

Chapter 15

Reconceptualised Security in Mexico

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15.1 Reconceptualising Security

Discussing some of the main security challenges in Mexico related to regional development implies from the outset placing oneself in the midst of the conceptual debates about security and also deciding one's stance on the various trans-Atlantic security trends in dispute. At one extreme is the so-called narrowed security perspective, which focuses on military and political issues. From the end of the Cold War and the bipolar world, this has typically been associated with the USA's position and has become ever more evident during the war against terrorism launched after the Two Towers attack on 11 September 2001. At the other end of the spectrum is the re-conceptualised security view centred on the wider, deeper and sectorialised position which, though associated with military and political challenges, clearly goes beyond them since it embodies on an equal footing other kinds of challenges, such as economic, environmental, sociocultural, and gender-related issues. This perspective characterises the position of some European and Asian countries, such as Germany and Japan.

As a concept, security is an ambiguous construct, which is under debate scientifically and politically and has had a changeable history. Thus, although the two concepts of peace and security have been interchangeably employed (Wæver 2008a; Albrecht/Brauch 2008) and have guided the actions of human social groups, their meaning is not identical. Some of the main conceptualisation factors are (Serrano Oswald 2004, 2009, 2014):

- (i) a 'state of being' (as a kind of mythical concept in pre-scientific societies) which can cover from the individual (the self, e.g. rage) to the collective level, taken as a group or as a whole society (e.g. as a protectorate);

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- (ii) the antithesis of the former condition, namely, the shortage or absence of vulnerability or invulnerability (something construed anew);
- (iii) it embodies a linear temporal framework which moves from preventive action (e.g. protection) to corrective measures (rescuing), and which can be taken in its turn as processual or teleological in both synchronic and diachronic terms;
- (iv) it cannot be seen in purely objective or institutionalised terms (protection, Welfare State), but also as a ‘sense of’ whose meaning (e.g. tranquilising) becomes inter-subjectively constructed;
- (v) it remains bound to a negative conception of freedom (‘absence of’) following Isaiah Berlin’s terminology (2002) which, in turn, is understood by Galtung (1969) as ‘positive and negative peace’ and which should be considered in a wider form in its multi-systemic interrelations.

As said above, security debate exists under two forms, the narrowed traditional conception within realist doctrines of security, and the widened deepened and sectorialised view (Brauch 2005a, b, 2008a, b). The first is based on State security, whereas the second embodies human security, universal rights (UNESCO, ONU) and contains a horizontal widening (from military and political dimensions to those which are economic, environmental, sociocultural, and gender-related in character), plus a vertical deepening (from the individual to the State and global or universal level), and lastly it becomes sectorialised (e.g. water security, financial security, food security and so forth). As can be seen, it includes several typical modern or late modernity traits, such as changing society structures, mass communication, the risk-society (Beck 1998, 2001; Giddens 1991), and, as a consequence, it becomes conceptualised along greater axes (e.g. societal security) (Wæver 2008b). But it also embodies different sorts of pillars (e.g. culture as a pillar for development – always sustained and based on UNESCO works), and social processes as another plausible pillar (e.g. social vulnerability), as well as the conceptual debate intersections (Brauch 2008a; Oswald’s HUGE 2011, 2014).

Moreover, such debate contains a structural and directional syncretism, given the fact that it includes differential power relationships between North and South, with a plethora of challenges and discussions on security, and several voices moving from the individual and micro-groups level (e.g. family and communities) to macro groups and transnational organisations, and indeed taking place in either elite processes – which usually move downwards – or those moving upwards from below, trying to reach the summit, yet all framed by an eclectic and fragile world order (Higgins 2006).

In terms of the socio-political axes that have guided the reconceptualisation of security, on the one hand we have the Cold War and bipolar world’s end (didactic and frozen-persistent mentalities notwithstanding); on the other a full set of important variegated facts, such as capitalist and neoliberal consolidation after the collapse of the socialist-communist model, a scattered scene wherein states appear evermore vulnerable as they face the growth of globalising dynamics and their ‘actors’.

This implies, for example large flows of capital, recurrent macro-regional and global financial/economic crises, high social costs, plus national disarmament and rearmament processes with the proliferation of weapons in populations at large, and the emergence of ever new direct social actors, together with local or regional enemies and wars enacted by somehow improvised or disguised non-State actors. To them should be added, as well as terrorists, organised crime, often within intra and international action frames; and, finally, another sort of ‘hecatombic’ threat (e.g. the transition from the Holocene to the so called Anthropocene emerging era), besides climatic change and human-induced global climatic change. Thus, we have a rather defensive – not offensive – kind of security which has rapidly become centred in quite a new kind of threat that incorporates multiple scale types, plus a rapidly growing general problem of trust and welfare construction which permeates most of the factors just described.

Within security study analyses, an important role has been allotted to those parts involved in security construction as well as to the processes from which several branches and topics become security priorities. Even though security is really a daily issue impacting everybody, not all people or groups possess the same ability to exert any influence on the security agenda (be it narrowed or widened) or on what is called ‘securitisation’ (see Wæver’s work). However, such an agenda certainly has implications which are in no sense neutral (armamentism may be prioritised, while anthropogenic environment prevention and remediation is often questioned or neglected or even cancelled along with social welfare agendas, and polarisation rather than cooperation is fostered, etc.).

All of this notwithstanding, security conceptualisation in both streams (narrowed and widened) impinges strongly on the way security public policies and their territorial and land relationships are construed; yet there are at least three more related issues: the standpoint from which they operate, the question of whether or not they are strictly monitored, and whether and how several states or supra national bodies allot and distribute their budgets.

Confronted with such an unclear panorama, it is pertinent to consider the experience, credentials, attitudes and motivations of those who analyse and conceptualise public security policies and their outcomes. Further and beyond security policy-makers and executors, the crude fact is that such persons/institutions rarely pay due consideration to analysts’ opinions and recommendations – especially if they question or challenge the formers’ agendas or if they point towards catastrophic outcomes. However, would it be reasonable to remain silent or to opt for reducing their analyses to just a narrowed security? It is my contention that a broad, deep and sectorialised security implies that challenges will grow in size and proportion, and that arenas and levels might get confused about what should specifically be done by each sector or actor.

Nevertheless, sticking just to a narrowed analysis leads to very simplistic viewpoints which could become fragmented, dispersed, non-transversal and reduced to only immediate and woefully short-term policies, all of which will only

nurture the growth of security issues due to failure to recognise the vast extent of the problem. Yet such short-sided attention will – as previously said – feed a time bomb of security issues, given its structural, transversal and multi-systemic nature. The real dilemma is that, from a reconceptualised security approach and view, risks and threats imply and involve all humanity not only as ‘the’ cause but also as ‘the’ solution (“it is ‘our’ security as human beings and not ‘their’ security as a group”); the rude fact is that even elite individuals, groups and countries which enjoy better structural conditions to face threats are not – and should certainly never be – exempt from security concerns. Failure to heed potential threats will, far from erasing them, simply allow them to become ever stronger. With this horizon in view, let us specifically consider the Mexican case.

15.2 Mexico: Some Challenges from a Reconceptualised Security Lens

During recent years in Mexico, security has been strongly bound to what the government named ‘the war against drug-trafficking’, or ‘the fight against organised crime’, and ‘the strategy versus drugs’. Standing upon such proclamations, security public policies mobilised police bodies, the army, and the naval military corps to carry on a relentless armed battle against organised delinquent groups directly linked to diverse illicit actions. The battlefield has been widespread across all regions (urban and rural alike) of the country, and their populations have greatly suffered what the former national president called ‘collateral damage’. Thus Mexican women and men primarily associate security challenges with terrifying figures, which vary according to the source, but all of which oscillate between 60,000 and 150,000 killed persons, in addition to an even larger number of people who have disappeared. Regardless of source, all those figures surpass the death total during the entire regrettable Vietnam War, which has been established as 58,000.

Without trying to minimise the importance of this debate, which recurs frequently in current official and unofficial literature, a more complete picture can be obtained by looking at security issues from the discussed reconceptualisation perspective and linking the current Mexican crisis and war to sociocultural, economic and environmental factors while always considering them from the human, individual, community, international and transversal gender perspectives. This approach makes it easier to grasp why the situation has reached this point and which multi-systemic dimensions would be required to provide an answer that incorporates proper security actions and thought relevant to the multi-layered situation troubling Mexico.

Ever since the ‘Declaration on Security in the Americas’ adopted Mexico City on the 28th of October 2003 by the American States Organization,¹ multi-dimensional

¹See at: <http://www.oas.org/en/sms/docs/declaration%20security%20americas%20rev%201%20-%2028%20oct%202003%20ce00339.pdf> (11 February 2018).

security specialists have officially insisted on facing what, at the time, were relatively minor new military and political threats, as well as threats related to the economy, society, health, technology and the environment. Nowadays the spectrum has broadened to include terrorism, access to weapons of mass destruction and human-trafficking, as well as cybernetic security attacks, accidental maritime damage, natural and human-induced disasters, poverty and social exclusion. So it is from this wide angle and spectrum that we will now take a closer look at the same relevant multi-systemic indicators, since that will allow us to reach a much better understanding of the challenges of multidimensional security in Mexico.

15.3 Economic Security

According to the World Trade Organisation,² economic security promotes welfare and is beneficial for the growth and development of countries and their regions. Nevertheless only eight per cent of workers live in countries where it is possible to find favourable conditions with regard to economic security. As a matter of fact, the citizens of many rich and middle income countries face major threats to their economic security (this is reminiscent of recent debates in Mexico about the urgent need to raise the minimum basic salary as well as macroeconomic stability), while, curiously enough, some low-income countries achieve higher salary levels than richer countries. Yet we have also learnt that, as a direct consequence of inequality, economic growth is not automatically translated into welfare. Inequality, is apparent in unequal access to resources in regions, blocs and countries. In the year 2012 one thousand million people – mostly women and children – suffered hunger. The 1996 Food Summit' goal was to reduce that figure by fifty per cent by 2015, yet such a goal has not been met and appears to be no more reachable even by 2030.

In terms of social inequality, based on diverse data and OECD documents,³ growth disparity of the world's regions between the years 1820 and 2000, expressed in terms of quintiles' GDP per capita (each quintile representing US\$5,000), appears to be as follows: In 1820 GDP per capita in all regions was much below US\$5000, whereas for the year 2000 the gap between every single region grew in a highly considerable way: GDP per capita in the USA, Canada and Oceania surpassed US\$25,000; in Japan it was above US\$20,000; in Western Europe it remained between US\$15,000 and US\$20,000; whereas in Latin America, between 1820 and 2000, it scarcely surpassed the first US\$5,000 quintile; and in Africa, even though GDP per capita increased by four between 1820 and 2000, it remained two-thirds below the first US\$5,000 quintile.

²Some data for this article taken with permission by the publisher from Serrano Oswald (2016). Available at: <https://www.ilo.org/global/lang-es/index.htm> (11 February 2018).

³Available at: <https://www.oecd.org/centrodemexico/laocde/> (11 February 2018).

If we now divide the world population into five blocks between the years 2000 and 2008 and explore resource access of each world block, comparing the richest and poorest, according to UNDP⁴ the 20 per cent richest block possesses about 85 per cent of national investment, national savings, international commerce, and GDP, whereas the poorest 20 per cent block has only 0.9 per cent of national investment, 0.7 per cent of national savings, 0.9 per cent of international commerce, and represents 1.4 per cent of GDP.

What is the situation in Mexico? According to available information extracted from the World Bank⁵ and UNICEF⁶ data, Mexico is located in the 80th position in terms of child poverty, with 28 per cent of its children living in poverty, placing it below South Africa's position of 76th. Looking at Mexico from a slightly different angle, 27.2 per cent of infants less than five years of age suffer anaemia, over half of pre-school children are affected by iron deficiency, 18 per cent are short for their age, and, regarding height, this issue is three times more severe amongst rural children. At the same time, 5.4 per cent of infants are overweight and 18.8 per cent of them surpass the 5 years of age (Chavez et al. 2006). The country is ranked 80th in terms of per capita income, whereas its national income places Mexico as 10th in the world (Serrano Oswald 2015, 2016).

How can such severe contradictions as poverty-richness, malnutrition-overweight etc., be explained? Homer-Dixon talks about a 'structural induced scarcity' whenever and wherever the richest 20 per cent of a country's population accounts for about half of that country's consumption (Homer-Dixon 1998: 351). And according to Mexico's official National Institute for Statistics, Geography and Informatics (INEGI)⁷ and Mexico's central bank (Banco de Mexico),⁸ in the year 2005, 0.23 per cent of the Mexican population possessed 40.3 per cent of national wealth and 78 per cent of financial savings, whereas the working strata – 52.7 per cent of the population – had only 18.4 per cent of national wealth and 10 per cent of national savings. With regard to internal inequality in saving accounts, 0.07 per cent of the Mexican population (73,481 accounts) enjoyed saving accounts of over one million pesos, representing 63 per cent of national savings, whereas, at the other extreme, 14.2 per cent of the population (15,700,000 accounts) had saving accounts containing less than one thousand pesos.

Beyond poverty multi-dimensionality and focusing now on economic security, let us return to the key deep question: which security and for whom? After reviewing the above data, new questions emerged, associated more with the basic economic model than with the specific form assumed by poverty, growth – or its absence – and inequality. In 2008 we all witnessed the economic and financial global crisis that hit individuals, families, groups, countries, regions and the world economy as a whole. The biggest world banks and insurance companies collapsed,

⁴Available at: <http://www.mx.undp.org/content/mexico/es/home.html> (11 February 2018).

⁵Available at: <http://www.bancomundial.org/es/country/mexico> (11 February 2018).

⁶Available at: <https://www.unicef.org/mexico/spanish/> (11 February 2018).

⁷Available at: <http://www.inegi.org.mx/> (11 February 2018).

⁸Available at: <http://www.banxico.org.mx/> (11 February 2018).

GDP was sharply reduced, exports fell, emigrants' consignments to their families sharply dropped, tax collecting experienced considerable diminution, unemployment and migration increased with and through counter-cyclic public expending. Following ILO,⁹ financial and economic crises between 2008 and 2010 destroyed 27 million work posts. Currently there are 1,530 million people who only have temporary and precarious jobs, 630 million workers (20.7 per cent of total) and their families suffer extreme poverty with daily salaries of US\$1.25 or less, and there still are 205 million jobless people in the world. This situation is especially affecting new generations (12.6 per cent of unemployed in 2010) with an average index of 8.5 per cent, even in developed countries. For example, Spain reached 22.8 per cent youth unemployment and Portugal 12.9 per cent, whereas North Africa reached 23.6 per cent. In the Latin American region the youth unemployment rate was 7.2 per cent. Even for those with a job, very scanty economic security is offered in relation to their incomes. According to the *Latinobarometro*¹⁰ in one of its random samplings, 76 per cent of respondents are worried about losing their job and the majority bluntly expressed that they wouldn't mind having a non-democratic government if this offered a better answer to unemployment and casualisation.

Therefore it can be useful to briefly revisit the global financial model and its structural contradictions, so as to explore the feasibility of putting a tight control upon such kinds of structural economic crises. According to figures published by *Der Spiegel* magazine (*Der Spiegel* 12 December 2011: 42–43), it was estimated that in the global labour market 3.1 billion people are worth US\$55 billion, global economic production calculated in 2011 was around US\$70 billion, the energy market in 2010 had a total value of \$7 billion, and (remembering that initially the 2008 crisis was called a 'real estate crisis') in 2011 the real estate market was estimated at US\$0.4 billion. All this totals US\$ 132.4 billion. The surprising counter-position to such 'tangible' values is that the assets market in 2010 was US\$ 63 billion, the bonus market in 2010 was calculated at US\$24 billion, the oil derivatives market in 2011 was estimated at US\$708 billion, and the foreign exchange market in 2011 had a total value of around US\$ 1,007 billion. Together these assets amount to \$1,802 billion compared with the tangible values (labour market, global economic production, energy, and real estate market) of only US \$132.4 billion. Therefore the difference amounts to US\$1,669.6 billion. Such is the world casino that 'sustains' our economic security.

15.4 Social-Societal Gender Security

Societal security is multilateral and has a direct reference to citizenship welfare, so that in an important ONU's ILO definition it is taken as 'society's protection given to its members via a full public set of measures against economic shortcomings and

⁹Available for 2012 information at: <http://www.ilo.org/global/lang-es/index.htm> (11 February 2018).

¹⁰Available in: <http://www.latinobarometro.org/lat.jsp> (11 February 2018).

social lacks; measures which, if absent, will result in the disappearance or strong reduction of formidable affectation problems amongst which, general society's income, sickness, maternity, labour accidents, labour diseases, unemployment, invalidity, old age and death, as well as poor protection in terms of medical assistance, and several children family' (Solorio 2001: 9). Such a definition has been accepted by all countries (G5, G7, G20, G77, OECD, including developing countries), and it should be adapted to each territorial type consonant to its own economic and social evolution, taking also into account its groups and sectors which require special protection (infants, youth, ethnic and indigenous minorities, migrants, persons endowed with different capacities, sick people, enforced labour groups, etc.).

Societal security perspective seen from ILO's eyes furthermore implies a world observatory focused on labour and working conditions, while at the same time ILO produces databases and global/regional indicators. Societal security additionally looks for guarantees through laws and multilateral agreements, and by so doing it is taken for granted that it will imply further a democratising potential within globalisation, even though each country and region could have specific and important challenges and goals.

In Mexico, a country with a strong assistantship tradition, some of the institutions in charge of social security have been seriously associated with corruption scandals. This, together with narrowing welfare policies, has prompted the State to receive very serious questioning. The main Mexican social security institutions are: the Social Security and Services Institute for State Workers (ISSSTE), the Social Security Institute for Mexican Armed Forces (ISSFAM), the National Fund Institute for Workers' Housing (INFONAVIT), the Housing Fund of the Social Security and Services Institute for State Workers (FOVISSSTE), and the Mexican Institute of Social Security (IMSS). Currently the State is facing a budget crisis and a massive informal economy – which has already surpassed the formal one representing 54 per cent during the years 2000 to 2010 according to INEGI – so that 62 to 65 per cent of the working population does not enjoy access to the said health and welfare institutions, some of them functioning only thanks to a mixture of an officially imposed regime which includes State, workers and employers, as well as a voluntary regime including a large system composed of workers' relatives, independent private workers (professionals, owners of little shops – grocery type), handicraft artisans, non-salaried voluntary workers, domestic employees, State common land's rural workers, small land owners, individuals, temporal workers for every six years set of each federal administration, and municipalities as well as federative states.

With regard to gender and social security, in Mexico women truly suffer from major insecurity and far more insecurity-types (economic, physical, political, social alimentary and environmental). According to OECD,¹¹ the salary gap between women and men rose to 40 per cent in 2015. Women also suffered larger food shortages – 24.3 per cent compared to 20.5 per cent of men. With regard to the so-called progress-opportunities-prosper programme ('Programa Oportunidades'–

¹¹ Available at: <http://www.oecd.org/centrodemexico/estadisticas/> (11 February 2018).

Progresas–Prospera), the basic schooling policy has partly filled the gap – 98 per cent of women received a basic education compared with 96 per cent of men, and 87 per cent attended secondary school compared with 81 per cent of men. Nevertheless, in terms of political power access – official gender quota notwithstanding – women are rather far from equality: in 2015 women constituted only 33.3 per cent of the upper federal camera and 38 per cent of the deputies or lower camera, and out of seventeen State ministries there were only three in female hands, and those just in areas typically considered feminine (Health, Tourism, and Social Development ministries) – yet in 2017 not even those three remained. Out of 31 federative states in Mexico, none had female governors – and in 2017 there is only one; furthermore only 5.5 per cent of municipal mayors are women, and at the same time in local deputy cameras women constitute just 8 per cent.

With regard to domestic chores, women daily devote 373 min to them, while men devote only 113. The majority of informal workers are women, and 15 to 20 per cent of women work without any payment compared with 9 per cent men. Out of the 500 most important transnational corporations, only five are headed by women, and none of them is a Mexican. Within marital/couple relationships, women report the following types of violence: physical 46 per cent, economic 53 per cent, and sexual 16 per cent. In the extreme case of security absence, hate crime against women just for being women, increased the negative reputation of Mexico through its regrettable femicide record: between 1985 and 2010 36,000 women were violently assassinated, and 6.3 per cent of murdered females were less than five years old (ONU Women-Inmujeres 2010).

Finally, regarding environmental security, during disasters more women die than men. Certainly little data exists due to the nature of emergency situations, yet in after-event studies the data are appalling: 63 to 68 per cent in the notorious Boxing Day tsunami in Asia and 80 per cent in the Pakistan earthquake (Ariyabandu/Fonseka 2009); moreover, in a post disaster study conducted two years after the Philippines typhoon by Anttila-Hughes and Hisang (2013), it was found that the infant death rate was 15 times greater for baby girls than for baby boys. In short, women are major victims in social and political disasters and receive limited and inadequate help in such emergency situations. Besides the fact that, across the world, women constitute 70 per cent of the people living in extreme poverty (Amnesty International 2009). Without endorsing an essentialist posture, women de facto are the main subjects in charge of such key human functions as care and biological, social and cultural reproduction; so their marginalisation unquestionably hurts the whole of society, especially when they face cyclical and highly complicated emergencies.

15.5 Environmental Security

Environmental security includes guidelines, policies and actions to combat and reverse pollution, environmental degradation and scarcity of natural resources, as well as appropriate measures to adapt and mitigate global environmental change, all

framed by biodiversity and sustainability in the short, medium and long term. Environmental security is one of the most pervasive threats of our modern and late modern life system, and it is associated with diverse global environmental change dimensions (GEC) happening in the Ecosphere (atmosphere, hydrosphere, biosphere, lithosphere, pedosphere) as well as in the Anthroposphere (population, economy, transport, social organisation, science and technology, culture and behaviour). The pioneering work of Paul Crutzen – a Chemistry Nobel Prize laureate – documents the transition from the Holocene to what he coined the Anthropocene, namely, an anthropogenically induced epoch shift in the earth's system, starting from the industrial revolution and due mostly to greenhouse gases (GG). In their natural evolution during the millennia since the interglacial cycles they oscillated by about 100 ppm (concretely from 180 ppm to a 280 ppm maximum), but since 1950 they have significantly incremented, with an average growth of 20.8 ppm each decade, so that by 2017 they had surpassed 403.5 ppm. Such an epoch change therefore carries multiple interrelated consequences. These include global warming, the extinction of living species, forestry loss and deforestation, forest fires, and a rise in sea levels.

It is something new to human beings and it is indeed very interesting to realise that never before has such a shift occurred, and that therefore, in the Anthropocene, it is we – all the human beings – who are both the cause and victims of such a global environmental shift. Could we also be its solution? Maybe... yet only in so far as we take environmental security very seriously in a fully integral form; mostly, given that a technological solution has not yet been able to rise to such a challenge, predictions for the future seem to be just overwhelming. Let us see why: Environmental security seen from another angle, namely, that of population growth. During the twentieth century world population grew from two to six thousand million. A conservative population estimation for 2050 forecasts an increase reaching nine thousand million, most of them settled in poor and arid countries inhabited basically by Muslims. Based on current consumption and behaviour models, the ecological impact footprint implies that the equivalent of 1.4 earth planets per year would be required to sustain the population. This means that if there is no change in the population's consumption and related behavioural patterns – business as usual – forecasts maintain that in 2050 we would require 2.5 planets.¹² In the years 1971 to 1980, in Latin America a little more than 200 disasters were detected, having an approximate cost of US\$100,000,000, whereas for the years 2001 to 2010 the region's disasters registration ascended to about 1,000 with an approximate cost of US\$450,000,000. According to Münchner Rück re-insurance firm (NatCatSEFRVICE@206, GeoRisikoForschung, MunichRe), the number and type of significant catastrophic disasters at world level between 1950 and 2005 would be considerably changed: between 1950 and 1960 the maximum number registered of such types of catastrophic events per year was five, but on average it was three and most of them were

¹²Available at: <https://www.footprintnetwork.org/our-work/ecological-footprint/> (11 February 2018).

tsunami-earthquakes and volcanic eruptions, whereas between 1990 and 2005 registration ascended to fifteen big catastrophes per year, amongst them forest fire devastations and a rising number of floods and cyclones.

In several UNO reports, the twenty-first century has been called ‘the water conflicts and wars century’. During the twentieth century, the general population grew by three times but water consumption by six times, which indeed caused scarcity, pollution, water salinisation and overexploited aquifers. If the population continues to grow at its current rate, increased water demand will augment by 55 per cent. In 2025, 2.6 people will face water stress in forty-eight countries (forty in West Asia, North Africa and Sub-Saharan Africa). Out of 148 countries having water resources in trans-territorial borders, thirty-seven are at risk of water wars, and such countries have a larger population than those which opt for ‘hydro-diplomacy’. Among the former, the Middle East, Russia, India, China, Pakistan and Indonesia stand out among others (Waslekar/Futehally 2014).

In the Mexican case, beyond its unleashed controversies for its own causes, the country has opted for the hydro-diplomacy approach regarding its north and south borders. Mexico has 653 aquifers, 105 of which were already overexploited in 2013, according to the official government institution (Conagua 2014). In fact, the most overexploited aquifer in the world is the one in Mexico City due to the population density, and this explains why the country’s central region is the most exposed to vulnerability in terms of morbidity and water consumption distress. In terms of predictions, in 2030 it will be Mexico City plus the north-western federative states of Baja California and Sonora which will face a critical situation, whereas simultaneously Sinaloa state and the hydrological Lerma region, which involves five federative states, will experience strong pressure on its water resources. Moreover, even the Yucatan peninsula and the southern part of Mexico, which enjoy the largest natural water supply, will confront mid to strong pressure as well (Oswald 2012).

Climatic change and anthropologically induced disasters – namely, those which do not come from nature and cannot be handled as such – are another key theme in the widened security agenda. Even though predictions vary, following the fifth Intergovernmental Panel for Climate Change (IPCC) of 2013 the physical and societal effects should also be taken into account, as well as the respective temperature increase. This can ascend about 1.1 to 6.4 °C to the year 2100. Sea level will rise between 18 cm and 2.4 m, not forgetting, though, that the consensual figure by now states only one metre for such 2100 year. On the other hand there will also occur significant rain precipitation changes, being more irregular, with major draught periods, and more extreme events such as tropical tempests (typhoons, hurricanes, cyclones, and tropical depressions), as well as winter tempests, floods, landslides, polar melting and reduction of glaciers amongst others. All of this is liable to lead to more human, economic and infrastructural effects and damage, not forgetting possible tipping points which could imply complete disruption of the earth’s system. Amongst climatic change societal effects, can be considered, for instance, regional conflicts, migrations, diverse kind of plagues and illnesses, vulnerability spirals, significant societal losses, and so forth, so that it

becomes an imperative to design and implement general strategies for prevention, adaptation, and resilience.

Climate change impacts in Mexico are many. Some of the most significant are the increase of warm and cold waves, landslides, hurricanes and cyclones hitting the coastal rim, which is 13,000 km long, severe random rains, frequency of strong winds, and doubled vulnerability. In Mexico poverty coincides with a high degree of exposure to extreme events, in this way generating a heavy vulnerability cycle ever more exacerbated over time, given the precarious structural conditions that become accentuated by such extreme events, which in their turn do not allow the majority of population to develop more resilient conditions. This can be seen in a graphic which compares regions presenting big disasters whose cost is US\$500,000 revealing that most of their populations are accustomed to surviving on less than two US dollars per day.

Also in Mexico, from 1985 to 2008, seventy-five disasters caused the deaths of about 10,000 people, several hundred thousand victims with direct injuries whose cost was approximately US\$9,600 million – meaning some US\$500,000 for each year – plus an additional US\$200 million for indirect harm (Conde/Saldaña 2007). Climate change and rising sea levels can result in more frequent and severe geo-hydro-meteorological events, soil problems such as erosion, soil degradation, desertification, draughts, low agricultural productivity, environmental degradation, poor water quality, scarce natural resources, plagues, an increase in diseases, and the loss of biodiversity and environmental services. Since global environmental change is bigger than just climate change, there are plausible social answers to such scenarios.

Fair access to natural resources and resilience consolidation implies that social and economic actors as well as the State, utilise all available scientific and technological knowledge to improve environmental services, and that most vulnerable groups could have structural conditions to mitigate cyclical environmental crises within a global climate change context. Otherwise, failure to adapt to specific and general change will breed socio-environmental conflicts as well as survival dilemmas which, in the frame of globalisation and systemic crisis, plus consequent conditions such as malnutrition, pollution, global warming and environmental disasters, can result in large migrations (Oswald Spring et al. 2014b), societal and domestic crises as well as international conflicts and even a global crisis. The lack of knowledge and response capacity, together with poverty, unemployment, and poor State aid added to the frequent lack and deficiency of prevention and conflict-reduction strategies, breed and generate risk and dangers. Before the most extreme catastrophic scenarios – such as becoming hungry, thirsty or dead – develop, stress arising from the wait for government or foreign aid, which is usually insufficient or through corruption much reduced, is likely to increase the perception that sending relatives to other regions or countries is a reasonable option, enabling those left behind to survive by consignment sending and support networks. Similarly, such situations could lead to the decision that the whole family must migrate, despite knowing in advance the many threats from others competing for

same water, food and land in swelling urban peripheries, and the likelihood of being obliged to settle in marginal zones of the worst life quality, namely being environmental refugees.

15.6 Integrating Closing Reflection

In order to contribute to past, present and future social science studies of Mexico and its regions, this chapter dealt with reflections on security challenges from a reconceptualised security perspective. By revising a series of debates, data and indicators referring to social, economic, gender and environmental security, it has shown the way Mexico is placed in a world that appears inter-crossed by intense recomposition dynamics. At the same time, it has led us to consider how Mexico reacts – or puts reaction aside – in the face of these issues. It has exposed the fact that that in most of those data and explored indicators Mexico frankly underscored. It was possible to offer the hypothesis that, if such recomposition breeds, in some aspects, decomposition, the Mexican situation becomes substantially severe. On the one hand this chapter has highlighted the need for deconstruction-reconstruction to achieve, from a reconceptualised security perspective, a sound recomposition. On the other, it was put forward that such a large and long task should be tackled through a carefully considered study of the ideas herein explored so as to be able to understand that the region's role and regional analysis together need to play a much stronger leading role – the more so considering the following final reflection with which I shall end.

Security processes imply the ability to create, transform and hand over solid information together with respective tools and mechanisms for impacting global and regional dynamics. What is crucial in the face of such tremendous challenges in our professional and human duties is never to lose sight of all that is *essential* and clearly distinguish it from the non-transcendental. To close my reflection on such grounds, let me finish with a metaphor I borrow from Harvard's Beth Simmons at her ISA presidential address:

“A wonderful night in the prairie” or “Homes and Watson Go Camping” – perhaps it is a well-known story for most of you (in 2001 it was considered by scientists as the world's funniest joke). The ultra-famous Sherlock Holmes and his assistant, Watson, decided to spend a night in the British green unspoilt countryside, taking advantage of the excellent meteorological conditions. As we can imagine from such prudent protagonists, they duly arrived at the selected place and, after meticulously checking the ground, proceeded to pitch their tent, organise their equipment fittings perfectly and, as the sunset slowly faded in the orange-pink sky, prepare a succulent dinner. After eating their delightful dishes and delicacies ‘seasoned’ with various glasses of wine while enjoying lively conversation about last month's adventures, they cleared away the table, chairs and utensils, entered the tent, wished each other a very good night and went to their respective sleeping bags.

Some hours later, when the night was advanced, Sherlock Holmes woke up and called to his faithful friend: “Watson, please look towards the sky and tell me what you see”.

Watson woke up startled and half-frightened, being still somnolent, opened his eyes, gazed at the sky and answered: “Well, mmm, OK, I see millions and millions of stars.”

Sherlock, far from satisfied with such an answer, looked at Watson and asked him: “But what does that say to you, Watson?”

Watson woke up properly, realised he must give a more precise answer and, wanting to impress with his powers of deduction, answered:

“From an astronomic viewpoint, it says to me that millions of galaxies and therefore billions of planets exist in the firmament. Astrologically speaking, it says that Saturn is in conjunction with Leo. Chronologically, I deduce it is approximately 3.15 and still far from sunrise.” Delighting in his own exposition, Watson continued, “Meteorologically, I have the feeling that tomorrow we will have a beautiful sunny day”...

Having arrived at this point, Watson, totally convinced he has given a flawless answer, asked Holmes in turn: “And what does it mean to you, Holmes?”

Holmes continued looking at Watson with knitted brows and, after a short silence, said to him: “Really something quite elementary: that every day you become more and more stupid. Someone’s stolen our tent!”

Someone’s stolen our tent!... Perceiving what is essential, if this is put in due context from the viewpoint of security reconceptualisation, is the first step in facing the current societal crisis that troubles Mexico and its regions. We need to be able to confront those challenges that will bring us to new widened, deeper and sectorialised models... Indeed we cannot put aside reflections about what is really the fundamental issue in all of this, namely, what is its essential tent?

Well, it so happens that, in the face of the current security crises that threaten Mexico from all sides, such a task cannot be anything but the uncompromising commitment to the rigorous analysis of the multidisciplinary discipline that *constitutes* regional science!

References

- Adger, Niels et al. (2014). “Human security”, *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Working Group II Contribution to the IPCC Fifth Assessment Report*, Cambridge, Cambridge University Press.
- Albrecht, Ulrich, Hans Günter Brauch (2008). “Security in Peace Research and Security Studies”, in H.G. Brauch et al. (Eds.), *Globalization and Environmental Challenges: Reconceptualizing*, Berlin, Springer, pp. 503–525.
- Amnistía Internacional (2009). *La Trampa del Género: Mujeres, Violencia y Pobreza*, London, Amnistía Internacional.

- Arends, J. Frederik M. (2008). "From Homer to Hobbes and Beyond – Aspects of 'Security' in the European Tradition", in H.G. Brauch et al. (Eds.), *Globalization and Environmental Challenges*, Berlin, Springer, pp. 263–277.
- Arizpe, Lourdes (1994 [1990]). "Foreword: Democracy for a Two-Gender Planet", in Elizabeth Jelin (Ed.), *Women and Social Change in Latin America*, London, Zed Books/ UNRISD, pp. xiv–xx.
- Anttila-Hughes, H. Keith; Solomon M. Hisang (2013). "Destruction, Disinvestment, and Death: Economic and Human Losses Following Environmental Disaster", http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2220501.
- Ariyabandu, Malalgoda, M., Dilrukshi Fonseka (2009). "Do Disasters Discriminate? A Human Security Analysis of the Tsunami Impacts in India, Sri Lanka and Kashmir Earthquake", in Hans Günter Brauch, Úrsula Oswald Spring, John Grin, Czeslaw Mesjasz, Patricia Kameri-Mbote, Navnita Chadha Behera, Béchir Chourou, Heinz Krummenacher (Eds.), *Facing Global Environmental Change. Environmental, Human, Energy, Food, Health and Water Security Concepts*, Berlin, Springer, pp. 1223–1236.
- Beck, Ulrich (1998). *La sociedad del riesgo. Hacia una nueva modernidad*, Barcelona, Paidós.
- Berlin, Isaiah [Ed. Henry Hardy] ([1969] 2002). *Liberty: Incorporating Four Essays on Liberty*, Cornwall, Oxford University Press.
- Brauch, Hans Günter (2005a). *Environment and Human Security. Freedom from Hazard Impact*. InterSecTions, 2/2005, Bonn, UNU-EHS <http://collections.unu.edu/eserv/UNU:1856/pdf4031.pdf>.
- Brauch, Hans Günter (2005b). *Threats, Challenges, Vulnerabilities and Risks in Environmental Human Security*. Source, 1/2005, Bonn, UNU-EHS <http://collections.unu.edu/eserv/UNU:1868/pdf4040.pdf>.
- Brauch, Hans Günter (2008a). "Introduction: Globalization and Environmental Challenges", in H. G. Brauch et al. (Eds.), *Globalization and Environmental Challenges*, Berlin, Springer, pp. 27–43.
- Brauch, Hans Günter (2008b). "Conceptual Quartet: Security and its Linkages with peace, Development and Environment", in H.G. Brauch et al. (Eds.), *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century*, Berlin, pp. Springer, pp. 65–98.
- Brauch, Hans Günter, Úrsula Oswald Spring, Czeslaw Mesjasz, John Grin, Pal Dunay, Navnita Behera Chadha, Béchir Chourou, Patricia Kameri-Mbote, P.H. Liotta (Eds.) (2008). *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century*, Berlin, Springer.
- Buzan, Barry (2008). "The Changing Agenda for Military Security", in Hans Günter Brauch et al. (Eds.), *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century*, Berlin, Springer, pp. 553–560.
- Conde, Cecilia, Saldaña-Zorrilla, Sergio (2007). "Cambio climático en América Latina y el Caribe: impactos, vulnerabilidad y adaptación", *Ambiente y Desarrollo*, Vol. 23, No. 2, pp. 23–30.
- da Costa, Thomaz Guedes (2008). "Political Security, an Uncertain Concept with Expanding Concerns", in Hans Günter Brauch et al. (Eds.), *Globalization and Environmental Challenges*, Berlin, Springer, pp. 561–568.
- Galtung, Johan (1969). "Violence and Peace", *Journal of Peace Research*, Vol. 6, No. 3, pp. 167–191.
- Galtung, Johan (1996). *Peace by Peaceful Means: Peace and Conflict Development and Civilization*, London, SAGE Publications.
- Giddens, Anthony (1991). *Modernity and Self-Identity: Self and Society in the Late Modern Age*, London, Polity Press.
- Herz, John H. (1951). *Political Realism and Political Idealism*, Chicago, Chicago University Press.
- Higgins, H.E. Judge Rosalyn (2006). "The United Nations System, and the Rule of Law", Keynote Speech, London School of Economics, London, 13th November 2006 http://www.lse.ac.uk/website-archive/publicEvents/pdf/20061113_Higgins.pdf.

- Hobbes, Thomas (1982). *Leviathan*, London, Penguin Classics.
- Hoogensen, Gunhild (2008). “Non-State Based Terrorism and Security”, in H.G. Brauch et al. (Eds.), *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century*. Hexagon Series Vol. 3, Berlin, Springer, pp. 439–447.
- Jelin, Elizabeth (Ed.), 1994 [1990]. *Women and Social Change in Latin America*, London, Zed Books – UNRISD.
- Mesjasz, Czeslaw (2008). “Economic Security”, in H.G. Brauch et al. (Eds.), *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century*, Berlin, Springer, pp. 569–580.
- Moore, Henrietta L. (1994). *A Passion for Difference: Essays in Anthropology and Gender*, London, Polity Press.
- ONU Mujeres-Inmujeres (2012). “Características, tendencias y nuevas expresiones en las entidades federativas, 1985–2010, Mexico City, Inmujeres”.
- Oswald Spring, Úrsula (Ed.) (2011a). *Retos de la investigación del agua en México*, CRIM-UNAM, CONACYT, Cuernavaca.
- Oswald Spring, Úrsula (2011b). “Can Health be Securitized?”, *Global Bioethics*, Vol. 24, No. 1–4, pp. 21–29.
- Oswald Spring, Úrsula (2014). “Una gran seguridad: seguridad humana, de género y ambiental”, in José Luis Calva (coord.), *Análisis Estratégico para el Desarrollo*, IIEC-UNAM.
- Oswald Spring, Úrsula, H.G. Brauch; G. Edwards; and J. T. Roberts (2013). “The impact of climate change on human security in Latin America and the Caribbean”, in M.R. Redclift y Grasso (Eds.), *Handbook on Climate Change and Human Security*, Cheltenham, Northampton, Edward Elgar, pp. 227–253.
- Oswald Spring, Úrsula, Hans Günter Brauch (Eds.) (2009). *Reconceptualizar la seguridad en el siglo XXI*, Cuernavaca, CRIM-UNAM.
- Oswald Spring, Úrsula, Hans Günter Brauch, Keith Tidball (Eds.) (2014a). *Expanding Peace Ecology: Peace, Security, Sustainability, Equity and Gender. Perspectives of IPRA’s Ecology and Peace Commission*, Berlin, Springer Briefs.
- Oswald Spring, Úrsula, S. Eréndira Serrano, A. Estrada et al. (2014b), *Vulnerabilidad Social y Género entre Migrantes Ambientales*, Cuernavaca, CRIM-DGAPA-CONACYT.
- Salinas, Mario; Úrsula Oswald Spring (Eds.) (2002). *Culturas de paz, Seguridad y Democracia en América Latina*, Mexico City, CRIM-UNAM – Coltlax – DGAPA – Heinrich Böll.
- Seider, Rachel (Ed.) (2002). *Multiculturalism in Latin America: Indigenous Rights, Diversity and Democracy*, London, Institute of Latin American Studies.
- Serrano Oswald, Serena Eréndira (2004). “Género, Migración y Paz: Incursiones a una Problemática desde una Perspectiva Multidimensional e Incluyente”, in Úrsula Oswald Spring, (Ed.), *Resolución Noviolenta de Conflictos en Sociedades Indígenas y Minorías*, Mexico City, Coltlax – UAEM – CLAIP – Heinrich Böll.
- Serrano Oswald, Serena Eréndira (2009). “Engendering Security and the impossibility of securitizing gender”, in H.G. Brauch et al. (Eds.), *Globalization and Reconceptualising Security in the 21st Century*, Berlin, Springer, pp. 1143–1156.
- Serrano Oswald, Serena Eréndira (2013). “Migration, woodcarving and engendered identities in San Martín Tilcajete, Oaxaca”, in Thanh-Dam Truong, Sylvia Bergh, Des Gasper y Jeff Handmaker (Eds.), *Migration, Gender and Social Justice: Perspectives on Human Security*, Hexagon Series on Human and Environmental Security and Peace, Vol. 9, Berlin – Heidelberg – Nueva York, Springer, pp. 173–192.
- Serrano Oswald, Serena Eréndira (2015). “Seguridad Reconceptualizada en México: Desafíos Actuales”, in S. E. Serrano Oswald (Ed.), *Pasado, Presente y Futuro de las Regiones en México y su Estudio*, Mexico City, AMECIDER, December, pp. 1–27 [original text published in Spanish].
- Serrano Oswald, Serena Eréndira (2016). “Reconceptualized security: core Mexican challenges”, *Regions*, Regional Studies Association, Vol. 301, No. 1, Spring, pp. 18–20.

- Shepherd, Laura; Jutta Weldes (2008). "Security: The State (of) Being Free From Danger?" in H.G. Brauch et al (Eds.), *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century*, Hexagon Series Vol. 3, Berlin, Springer, pp. 529–536.
- Solorio, Carmen (Ed.) (2001). *Principios de la Seguridad Social*, OIT, Geneva.
- Wæver, Ole (2008a). "Peace and Security: Two Evolving Concepts and Their Changing Relationship", in H.G. Brauch et al. (Eds.), *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century*, Berlin, Springer, pp. 99–112.
- Wæver, Ole (2008b). "The Changing agenda of Societal Security", in H.G. Brauch et al. (Eds.), *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century*, Berlin, Springer, pp. 581–593.
- Waslekar, Sundeep; Ilmas Futehally (2014). *Water Cooperation for a Secure World*, Mumbai, Strategic Foresight Group.
- Wilde, Jaap H. de (2008). "Environmental Security Deconstructed", in H.G. Brauch et al. (Eds.), *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century*, Berlin, Springer, pp. 595–602.