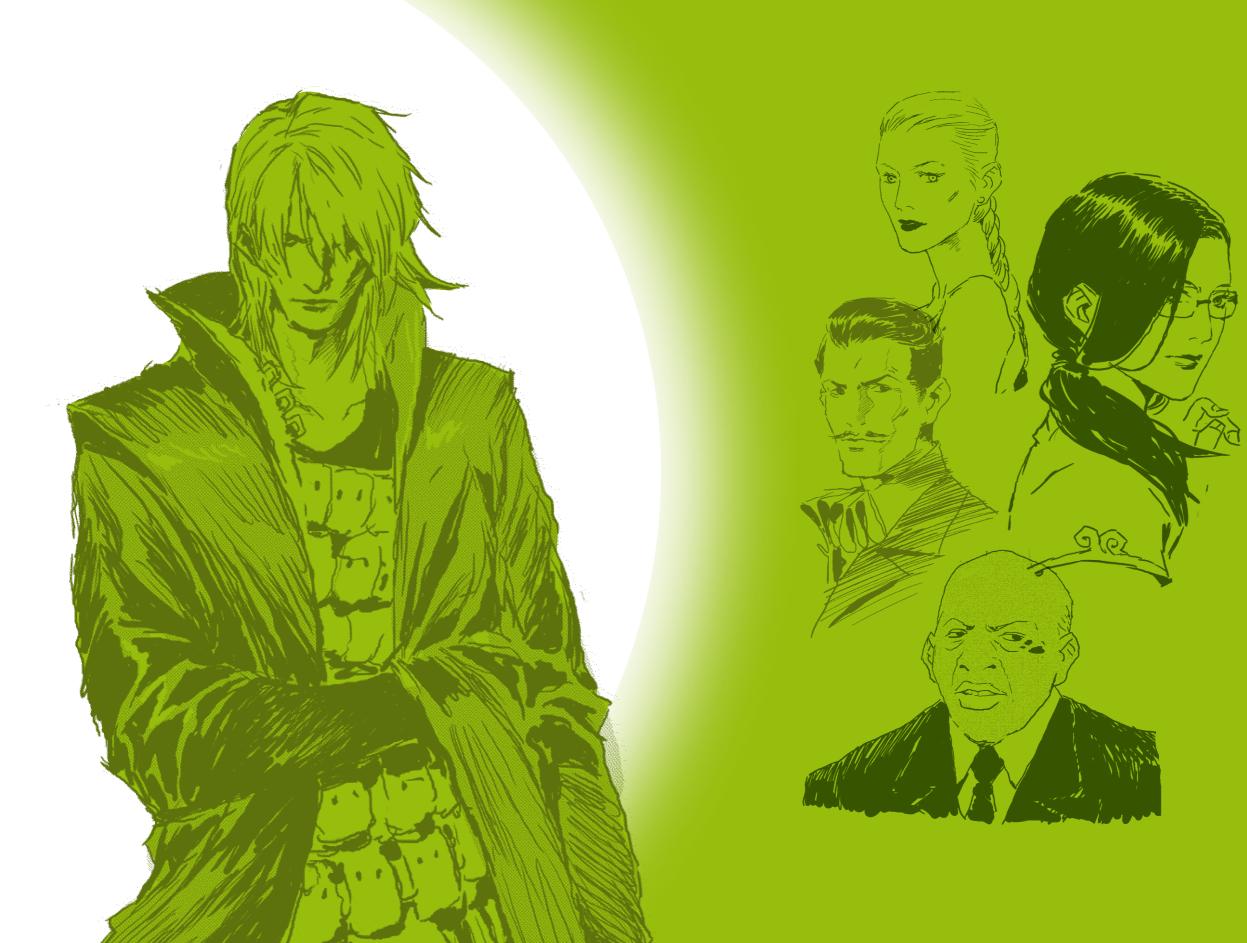


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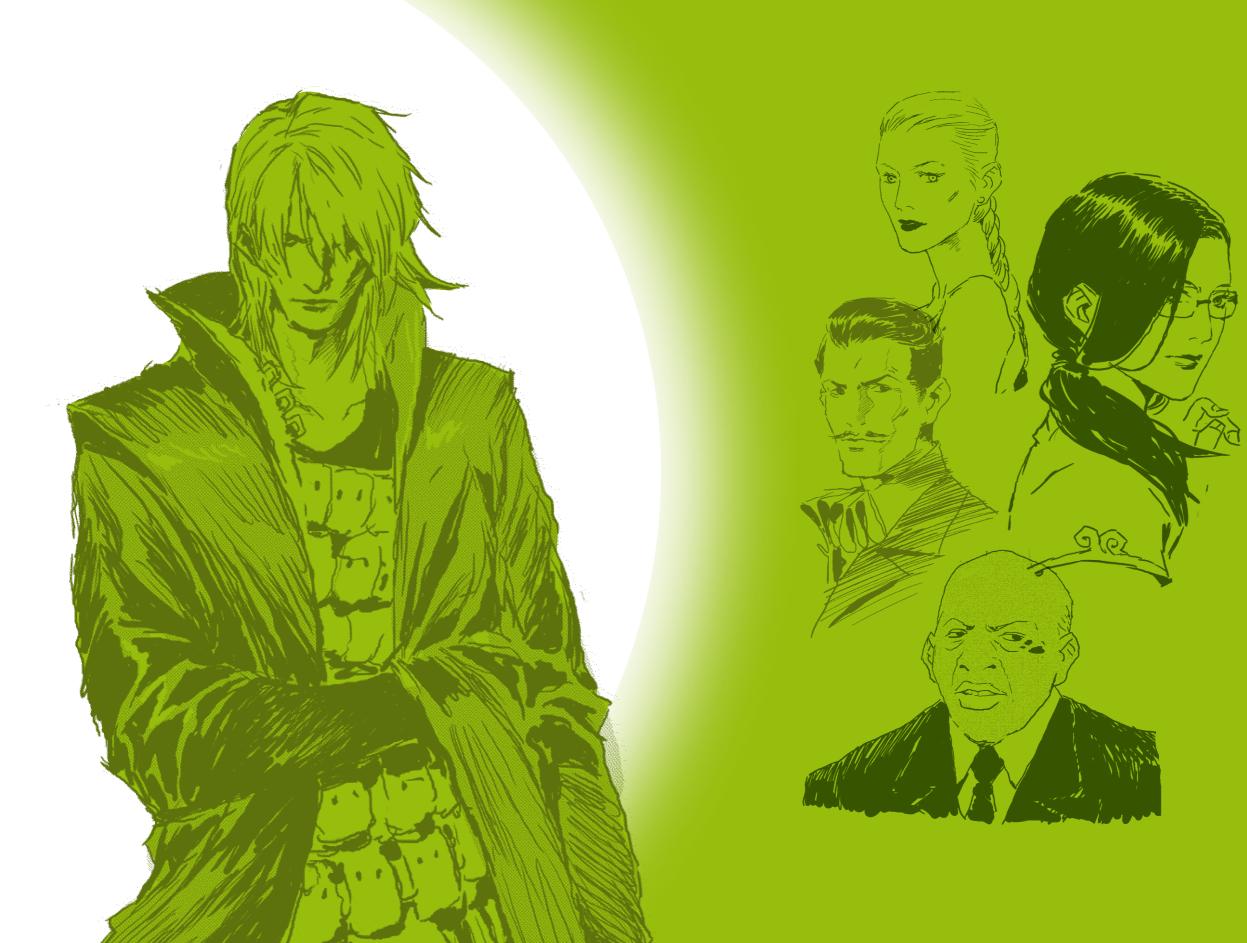
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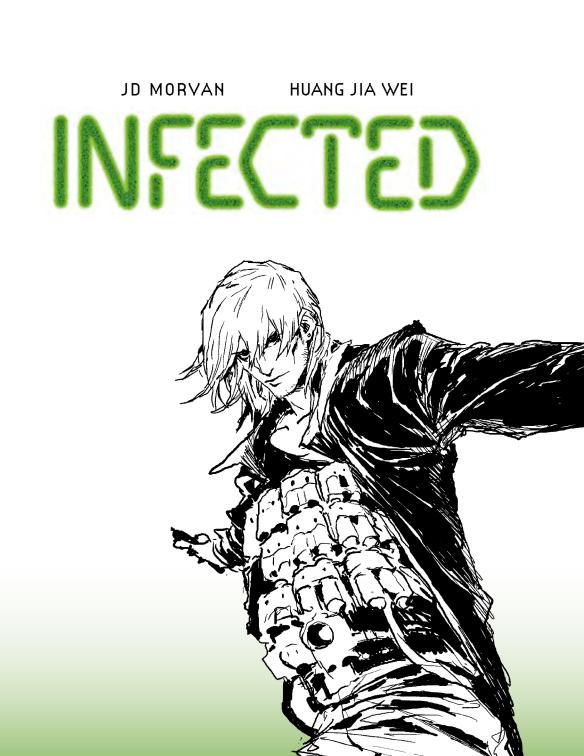
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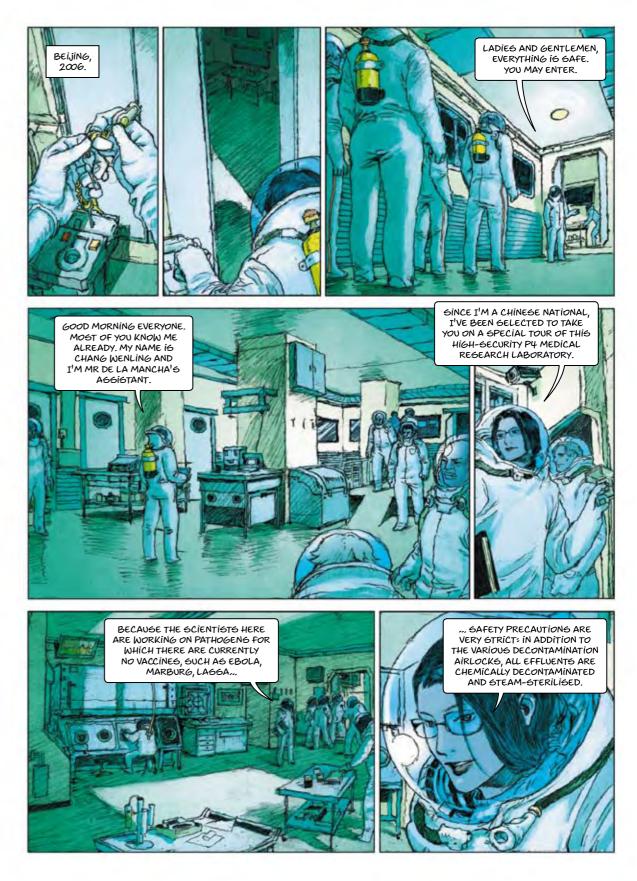
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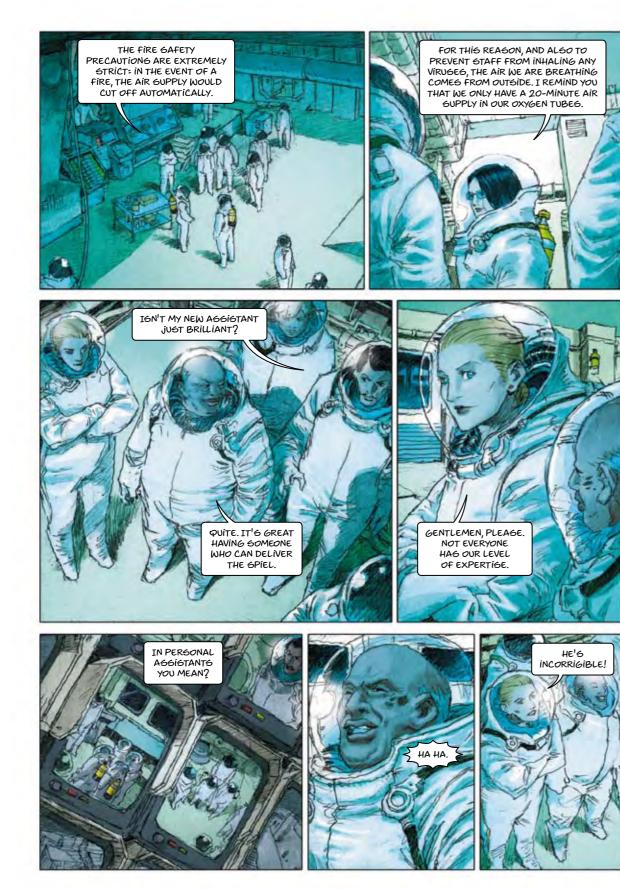
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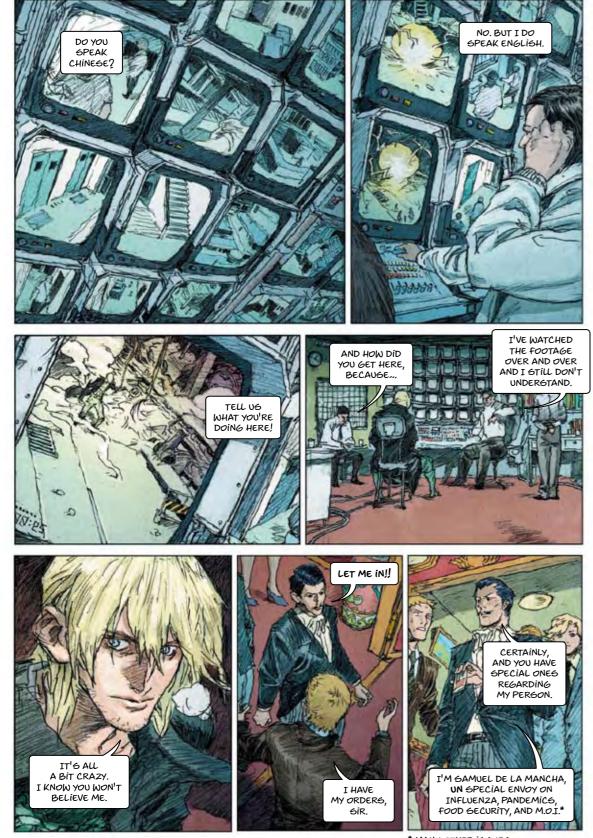




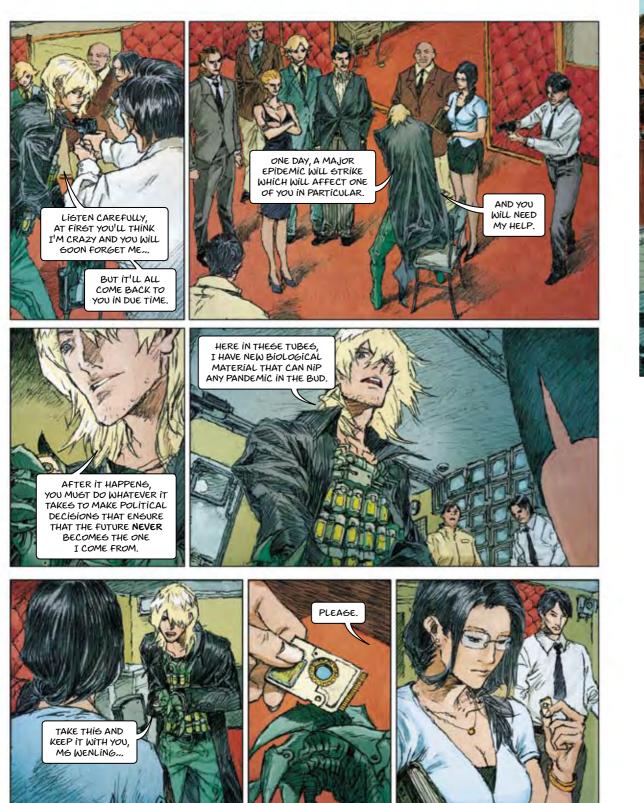










































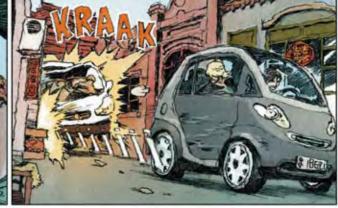
















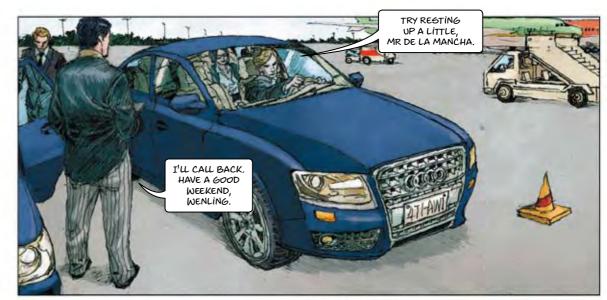












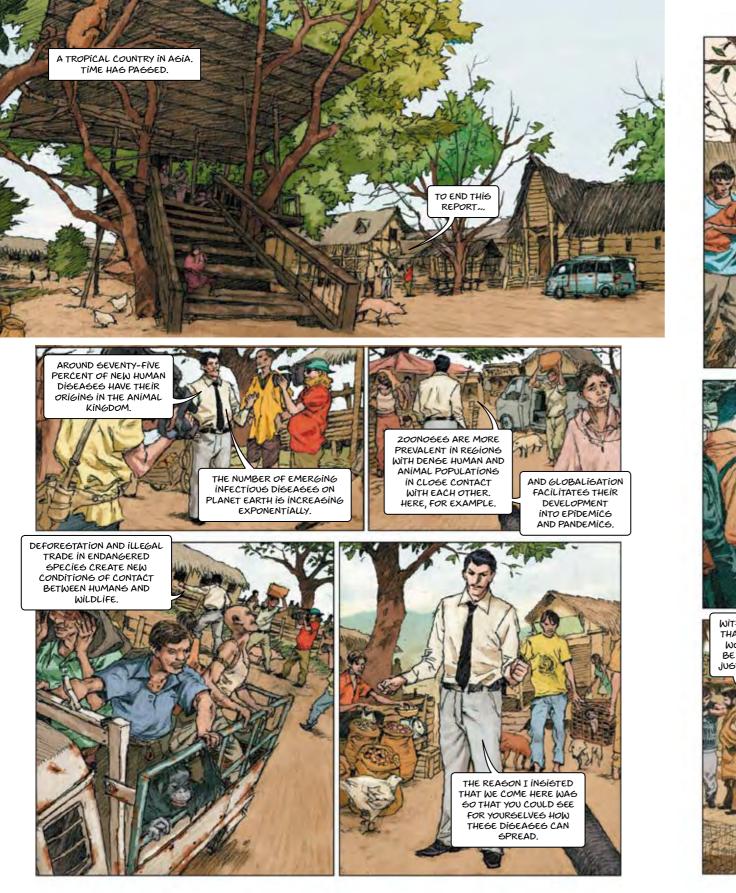




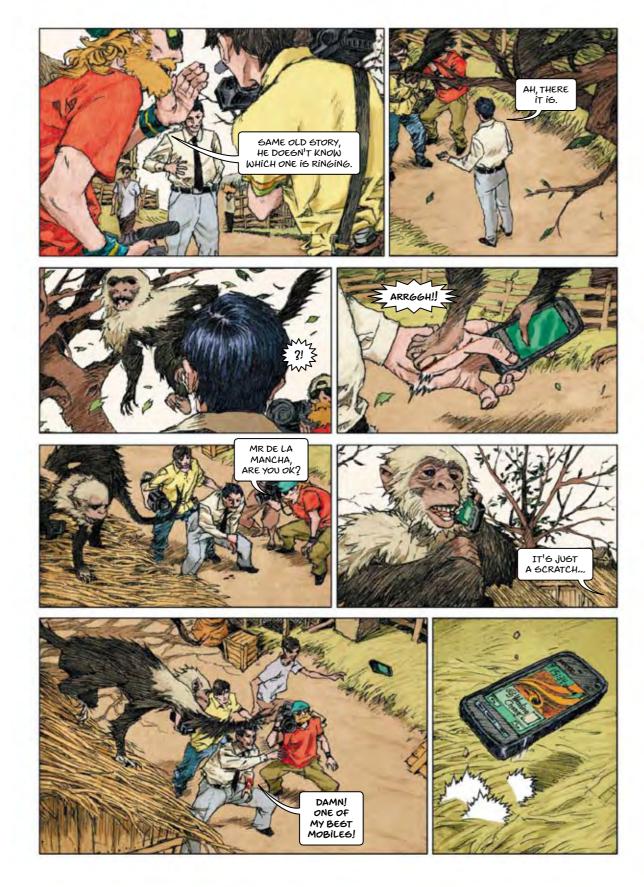










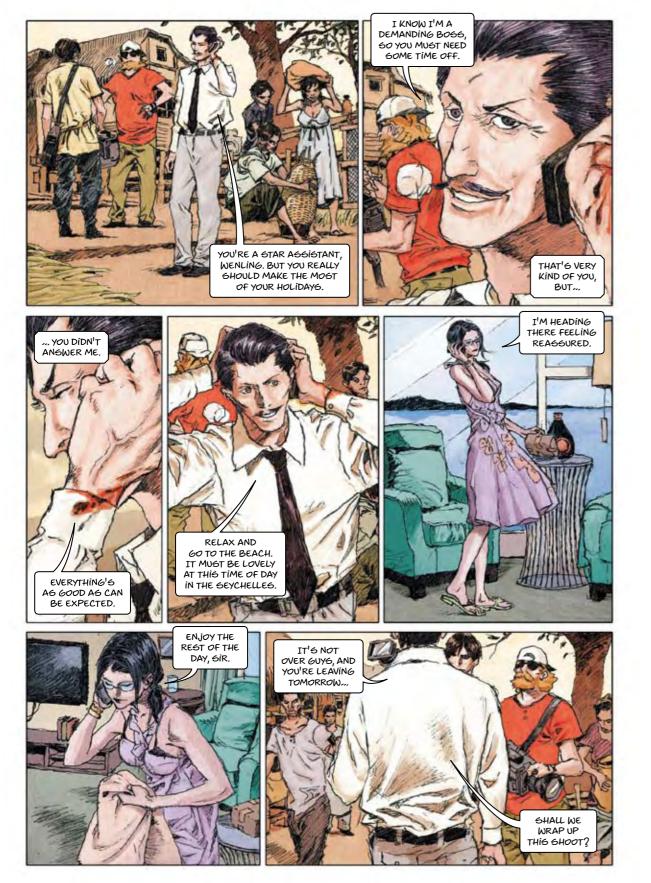




CAME ON.

IF YOUR FILMING

WAS GOING WELL.



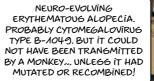
















I'M HÌGHLY CONTAGIOUS, 50 IF I COME INTO CONTACT WITH ANYONE, THE ENTIRE WORLD COULD BE CONTAMINATED.



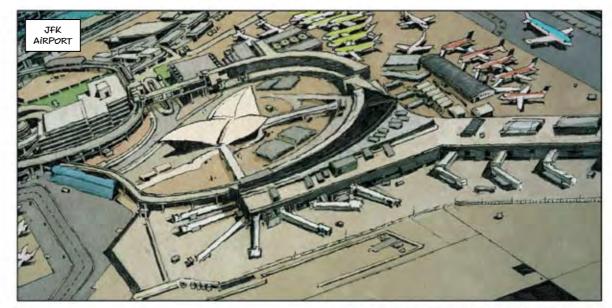


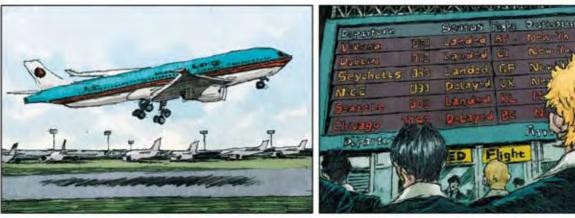


























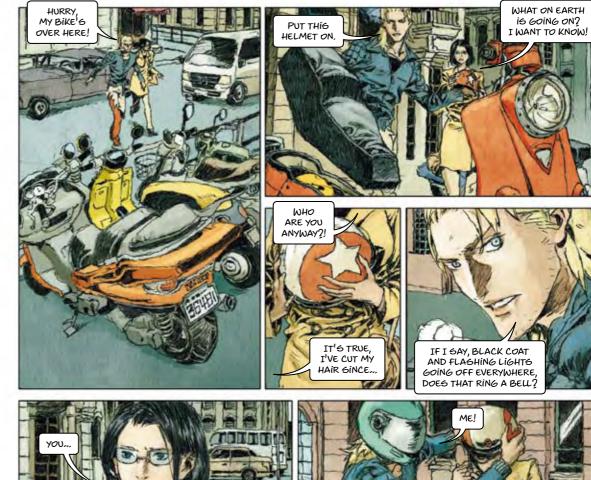










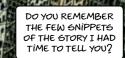


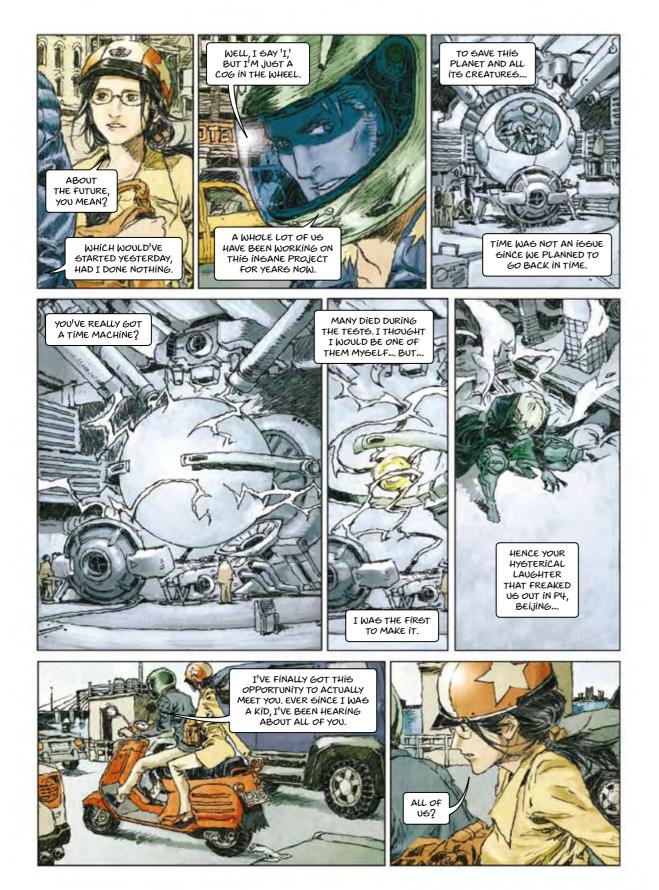


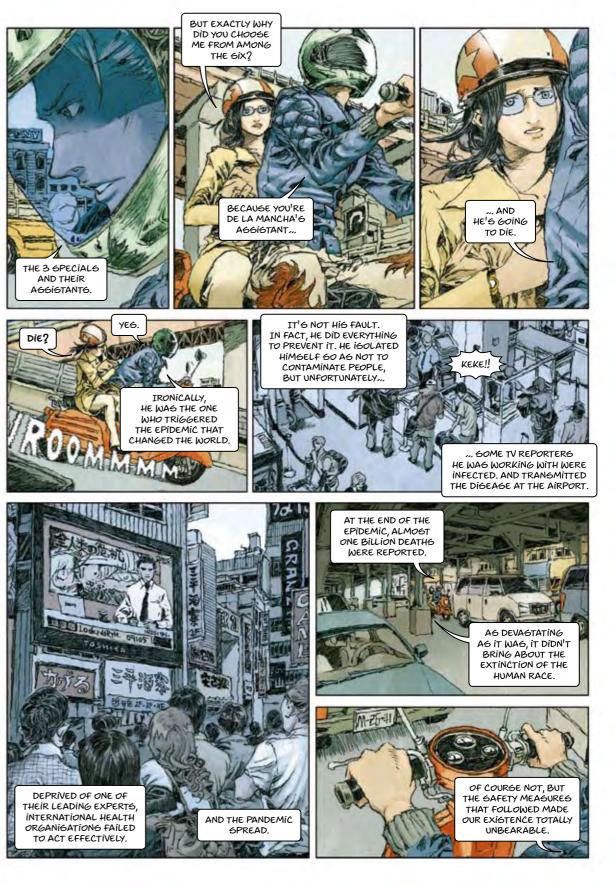


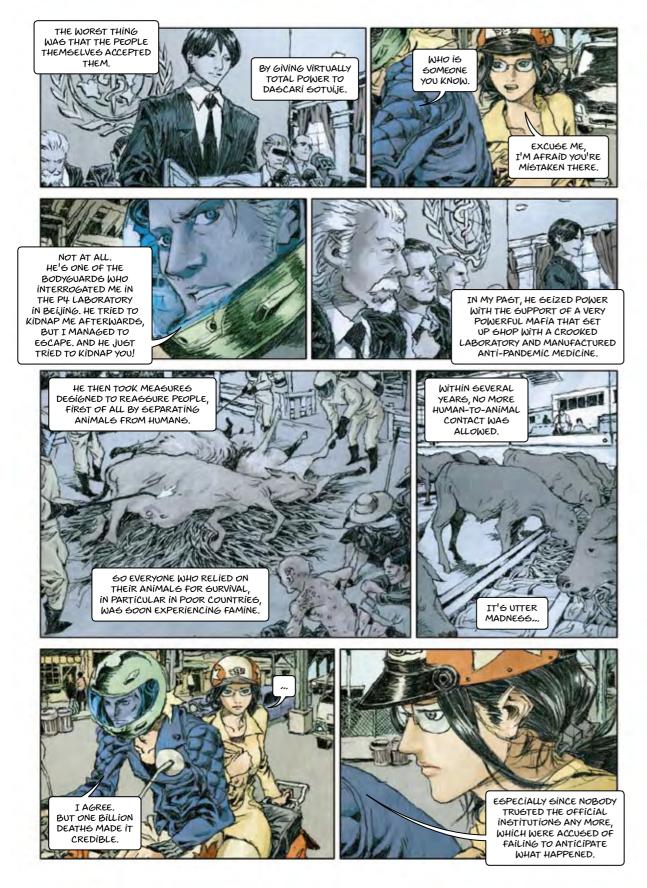


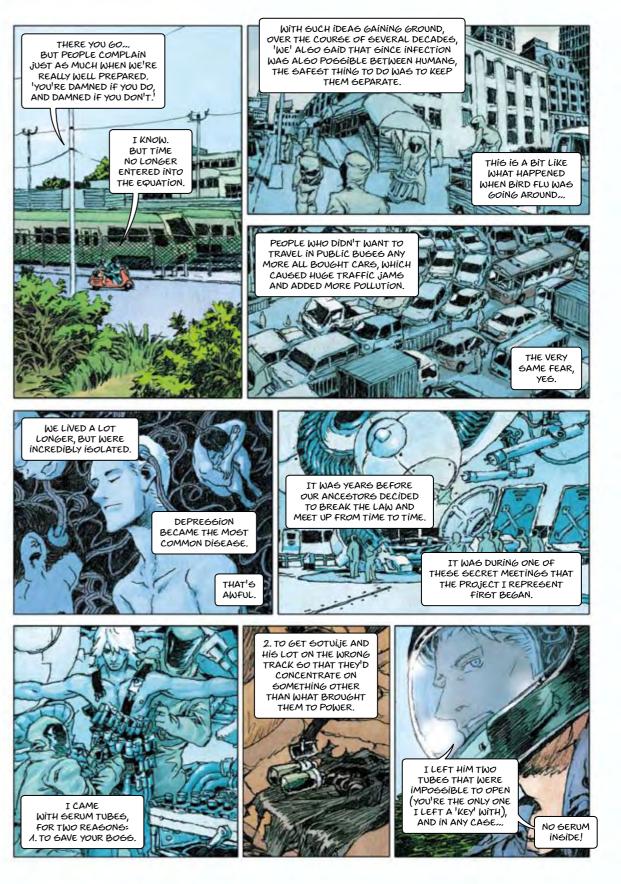


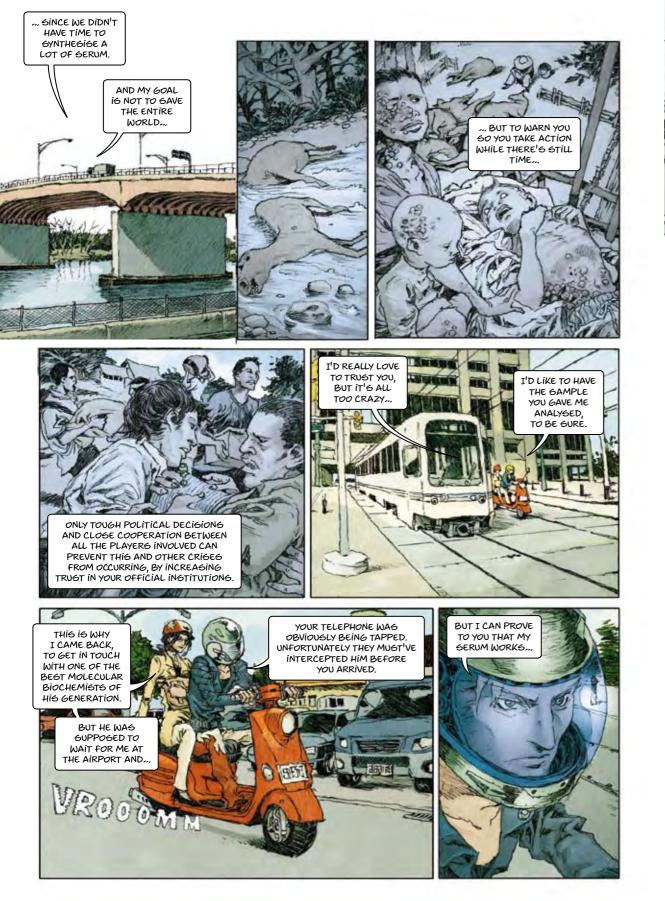


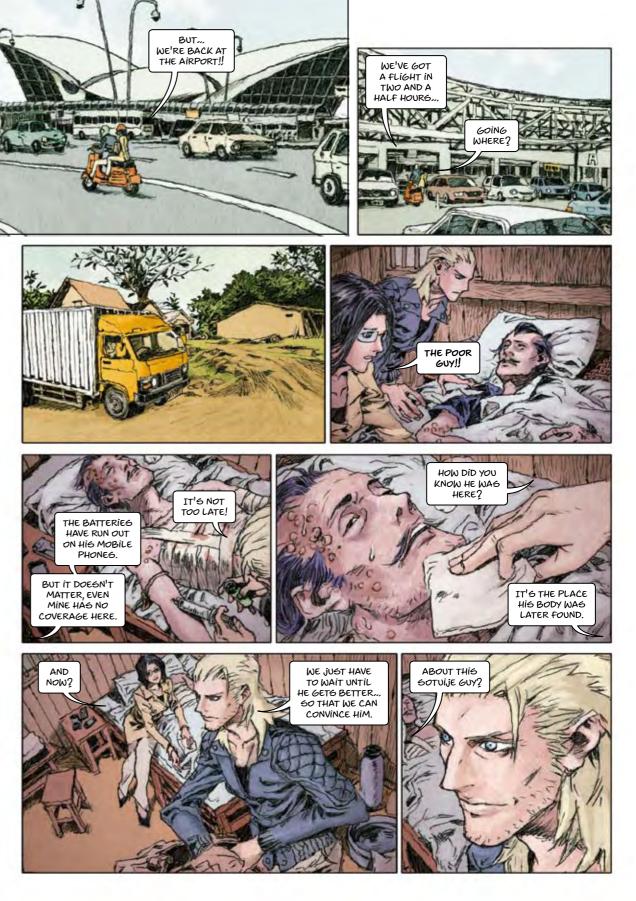


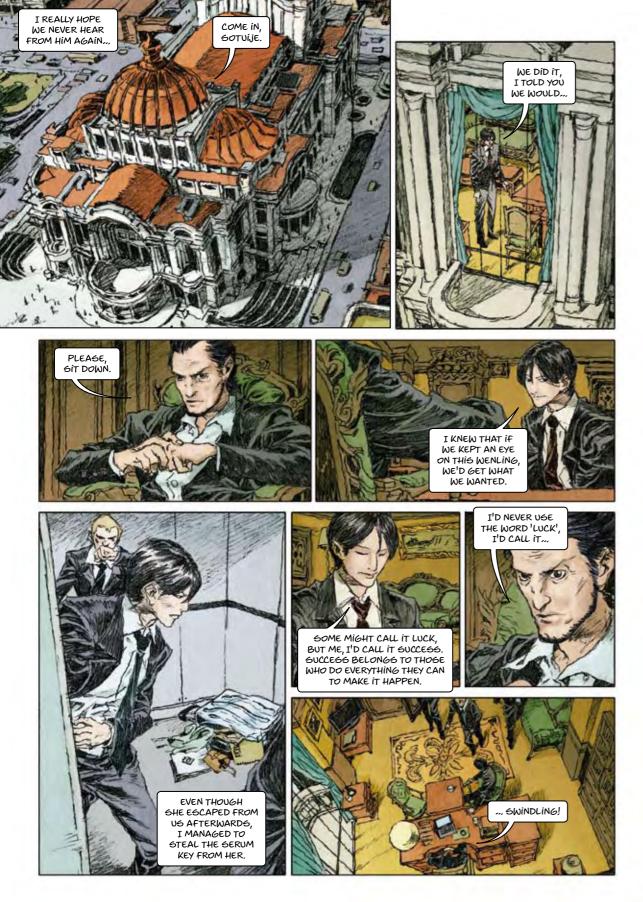




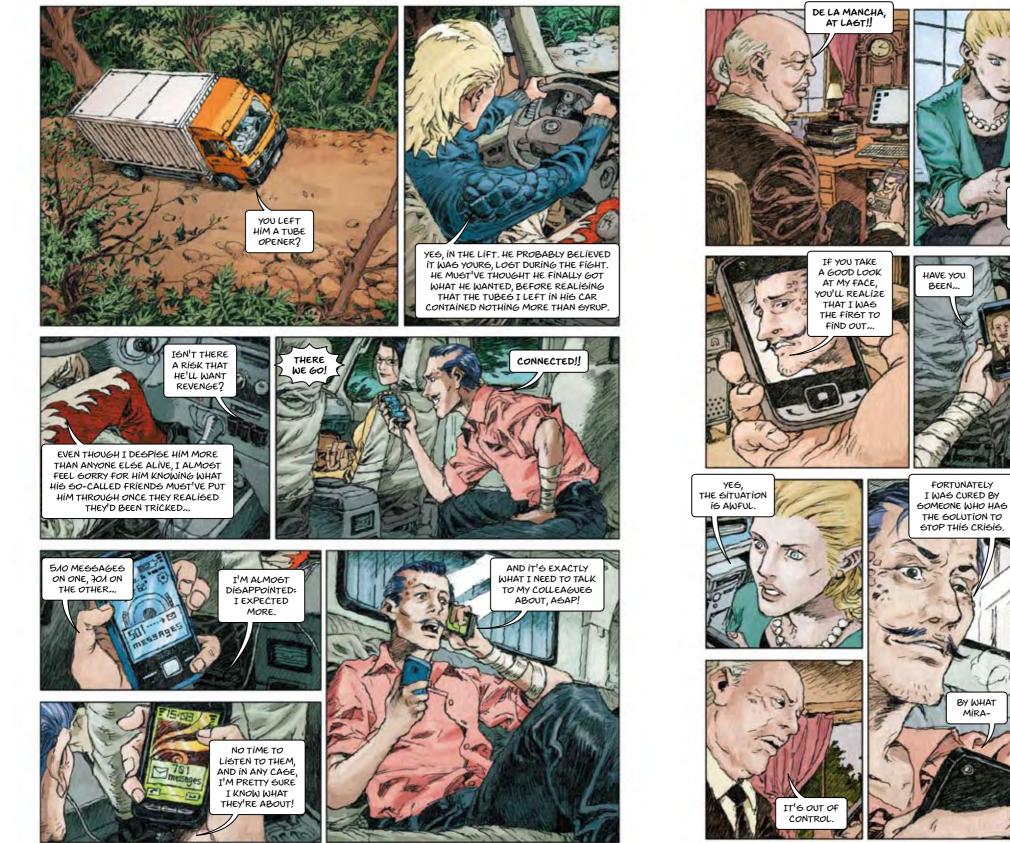








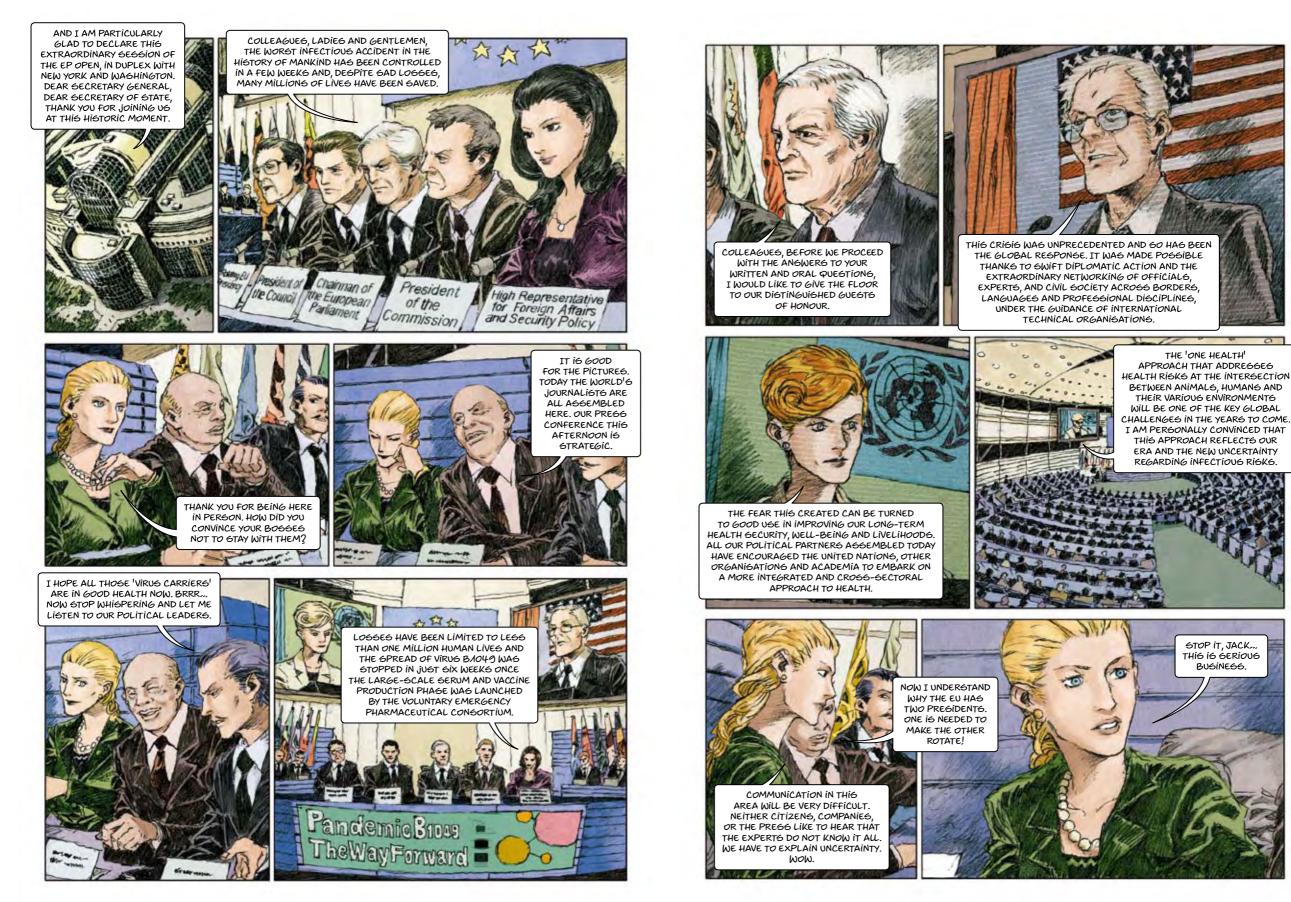






WHERE

THE HECK WERE YOU ?!



GTOP IT, JACK ...

THIS IS SERIOUS

BUSINESS.





SECTORS THAT ARE DIRECTLY OR INDIRECTLY RELATED TO ANIMAL AND HUMAN HEALTH. AMONG OTHER THINGS, IT INCLUDES THE ENVIRONMENT, WILDLIFE AND VARIOUS DISCIPLINES RELATED TO DEVELOPMENT IN GENERAL.

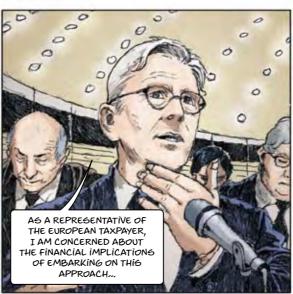


PARTNERG HAVE FLEXIBILITY IN DEFINING THEIR SCOPE OF ACTIVITIES MORE OR LEGG BROADLY. FOR INGTANCE, THE COMMISSION EMPHASISES THE POTENTIAL OF ONE HEALTH TO HAVE A POSITIVE IMPACT ON LIVELIHOODS AND ON FOOD AND HUMAN GECURITY.











PLANNING STAGE.

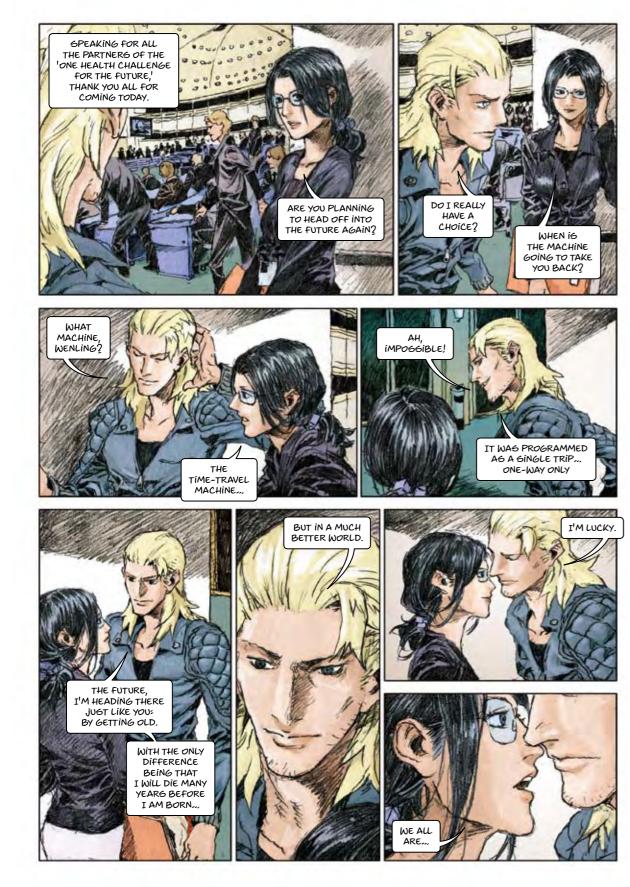


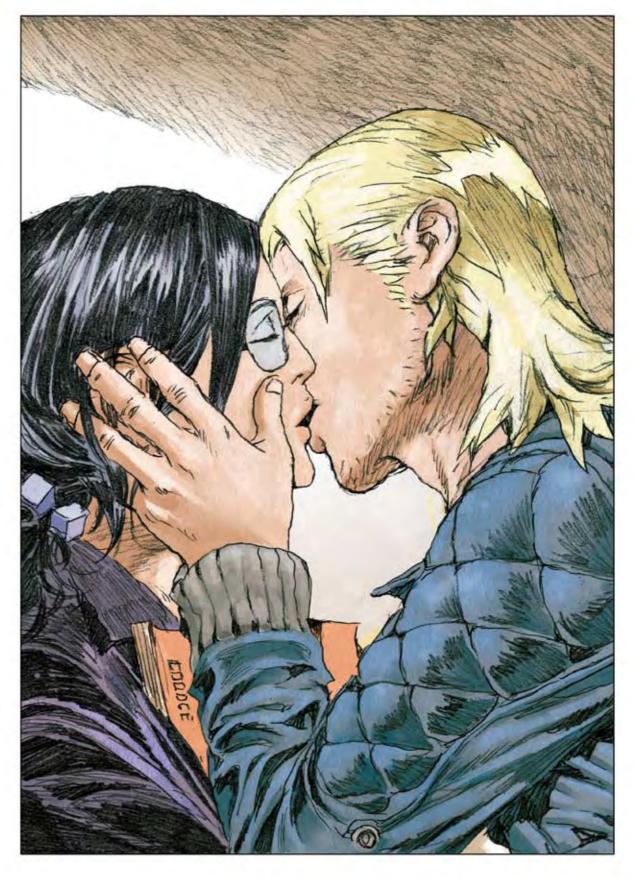




LET'S HAVE DINNER IN THE CENTRE OF BRUGGELG THIS EVENING. I'LL TAKE CARE OF THE BEER, GAM WILL TAKE CARE OF THE WINE - HE IS AN EXPERT -AND CHARLOTTE, WOULD YOU ORDER THE LOCAL CUISINE FOR US?







BACK TO REALITY

Ms Chan Wenling and her friend-from-the-future are engaged in an exciting adventure to convince people to act together and save the world. While the story may be fictional, it is nevertheless intertwined with some factual information. This section offers further reference for some of the story's 'real life elements' and allows you to discover the scientific facts behind the fiction!

1_ Beijing 2006

The first International Ministerial Conference on Avian (Animal) and Pandemic Influenza took place in Beijing in January 2006. It was hosted by the Chinese government and co-sponsored by the European Commission (the initiator of the conference) and the World Bank.

The main outcomes of this event were:

- A global agreement (The Declaration of Beijing) endorsed at the highest level by more than 100 countries and representatives of international and regional organisations, agencies, the private sector and civil society;

A commitment to:

Develop and implement integrated national plans at country level to combat highly pathogenic avian influenza (HPAI);

Build a long-term strategic partnership between the international community and the countries affected or at risk;

Share information and biological materials related to HPAI;

Increase cooperation on global research, including research on vaccines and antivirals;

Evaluate the results and the impact of these efforts.

Pledges of assistance to combat HPAI amounting to a total of \$1.9 billion, of which approximately \in 214 million was provided by the European Union in the form of grants.

More information on the Beijing Conference is available at: www.eeas.europa.eu/health/index_en.htm

in particular under: ec.europa.eu/world/avian_influenza

The outcome and impact evaluation of the Global Response to avian influenza is available at

www.eeas.europa.eu/health/docs/health_grai_en.pdf

2_ P4 Laboratory

The acronym P4 stands for Level 4 pathogens and biosafety agents, meaning micro-organisms with high pathogenic potential. P4 laboratories are very high-security compounds where highly pathogenic, often very contagious and deadly infectious agents are manipulated for research. Recent examples of pathogens handled in P4 laboratories include the viral agent of severe acute respiratory syndrome (SARS) – a coronavirus – and the Ebola, Marburg, Lassa and Congo-Crimea viruses. P4 labs are closed facilities with many layers of security, including positive air pressure in the 'space suits' used by the limited number of scientists authorised to work in the core rooms of the compounds. There are fewer than 20 P4 labs in the world.



3_ Ebola, Marburg, Lassa Viruses Source/Adapted from: Wikipedia

They are the pathogens (viruses) responsible for hemorrhagic fevers, diseases characterized by damage to the interior surface of blood vessels and the destruction of normal coagulation mechanisms leading to internal haemorrhaging and often death.

First recognized in Congo (formerly Zaire) in 1976, the Ebola virus is responsible for Ebola hemorrhagic fever, which pro-



vokes death in 50 to 90% of cases. There are various types of Ebola viruses, some non-pathogenic in humans but fatal in animals, and some extremely aggressive in humans. There is no specific treatment for this disease.

Bats are considered as the most likely reservoir. In some cases the disease can be transmitted to humans through gorillas, chimpanzees or duikers (sub-Saharan antelopes), generally through contact with carcasses of these animals, after which the virus passes directly from human to human.

The Ebola virus is a potential agent for biological warfare. It is also partly responsible for the decline in chimpanzee populations observed since 2003. The Lassa fever resembles Ebola, has high infectious potential (up to 50% of the population in affected areas) and spreads rapidly. It is responsible for deadly epidemics, mainly in West Africa, where between 300,000 and 500,000 cases occur every year, with death tolls ranging from 5000 to 6000. The vector is a rat.

The Marburg virus is hosted by bats and until 2000 primarily affected the Eastern and South African regions. Two major epidemics occurred in Congo (2000) and Angola (2005).

4_ Zoonoses

Zoonoses are diseases that can be transmitted from animals to humans, and the reverse. They can be caused by bacteria, viruses, fungi, parasites or non-conventional transmission agents (like the prions responsible for Creutzfeldt-Jakob disease and bovine spongiform encephalopathy (mad cow disease)).

Around 70% of new human infectious diseases (the so-called emerging infectious diseases or EIDs) originate in animals. The number of EIDs is increasing exponentially, with new ones diagnosed almost every year. Better surveillance of diseases might partially explain this trend but the main factor seems to be the increase in the size of human and animal populations, together with dramatic changes in human and animal movements around the planet in the context of globalisation. Diseases do not know borders. Viruses and other agents benefit from larger population reservoirs, more numerous contacts between populations and various species and a strong boost to circulation around the planet. At every instant, hundreds of thousands of passengers are sitting on commercial flights. connecting airports as if they were houses in the same village. Planes also transport live animals (like one-day chicks), eggs, carcasses, meat products, seafood, embryos and semen for breedina.

5_ One Health

'One Health' (OH) is an integrated approach to health that focuses on the interactions between animals, humans, and their diverse environments. It encourages collaboration, synergies and crossfertilisation between all professional sectors and actors in general whose activities may have an impact on health.





6_ Destruction in Countries

In many countries of the world, particularly the poorest, human livelihoods are closely related to the health of animals. Animals in good health are less likely to transmit diseases, and their production can be optimised in given environments. It is often forgotten that in addition to the human toll of slightly more than 300 deaths (registered cases only) from the highly pathogenic avian influenza epidemic, there was also an economic toll to poultry production, with over two hundred million birds killed in order to contain the disease. The impact of these measures on life conditions and the well-being of the poor in particular has not been evaluated but must be enormous.

7_ Cross-Sectoral Cooperation: Whole of Society Approach

Recent health crises (like SARS, the H5N1 epidemic and the A(H1N1)2009 influenza pandemic) have demonstrated that many more sectors were involved in health crisis prevention



and response than the 'traditional' health sub-sectors (human and public health on the one hand, animal health on the other). Sectors like the environment, wildlife, agriculture, transport, media, and the schools, to name a few, are also key. Crosssectoral cooperation aims at involving all relevant professional sectors in a common goal, in this case, health crisis prevention and where necessary, response, along with encouraging a contribution to global health. The experiences of H5N1 and H1N1 have also shown that efforts towards better health should not be limited to specialists but should involve society as a whole, including political leaders, opinion-makers, teachers, and citizens in general.

8_ Pandemic Readiness

While pandemic preparedness refers to efforts to prevent, manage and mitigate the effects of a pandemic, pandemic readiness refers to an ongoing status in which all sectors of society are continuously ready for a pandemic, or indeed any major health risk with the potential to disrupt normal life. The global response to the H5N1 and A(H1N1)2009 influenzas resulted in a fair level of pandemic readiness in some countries, while more work is required in others.

9_ Communication: Explain Uncertainty

Communication has been a challenge during the H5N1 and A(H1N1)2009 crises. In spite of many efforts, it is often perceived as insufficient and sometimes contradictory.

Health risks are changing with globalisation, and new strategies – including better global coordination – must be designed and agreed upon for communication efforts. One way forward is probably through better explanation to the public and frontline professionals that '*the experts do not know it al*' and that in fact they often 'do not know.' Although this may complicate the life of political decision-makers, candid statements on what is certain and what is not clearly known might increase confidence in times of crisis, and avoid the '*damned if you do*, *damned if you don*'t phenomenon.