes instead of perceiving an obvious crisis happening right in front of them. Many lean towards the optimistic view of things, brushing aside the possibilities that they may fall ill due to a virus, that they may die from it, that their workplaces and schools will be shuttered or that the death rates of other countries could ever be possible in their own. I, too, count myself amongst such people.

Almost everyone reaches a limit in their thinking capacity when facing a very significant crisis, and so we cling ever more tightly to optimism and flee from reality by telling ourselves that the numbers of infected and dead are still few in Japan. That we have an advanced healthcare system, and children and young people are rarely infected. In one or two weeks, the virus will have either spread or have been suppressed. The critical moment will be after those two weeks, the turning point after three. Given a year, there should be no problem holding the Olympics. I probably will not be one of the four out of every 100 people... It is not at all strange that we should want to believe any of this. Although, hope may soon turn into baseless conviction before one even realizes. The First World War began in the summer of 1914 and went on until the fall of 1918, despite the German emperor Kaiser Wilhelm II's reassurances to his people that it would all be over by Christmas of 1914. Japan's Imperial Headquarters repeatedly told people the Second World War would end with a victory for Japan. That the optimism and bravado of those in charge, disseminated by mass media, was believed even by a considerable number of people who had opposed their governments is a bitter fact of history.

The Plague; the Thirty Years' War; the Great Lisbon Earthquake; the Napoleonic Wars; the Great Famine of Ireland; rampant outbreaks of cholera, plague, and tuberculosis; the First World War; the Spanish influenza; the Ukrainian Famine; the Second World War; the Chernobyl nuclear disaster; the Fukushima nuclear disaster... History is littered with deadly crises such as these. During a significant crisis, the forward march of reality has always pitilessly crushed people's hopes underfoot. Particularly in Japan, where people grew accustomed to hearing the announcements of the Imperial Headquarters, it is common knowledge that the careless optimism, moral and spiritual theories of the country's leadership (for whom a retreat could easily be described as a mere "change of course") was simply cheap comfort, blinding the people and dulling their powers of reasoning. Hopes of that sort are probably safer not held at all.

Social scientists, who have as their tools only imagination and words, can produce neither a vaccine against COVID-19 nor medicines to treat it. However, while people in this occupation are limited in what they can do, it is not without value. Historians, for example, avoid the general tendency of interpreting historical materials in ways that serve either themselves, publishers, or the state, or of making them fit neatly into grand narratives of hope. This has drummed into them the skill of reading historical materials with an open mind. Their training allows them to dispassionately sort out the hopes that people cling to using similar events that have occurred in the past as a guide. This bears no connection to scientism or moralism. Happily, I work in the field of environmental history studying the relationships between humans and nature (particularly microbes). Through such work, I hope to obtain at least some clue as to how we might live through the present circumstances.

2 Should we put our hopes in the state?

Let us first consider the hard facts.

COVID-19 has divided both the world and Japan. To begin with, the fact that few people in Japan have become infected is mainly due to the low levels of testing and gives little cause for celebration. Sadly, those who, until recently, were clamoring for the Tokyo Olympics to be held in July have created a baseless optimism amongst Japanese society. Yet, whether or not the Olympics will be postponed, the number of new infections in the capital is rapidly increasing. Globally, more and more infections and deaths have been reported beyond the aged and critically ill groups. Additionally, COVID-19 has damaged not only people's health, but their confidence in the state, their families, and the future. Although, perhaps the foundations had already begun to shake prior to the outbreak itself.

First, the state.

In times of crisis, people cling to the voices of authority emanating from their leaders as the ultimate source of hope. They abandon their own thinking and entrust themselves to leaders, be they governors or prime ministers.

If the leaders of the collectives to which we belong, particularly state leaders, had released information to their constituents wholly and without concealment, the constituents themselves would undoubtedly be capable of determining a course of action based on the data. Leaders who are tolerant of differing views also enable more creative solutions to emerge. Organizations which do not falsify data, or make subordinates falsify data, take a serious view of history, and give the proper respect owing to documents that will be left to posterity. They may even, perhaps, prevent avoidable deaths. Countries led by accountable leaders are more likely to alleviate the anxiety felt by those fighting in the front lines against the virus, such as nurses, caregivers, childcare, and service industry workers. If we had chosen leaders capable of adapting to the changing nature of a crisis, who answered journalists' questions and who did not suppress unpopular opinions, the people may have been able to act with a sense of conviction. A government that spends tax revenues on research and education to contribute to humanity's store of wisdom, instead of being compelled to purchase goods from the United States that are utterly useless in an "emergency," may have actually been able to properly respond to the pandemic and to propose scientific policies that, at the very least, would not become a hindrance.

Sadly, the Japanese government, and governments like it overseas, remain deaf to the myriad criticisms we have raised and have failed to make any effort to perform to the standard described above. The notion that faith in such a government will save us is utterly demolished by the words written in the shaking hand of Toshio Akagi, moments before his suicide, and published in the March 26 *Shūkan Bunshun* ("In the end, subordinates get their tails cut off.... What kind of a world is this?") and by the shockingly lax words of government politicians in the Diet. The astounding fact that this administration still has a 45.5% approval rating only makes matters worse (Kyodo News Opinion Poll, released March 28, 2020).

Moreover, in the wake of the state of emergency declaration, the Diet gave to this cabinet, of all things, the authority to restrict people's basic human rights. History records any number of instances whereby leaders, under

the banner of protecting lives, use such declarations for their own purposes. How foolish must we be to take an optimistic view of the crisis under the current government?

3 Should we put our hopes in the home?

Second, the household.

If the state cannot be relied upon, then the household shall be burdened with decisions of life and death. Nothing is closer, more dependable or a source of greater comfort than one's family. Given that close physical contact is unavoidable within them, families may even be said to share a common fate. Yet, parents who are unable to work from home are compelled to leave their elementary school-aged children at home and struggle with the anxiety and guilt of doing so. Moreover, asking one's aging parents staying separately to help out, and thereby exposing them to the risk of infection on their way is, frankly, disturbing. More people are dismissed from their jobs due to poor economic conditions. In the end, neither the economy nor the conditions for bringing up children are improving. Nor is there any guarantee that homes are safe.

But were these homes safe for children to begin with? I am not asking whether or not they should be, but whether they are. In Japan, one in seven children lives in poverty. The results of policies that have created such an economic divide become apparent during such times of crisis. In *School Lunch – A History* (Iwanami Shoten, 2018), I wrote that even during the period of rapid economic growth, a large number of children got by with the daily nutrition afforded by their school lunch. Nowadays, it appears that this final source of sustenance for children is to be discontinued.

Even in homes that can provide the minimum three meals a day, danger remains. According to *Courrier Japon* (March 29 ①), “Since the March 17 stay-at-home order there has been a possible increase in domestic violence. A nearly 32% rise in domestic violence was reported in one week in the area under the jurisdiction of the Paris police, and a 36% rise in regions overseen by the National Gendarmerie.” This is not just a problem for France, where domestic violence against women was already a social problem. In Japan as well, many families who are unaccustomed to spending long periods of time together under the same roof are likely experiencing a somewhat unpleasant atmosphere. For children who ordinarily experience abuse, the home must be a prison from which the urge to escape is stronger than ever. And it is not only children; wives subjected to their husbands' violence and who cannot easily leave now find their own homes akin to prisons. It is also perfectly possible that family members who become infected will go missing in the future.

If households become dysfunctional, people must then rely on the local community. Sadly, however, the places that once may have supported the socially vulnerable have had their operations either restricted or halted due to COVID-19. Amidst the fear of infection, local community organizations, be they PTAs, neighborhood committees or NPOs, are struggling to render effective assistance. Children's canteens and school lunch services are largely closed, leaving young stomachs and hearts to go empty.

Moreover, in the event of a large-scale flood or earthquake of the type that have occurred frequently over the recent years, local emergency shelters would undoubtedly become hotbeds of infection. Accordingly, local governments must immediately produce guidelines in relation to emergency evacuation procedures.

4 Spanish influenza and COVID-19

As COVID-19 is now looking more likely to spread than to be suppressed, the Spanish influenza, much more than SARS or Ebola, is the historical event that may help us pick out some useful principles for action from amongst all the wishful thinking. That pandemic occurred 100 years ago. Although the USA was the epicenter of the disease, the Spanish influenza received its name (unjustly, for Spaniards) from the fact that information about it spread from Spain, a neutral country during the war that did not practice wartime censorship. For three years between 1918 and 1920, the virus swept the world in three waves. The smallest estimates put the death toll at 48 million, while the largest put the figure at 100 million (Taro Yamamoto, *Kansenshō to bunmei – Kyōsei he no michi* [Infection and civilization: The path to symbiosis], Iwanami Shoten, 2011). The Spanish influenza plunged humanity to the furthest depths of fear. Despite all that, this historic episode is largely ignored by textbooks and the various historical societies. While researching the famine in First World War Germany

(*Kabura no fuyu – Dai-ichi sekai taisen doitsu no kikin to minshū* [The turnip winter: Famine and the masses in First World War Germany], Jimbun Shoin, 2011) I encountered some material on the Spanish influenza, which tormented many private citizens, and I could not help but notice more than a few similarities with the current pandemic. Both were caused by viruses, both ignored international borders, and both became global in scale. In both cases, people died in groups on large vessels, the initial responses to both ended in failure, both led to the spread of false information, both killed prominent individuals and the conditions surrounding the outbreak of both are also alike.

Nevertheless, during the Spanish influenza pandemic, there was little technical ability to isolate the virus, whereas we in the present are at an advantage in relation to medical technology. Conversely, the then world population of 1.7 billion people would have been an advantage compared to the current figure of 7.5 billion. A feature of the present era is the vast amount of information disseminated via different forms of media other than newspapers, including social media, though whether this is an advantage or not I, frankly, do not know. The WHO did not exist 100 years ago, a fact which ideally should mean that we now have an advantage, though as the news suggest, this is somewhat difficult to believe.

A hundred years ago saw the era of rice riots in Japan and the Siberian War (the Siberian Expedition). At that time, hitherto unimaginable movements of people occurred across Asia, Europe, and North America. This was, after all, right in the middle of the First World War. Scores of young men crossed over in large ships to Europe from America where the influenza had already been circulating from the spring of 1918. With their poor ventilation and crowded conditions, infection quickly spread aboard the ships and many young passengers, once the very picture of health, died one after another. In Europe, many people from Asia were employed as laborers. Workers from the colonies of French Indochina travelled to France, those from India and Burma to England and many Chinese laborers arrived in Europe (For an account of the Southeast Asian experience of the First World War, see Shinzo Hayase, *Mandara kokka kara kokumin kokka he – Tōnan ajia-shi no naka no dai-ichi sekai taisen* [From mandala nations to nation-states: The First World War in Southeast Asian history], Jimbun Shoin, 2012). The infection soon spread to Asia, with some 400,000 people believed to have died in Japan.

Two reasons why so many soldiers succumbed to the disease once it had spread across the globe were the poor sanitary conditions and lack of adequate nutrition during the war. According to environmental historian Alfred W. Crosby, soldiers were forced to work in poor sanitary conditions even when unwell, making them particularly prone to infection and deteriorating health. Food shortages on the home fronts, not surprisingly, also made them highly susceptible to the virus. Moreover, considering the fact that tooth decay was a significant problem amongst soldiers (Ruchel Duffett, *The Stomach for Fighting: Food and the Soldiers of the Great War*, Manchester University Press, 2012, p. 21), the poor condition of their oral cavities, the virus's main habitat, must have been an additional factor.

The fact that there is no global war currently underway does not, however, give us cause for celebration. The incessant movement of people during the last few years has been occurring on a different scale altogether, the biggest indicator of which is the recent advent of "overtourism." Tourists have become the new soldiers, travelling not by ship but in airplanes, the frequency of travel and sheer numbers of people are of an order of magnitude higher. This is another characteristic of our present situation.

5 Lessons from the Spanish influenza

The Spanish influenza holds lessons for us in the present. These can be summarized along the lines of Alfred W. Crosby's book, *America's Forgotten Pandemic: The Influenza of 1918* (Japanese translation by Hidekazu Nishimura, Misuzu Shobō, 2004). First, infectious diseases may come in more than one wave. The Spanish influenza had a tendency of reappearing and came in three waves. The first wave went around the globe in four months, and the second was deadlier than the first. As is the case with the coronavirus disease, we must not let our guard down even if the number of new infections drops. Viruses can mutate. The suppression of a less virulent strain may lead to the emergence of a deadlier strain. I do not know why politicians and the media believe this pandemic will be over in one wave. As a cursory study of modern history makes it clear, there is absolutely no guarantee that the Olympic Games can be held next year.

Second, the Spanish influenza became more rampant and more dangerous because people refused to stop working when they felt unwell, or they forced other people to do so. This makes sense when we think of the sanitary conditions in which soldiers found themselves, and the fact that they were unable to complain against this problem. Japan's workplace culture, which has led to deaths by overwork and even suicides, can only work against us in this regard.

Third, we must not be negligent in caring for our health care professionals. Many of those who survived the Spanish influenza spoke of being saved by the dedicated care of their doctors and nurses. It is difficult to imagine these professionals trying to save their patients from dying in front of them even when they themselves are at risk. We must not forget that Japanese nurses, despite their low wages, are putting their own lives on the line to fight the current virus. Not once in the world's recent history have nurses or other care professionals been paid back the debt that is owed to them.

Fourth, during the Spanish influenza, governments at war restricted the flow of information and the mass media went along with them. This was a significant cause of the explosive spread of the influenza. The open disclosure of information allows for its rapid analysis and advances the identification of the sources of infection.

Fifth, notwithstanding the fact that the Spanish influenza produced more deaths than the First World War, in the later years the virus disappeared from many historical accounts and from people's memories. Historical scrutiny of that pandemic has been insufficient as a result. To prevent the same from occurring in the post-COVID-19 world, we must ensure that all data are well stored so that a proper historical analysis can be done. As was very much the case after the Spanish influenza, once this crisis is over, some will likely seek to use their triumph over it as a pretext for acquiring power and profits. We now observe obnoxious events popping up to celebrate "victory" over the virus. But can such a victory be had so easily? Ever since humanity began farming land, keeping livestock, building fixed settlements and constructing cities, we have been fated to live alongside viruses (see James C. Scott, *Against the Grain: A Deep History of the Earliest States*, Yale University Press, 2017). If we are to begin handing out awards, these should go to the medical professionals and health care workers for their dedicated service.

Sixth, the reasoning of governments and people alike, is often clouded by emotion. An interesting example from one hundred years ago illustrates the point: "Such was the virulence of anti-German fanaticism in 1918 that the USPHS (United States Public Health Service) was obliged, in the middle of the fall wave when it had much more important things to do, to test Bayer Aspirin tablets" (Crosby, 2003, p. 216). In essence, a bizarre rumor had spread according to which the Aspirin manufactured by Bayer, a German company, contained the influenza pathogen.

Even now, the suspicion of others has awoken the prejudicial tendencies that lurk deep inside many people. If the world had thoroughly fought against intolerance, we would not see statements like "No coronavirus-spreading Chinese allowed," and the anti-Asian discrimination occurring in Europe and the United States may have been avoided. Or perhaps if politicians were themselves free of such prejudice, they might have maintained the most basic qualities befitting human beings despite the crisis. The loss of such qualities frustrates the sort of international cooperation required to suppress the pandemic.

Seventh, during the Spanish influenza, sanitation workers in the United States contracted the virus, garbage trucks stopped working and rubbish piled up in the cities. This inevitably worsened sanitary conditions in metropolitan areas. The collapse of healthcare systems must be avoided, but the collapse of sanitation systems poses an even greater danger.

Eighth, as the infection spreads amongst policymakers and bureaucrats, the functions of government may be hindered. The then President of the United States, Woodrow Wilson, became infected with the Spanish influenza, coming down with a fever of 39.4 degrees and was admitted to a hospital in the middle of a four-nation conference with Great Britain, France, and Italy. During his absence, the tone of the meeting changed considerably, and it went on to establish the punitive measures against Germany in the Treaty of Versailles.

6 The judgement of Clio

We cannot deem the danger to have passed once the coronavirus disease is suppressed. What is truly frightening is not the virus, but the people who are frightened of it. Unlike Japan's Prime Minister, German Chancellor Angela Merkel addressed in a March 18 speech about the painful and unprecedented nature of having to restrict basic human rights. For Merkel, who was born in East Germany, the right to move and travel freely was hard won (see Mikako Hayashi-Husel's Japanese translation of the speech ②). Nonetheless, I greatly doubt that this will continue to be an exception. The current pandemic will most likely trigger a significant transformation in people's consciousness. As their fear of risk increases in the face of unforeseen circumstances, nations may take on more autocratic styles of isolated governance via the retention and management of big data, or may seek a more self-serving, nationalistic model of statehood. Yuval Noah Harari sees cautious optimism for the possibility that the ideals of the European Union will be renewed in the wake of the pandemic. I, on the other hand, can envisage a rapid decline in the value of these ideals, for the reasons stated above (Yuval Noah Harari, "In the Battle Against Coronavirus, Humanity Lacks Leadership," *Time*, March 15, 2020 ③). Harari calls on countries not to isolate themselves but to cooperate, which I completely agree with. Nonetheless, the international community is now full of countries utterly mired in nationalistic thinking. As such, the international order and democratic nations may be on the path to a genuine decline, just as they appeared to be prior to the pandemic.

Furthermore, though this was not mentioned by Harari, a market has emerged for fear-suppressing products such as disinfection services that claim to "neutralize" the novel coronavirus. People have become even more obsessed with the need for cleanliness, already widespread at the best of times, and this threatens to kill off those bacteria and viruses that are useful to the human body, weakening the body's microflora and potentially exposing their immune systems to negative effects. Following the First World War, poison gas was redeployed for use in consumer products as insecticides (One such gas, Zyklon B, would later be used in the Holocaust). That these were used to disinfect public transport and public buildings is probably due to the havoc wreaked by the influenza (see Tatsushi Fujihara, *Sensō to nōgyō* [War and agriculture], Sueisha International Shinsho, 2017).

A useful description of the damage caused by our culture of disinfection can be found in Martin J. Blaser's book *Missing Microbes: How the Overuse of Antibiotics is Fueling Our Modern Plagues* (Henry & Holt, 2014). It is possible that, by not allowing specific viruses to survive in the body over a long period of time, we will lose the ability to protect ourselves from other pathogens. Furthermore, when the obsession with cleanliness becomes linked with racism it becomes even more dangerous, as we see in the case of Nazism (H.P. Bleuel, *Das saubere Reich*, published in Japanese as *Nachi doitsu – Seiketsu na teikoku* [Nazi Germany – The clean empire], translated by Kaori Ojima, Jimbun Shoin, 1983).

We can thus conceive of any number of bad outcomes. Yet the denizens of world history have not once, from reflecting on such crises, produced guiding principles to avoid repeating future crises. For those of us who hold the blood-stained baton of history, surely now is the time for us to search for principles that may be useful in the future.

First, nobody should be prevented from performing their everyday habits – mouth rinsing, hand washing, brushing teeth, face washing, ventilation, bathing, meals, cleaning, and sleep – by anybody else. This might seem obvious, yet history shows us that war and the movement by ships and trains that war requires make it difficult for people to perform these activities. History likewise shows that keeping human beings confined or imprisoned creates problems too, something we are well aware of. Even if we are busy at work, those in charge, in addition to not preventing their subordinates from carrying out these basic preventive measures (such as brushing one's teeth during lunchtime, or keeping shared garbage bins and toilets clean and tidy), should themselves also practice it. Eating well, laughing, and sleeping well are all essential to keep the immune system strong, and we would do well to reconsider our focus on work at their expense.

Second, there should be absolutely no self-restraint, or imposed restraints, when it comes to escaping from or objecting to violence or the unreasonable demands made within organizations or in the home. Local governments must quickly make preparations to deal with these issues. In the twentieth century, the notion of *Burgfrieden* (literally "castle peace," the truce amongst political parties agreed to in Germany during the First World War) became the norm during times of all-out war, yet the silencing of grievances will likely be the very thing that worsens the impact of COVID-19. In a March 16 televised address, the French President, Emmanuel Macron, repeatedly stated that "France is at war," while US President Donald Trump has no qualms calling himself a

“wartime president.” This type of language is a double-edged sword. While it does raise the sense of urgency, it is also extremely effective at suppressing opposing views.

Third, whether it is a war, the Olympics, or an international exposition, pouring the nation’s soul into an event that cannot easily be cancelled or postponed due to disaster and disease is a huge waste of tax revenues and time. All such events should be managed simply in accordance with their fundamental spirit. Particularly countries such as Japan, an archipelago frequented by natural disasters, should manage these events in a way that allows the possibility of their cancellation.

Fourth, we must consider what the danger of becoming infected with COVID-19 entails for those who, in the shadows of today’s globalized economy, have had to live as if they were already at war. In times of crisis, we easily forget the obvious truth that such is life for those who live in perpetual crisis. For people living near military bases, where a military aircraft might come crashing down at any time, is the risk of a nervous breakdown caused by the roar of machinery, or of being involved in some other accident, lower than the risk of contracting the coronavirus disease? For those who were exposed to radiation in the Fukushima nuclear disaster and who are still living in emergency accommodation, is the risk of developing a new disease lower than the risk of COVID-19? For workers who are constantly harassed by their bosses, is the risk of death by overwork, suicide or depression lower than the risk of dying from COVID-19? Is the possibility that homeless people suffer illnesses less than that of their catching COVID-19? For single mothers working on temporary contracts, is the prospect of working themselves into the ground and burdening their children less frightening than COVID-19? Is the risk that a child who struggles at school is psychologically damaged by their schooling less than the risk of them developing COVID-19 symptoms? Perhaps those in power have forgotten that every day they expose people to such crises. If we look to recent history, it is easy to see that COVID-19 will, above all, have enormous long-term effects on people who have been driven into vulnerable circumstances.

Fifth, notwithstanding the current crisis, we must not stop protesting against the control of information or its inaccurate communication. Only those who, like Taiwan’s Minister for Health, are both physically and intellectually engaged, who respond honestly to any question at any time, are capable of bearing the burdens of government. In addition, too many online newspaper articles require users to pay for access even if they contain information that might save lives. Restricting information can result in deaths that might have otherwise been prevented. At the very least, media companies have a responsibility to make articles related to the novel coronavirus freely available.

Japan, like all other countries, is being tested by Clio, the goddess of history. Is Japan worthy of surviving as a nation after the pandemic is over? How will Clio make her judgement? Scholarship and art emerging from the crisis are valuable indicators, and great transformations in both will likely occur in every country. But ultimately, these will not be the critical decider. A low death count will likewise be left out of the final decision. Our test, as I have discussed, will be this: Did we fight against those who would debase and dispose of human values? Did we defeat that savagery which, overcome by emotion, relieves its frustrations through witch hunts and attacks on the weak?

In her diary of life in lockdown in Wuhan city the writer Fang records a warning: “The standard which determines whether a country is civilized or not is not the number of skyscrapers it has, whether there are cars rushing around the streets, if it has advanced weaponry, a strong army or advanced science and technology. Nor is it whether the country has rich and diverse forms of art, whether it can hold grand events, if it has magnificent fireworks, if it can make merry in the world with the power of money, or whether it can get its hands on anything in the world. It has nothing to do with any of these. There is but one standard: how it looks after the weak” (for the Japanese translation, see Japan-China Welfare Planning ④).

Precisely in this time of crisis, we need to increase our efforts to meet the challenge laid down by Fang, which asks how we might improve on measures for those who will bear the brunt of the crisis. This crisis will expose both the baseness of human beings and their many day-to-day crises. How prepared are we to fight for those who have been exposed, to an appalling extent, to threats rivalling that of COVID-19? Are we prepared to keep fighting for them after the pandemic? The answers to these questions will decide Clio’s judgement. In a post-pandemic world, any country that boasts of “suppressing” the virus by sacrificing the weak or by shirking its responsibilities may just collapse under the weight of its own shame.

①



②



③



④



* * *

Tatsushi Fujihara

Born 1976 in Asahikawa, Hokkaido, raised in Yokota (now Okuizumo), Shimane Prefecture. Associate Professor, Institute for Research in Humanities, Kyoto University, specializing in agricultural history. Publications include *Kyūshoku no rekishi* [School lunch – A history] (Iwanami Shoten, 2018), *Bunkai no tetsugaku* [A philosophy of disintegration] (Seidosha, 2019), *Torakuta no sekaishi* [A global history of the tractor], (Chuko Shinsho, 2017), *Sensō to nōgyō* [War and agriculture] (Sueisha International Shinsho, 2017), *Kabura no fuyu – Dai-ichi sekai taisen doitsu no kikin to minshū* [The turnip winter: Famine and the masses in First World War Germany], Jimbun Shoin, 2011. Co-authored publications include *Gendai no kiten - daiichi sekai taisen* [The origins of the modern age – The First World War] (4 Vols., Iwanami Shoten, 2014).

