



**The game changes: "Disaster Prevention and Management"
after a quarter of a century**

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The game changes: *Disaster Prevention and Management* after a quarter of a century

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Abstract

Purpose – This paper has been written to mark the 25th anniversary of the founding of *Disaster Prevention and Management*. It reviews the modern-day challenges facing researchers, scholars and practitioners who work in the field of disaster risk reduction.

Design/methodology/approach – The paper reviews key issues in disaster risk reduction, including the relationship between capital and labour and its influence on vulnerability, the role of human mobility and migration in disaster vulnerability and the definition of welfare.

Findings – There is a need for a major revision in the body of disaster theory so that it can take account dynamic changes in the modern world. In the future, climate change and migration may radically alter the bases of vulnerability, risk and impact. The ways in which this will occur are not yet clear, but indications can be gained from current trends and the state of foment in which the world presently exists.

Research limitations/implications – Prediction of future developments is always subject to the caveat that unexpected influences may change the expected course of events. However, we need to anticipate developments in order to produce theory, policies, and practical solutions that are well-thought-out and viable.

Practical implications – Disaster theory must adapt to new conditions if it is to remain the "road-map" that clarifies complex realities and enables disasters to be managed and abated.

Social implications – Huge changes in the stability, expectations and vulnerabilities of populations are underway. These need to be understood much more fully in terms of their ability to influence disaster risks and impacts.

Originality/value – Presently, few analyses of the dynamism of global society are able to present a clear picture of the future needs of theory generation, scholarship and research.

Keywords *Disaster Prevention and Management*, Disaster risk reduction, Capital, Labour, Migration, Climate Change, Theory

Paper type Editorial commentary

Introduction

The founding in 1992 of *Disaster Prevention and Management* gave scholars and practitioners an important new source of research, information and wisdom about the many issues associated with extreme events. From the start, the journal succeeded in combining theoretical insight with practical studies in a way that is both distinctive and helpful to those who must respond to risks and impacts. As a result, many of the early articles, published well before the millennium, are still valid, stimulating and useful. Evidence that the journal "got it right" at the outset is provided by a comparison of early content with that of the latest issues: the same mix is still there, the same broad coverage prevails, and interest in the journal has never flagged. Civil protection, business continuity, policy studies, theoretical discourses, technical issues and humanitarian response vie for space in this ecumenical but remarkably focussed publication. Despite the breadth of its coverage, the journal has succeeded magnificently in establishing and maintaining its identity. It is set to remain an essential point of reference for those who study disasters for practical or academic reasons.

Such is the dynamism of the field of disaster studies that one should not over-indulge in looking back. It is time to consider what the future might hold in store. The field has changed enormously since it was founded a century ago (Prince, 1920; Barrows, 1923), and the pace of change has accelerated since the founding of *Disaster Prevention and Management*, in line with burgeoning developments in global society and economy. Theory is the 'road-map' of disasters, our means of making sense of complex and chaotic realities. Despite the best efforts of scholars around the world, we are still using formulations that stem from the early post-War period, a time when the world was a very different place to that which it has since become. The main surge of theory development in this field began to expire (around 1970), precisely when the great changes in the world started to bite: the diverging wealth gap, the beginnings of the information and communications technology revolution, globalisation and global change.

Through the media of research and publication—in journals such as this—disaster studies must adapt to the new reality. In this essay, looking (to the extent possible) resolutely forward, I shall review the challenges. New economic, political and social orders have emerged. As disaster is largely a socio-economic problem, their influence on impacts and suffering is profound and they beg to be understood. I fear we need a better quality "theory of human misery". This may seem gloomy to the point of morbidity, but one of the current weaknesses of attempts to understand the disasters problem and bring it under control is failure to confront the stark realities of the modern world. The advance of civilisation has not cancelled barbarism or banished exploitation. These phenomena have proliferated. A realistic view of the modern world is an essential pre-requisite of a positive approach to the solutions.

The following sections will consider the challenges of understanding disaster amid the dynamism of the modern world. With climate change, globalisation and human mobility, I believe we will increasingly need a redefinition of the field of disaster studies. I hope that journals such as this will play a leading part in that endeavour. I

begin with an issue I tried, perhaps unsuccessfully given its complexity, to tackle before the advent of the millennium (Alexander, 2000): the relationship between capital and labour in relation to disasters.

Capital and labour

Economists have sometimes viewed disaster as the accelerated consumption of resources (Jones, 2003). Although it is clear that when resources are destroyed someone has to lose (Hallegatte and Przulski, 2010), not all interested parties are in deficit. Capital is not necessarily harmed by disaster, which can augment profits and redistribute wealth to a select group of beneficiaries. They can thus consolidate their power structures (Klein, 2007). Although globalised production is put at risk by disaster (witness the world-wide shortage of computer chips that followed the 2011 Thailand floods or the international impact on automotive production caused by the Japan tsunami of the same year), such effects are not necessarily very common. Multi-national companies can switch production to unaffected sites, and companies can profit from the accelerated demand for relief and reconstruction goods engendered by disasters.

We live in a world in which capital has decisively gained the upper hand over labour. One indication of this is that very large death tolls in disaster (for example, in the Indian Ocean tsunami of 2004 and the Haiti earthquake of 2010) have not produced a change towards a more serious engagement with the risks of catastrophe. Probably the only development that can induce such a change is a major threat to the functionality of the world economy or a significant danger to the global food chain. In the meantime, the world economy continues to produce inequality and vulnerability, both of which are root causes of disaster impacts (see Figures 1 and 2, below). Half of trade goes through the world's 87 tax havens, where tens of trillions of dollars of private wealth are kept. One fifth of the global economy is illicit. About 9 per cent is represented by the drugs trade and the rest is the result of trafficking in people, vice, armaments and illegal investment. In this context, it is notable that the armaments trade, both legal and illegal, has suffered no recession since 2008. Reckless lending and reckless borrowing have brought populations to their knees, initially in poor countries, but increasingly in those, such as Greece, that are supposed to be part of the 'developed world' (Figure 2). National debt is the enemy of democracy because it is so often incurred by one party and paid for by another. The consequences of austerity policies can be seen in failure to prepare society for disasters and lack of resources for individual preparedness.

Pace Clausewitz, but war is the continuation of economics, rather than politics, by other means. In recent decades, it has involved expenditures that have dwarfed all others, such as the US \$3 trillion spent on the conquest of Iraq and its aftermath. Many regional wars are proxy conflicts between the great powers in which little effort is made to avoid the wholesale destruction of assets and society.

In the light of these considerations, more research is needed on how inequality, instability and the dark side of the global economy affect disasters. These are factors

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3 of disaster risk *creation*, not reduction, and we ignore them at our peril. Indeed,
4 focussing exclusively on how to reduce disasters could lead us to neglect the
5 underlying drivers of vulnerability to the extent that we are forever dealing with the
6 results of processes that we do not fully understand or know how to govern. Figure 1
7 (after Alexander, 2000) is a rather pessimistic view of the current relationship
8 between capital and labour in terms of the way it affects recovery from disaster:
9 capital recovers faster and better than does labour, a point emphasised by Kates and
10 Pijawka (1977) in their landmark study of reconstruction. Figure 2 extends this view
11 to the current preoccupation with debt and economic restructuring. The points that it
12 makes are, first, that the people who create the debt are not necessarily those who
13 suffer in the repayment crisis, and secondly that debt crises can significantly increase
14 people's vulnerability to disaster. When this happens it also tends to involve a
15 reduction of democratic rights, and, as noted below, democracy is an essential
16 ingredient of disaster risk reduction.
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20 *Figure 1. Relationship between capital and labour in relation to disaster recovery*
21 *(after Alexander, 2000).*
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23 *Figure 2. Disasters, debt and democracy: vulnerability against entitlement.*
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25 In this context, two more factors are corruption and denial of human rights.
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28 **Corruption and human rights**

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30 Studies have shown that there is a strong correlation between corruption and the
31 magnitude of earthquake disasters—as disasters, not as physical phenomena
32 (Escaleras et al., 2007; Ambraseys and Bilham, 2011). While correlation does not
33 prove causality, it does strongly indicate the existence of a causal relationship. The
34 problem here is that it is very difficult or impossible to measure corruption, and it may
35 be dangerous to try. Yet failure to implement building codes, resulting in structures
36 that easily collapse in earthquakes, is a typical result of a corrupt construction and
37 enforcement system. Corruption is the antithesis of good disaster risk reduction. It
38 drains away funds, perverts agendas, distracts from worthwhile goals, unduly
39 influences policy formulation and encourages patronage and inequality (Lewis,
40 2008). Although the phenomenon is often associated with developing countries
41 (Lewis, 2011), an alternative argument suggests that it is equally prevalent in rich
42 nations, especially through the operation of the global financial system (Whyte,
43 2015). The consequence of this situation is that deepening vulnerability to disasters
44 and failure to mitigate impacts cannot be explained solely by examining policies and
45 plans for disaster risk reduction. It is necessary to understand the 'dark side' through
46 which such agendas are perverted. For example, countries such as Turkey and
47 Mexico have building codes that provide a significant measure of protection against
48 seismic risk, but the prevalence of damage after major earthquakes is an indication
49 of how they have been flouted (Akarca and Tansel, 2012; Gawronski and Olson,
50 2007).
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3 Human rights are an issue that flanks corruption. Restriction or denial of basic rights
4 amounts to the antithesis of good disaster risk reduction (Cahill, 1999). People are
5 denied access to the information they need in order to prepare for disaster and
6 mitigate risks. The democratic base of preparedness, which needs to be
7 participatory, is undermined, and abuses contribute to the misery caused by disaster.
8 A good example, albeit an extreme one, is that of Cyclone Nargis in Myanmar
9 (Burma) in 2008 (Selth, 2008; Stover and Vinck, 2008). Vulnerability to casualties
10 and damage was enormous, aid and assistance were restricted, and minorities were
11 persecuted. The UNISDR's Sendai Framework for Disaster Risk Reduction makes a
12 glancing reference to human rights in article 19(c) and includes them among its
13 guiding principles (UNISDR, 2015). However, it does not treat them as an issue of
14 central importance to DRR. Legal scholars have cogently argued that respect for
15 human rights is a fundamental determinant of resilience (Da Costa and Pospieszna,
16 2015). It also has a major influence on gender equality (Chunkath et al., 2005) and
17 ability to recover from disaster (Hurst, 2010).
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20 Denial of human rights is a highly significant factor in the creation of a world-wide
21 migration crisis. This is a phenomenon that needs to be considered in the light of its
22 relationship with disaster risk reduction.
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25 26 **Migration**

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28 Already frenetic, the pace of change in the modern world is accelerating. This is
29 leading to dramatic shifts in preoccupations and priorities. During my lifetime (i.e.,
30 since the early 1950s), global population has almost tripled. The post-1945
31 settlements have not brought peace and stability, and neither has the end of the Cold
32 War. Regional conflicts and wars fought or supported in proxy by the great powers
33 have proliferated and persisted. There are failed states, such as Somalia, and highly
34 repressive ones, such as North Korea and Eritrea. Desertification may have dropped
35 down the agenda since its apogee in the 1970s, but it has resurfaced in the form of
36 climate change impacts. Although almost a billion people have been lifted out of
37 extreme poverty over the last quarter of a century, at the same time, economic
38 inequality has tended to increase under the influence of free-market capitalism
39 (Piketty, 2014).
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42 Given the presence of substantial migration crises in the Middle East, Europe,
43 Australia, South Asia, central and north America, and elsewhere in the world, and the
44 existence of more than 60 million refugees and countless internally displaced
45 persons, it may well be that we have passed a threshold to a new era of global
46 mobility. There is a new perception of the possibilities of migration and a new sense
47 of entitlement to the benefits, but how will this affect disaster risk reduction? At the
48 very least, the concept of geographical inertia (Alexander, 1995) will have to be
49 reviewed: after disaster, places may be rebuilt in situ, but people do not necessarily
50 remain in them.
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54 First, it is necessary to understand the nature of the phenomenon. Human mobility
55 consists of the refugees of war, conflict, torture and oppression, so-called 'economic
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3 migrants' in search of a decent living, people displaced by other phenomena
4 (eventually this will include the ravages of climate change—drought, sea-level rise,
5 etc.), and opportunists who are mobile by virtue of their skills and qualifications (I
6 myself have been one of these). Migration can be voluntary (with either incentives or
7 imperatives), induced (by policies, laws or political actions) or forced (including
8 human trafficking). Human mobility can be temporary (with or without known time
9 limits), semi-permanent (again, with or without known limits), permanent (in the sense
10 of immigration and emigration), or it can involve statelessness.
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13 Broadly, human mobility is a reaction to global hegemony and the mobility of capital.
14 It is also a reaction to the struggle for power inherent in conflict and warfare, as well
15 as the globalisation of industrial production. Under these circumstances, there could
16 hardly be any other reaction than the mass migration of people. To add to a situation
17 of widespread instability, persecution (more slaves are alive today than at the height
18 of the slave trade) and exploitation, the future effects of climate change on living
19 conditions can hardly be imagined at the present moment (McMichael et al., 2012). A
20 further factor is the impact of sophisticated robots and automation on the structure of
21 employment. On this basis, it would be worth testing the hypothesis that the world
22 has passed a threshold to a new organisation of society in which human mobility is a
23 much more central factor than it has been in the past. If the hypothesis is confirmed,
24 mobility will have a considerable impact on disasters and DRR.
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28 The current set of migration crises have some distinctive parallels with disaster risk
29 reduction. To begin with, both fields are characterised by myths and misassumptions.
30 It is common for policy to be detached from evidence. For example, very few
31 migrants to Europe are "benefits tourists" (i.e. there to take advantage of the social
32 security system) but preventing "benefit tourism" is a major theme in British migration
33 policy (Fudge, 2012). Few survivors of disaster are helpless, but it is not uncommon
34 for humanitarian assistance strategies to assume that they are (Shepherd et al.,
35 2011). For migration there are parallels with disaster in relation to evacuation and the
36 use of informal shelter, as well as the rise of precarious livelihoods. Lastly, both
37 disaster response and migration are easily associated with crises of leadership.
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40 There are also those cases in which migration and disaster response overlap directly.
41 After the 1980 southern Italian earthquake, which left 400,000 people homeless, the
42 Italian government used its stake in Alitalia, the national airline, to offer survivors
43 one-way tickets to places such as Canada and Australia, thus encouraging
44 emigration from the affected area, which offered only meagre prospects of
45 employment. More recently, the initial response to Hurricane Katrina in New Orleans
46 has been associated with forced migration (Fussell et al., 2010).
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49 A neglected issue that lies beneath these observations is welfare.
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51 **Welfare**

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54 There is, of course, a very substantial component of welfare in all forms of assistance
55 to respond to or mitigate the risk of disasters. However, it is remarkable how seldom
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3 this concept has been defined, and how little its meaning has been debated. A simple
4 definition of welfare (my own) is as follows: "the provision of care to a minimum
5 acceptable standard to people who are unable adequately to look after themselves."
6 This involves a multitude of considerations and value judgements about the real
7 meaning of helplessness and care. Politicians do not define welfare because doing
8 so would be thoroughly inconvenient: the concept is simultaneously a vote-getter
9 (possibly a source of largesse) and a millstone (waste that must be eliminated). The
10 relationship between the two interpretations is one of the most contentious in modern
11 politics.
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14 Currently, there is a lively debate about what the extent of rights to welfare of
15 refugees and other migrants, one that is decades overdue (Sales, 2002; Myhrvold,
16 2015). Great efforts seem to have been made to avoid such a debate in disaster
17 relief, mostly for fear of seeming reactionary and lacking in compassion. Indeed, it
18 seems difficult to the point of impossibility to develop a body of ethics and moral
19 philosophy regarding the extent to which people en masse are responsible for their
20 own misfortunes and should be self-reliant. If only this could be done, and without the
21 appearance of heartlessness, it would form the basis for a rational consideration of
22 the supply of aid and how it could contribute to making people more self-sufficient
23 and resilient.
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25 26 27 **Conclusions**

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29 In the future, three fields will tend to converge. They are disaster risk reduction,
30 climate change adaptation and human mobility. The relationship, and factors that
31 may influence it, are summarised in Figure 3. I propose three axioms about what that
32 convergence will involve:-
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35 1. Disaster risk reduction (DRR) is about vulnerability reduction and
36 development. So is human mobility.
- 37 2. Climate change adaptation (CCA) is about adapting to changing vulnerability.
38 So is disaster risk reduction.
- 39 3. Climate change will be a source of human mobility. In a situation of general
40 instability, so will disaster.
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43 *Figure 3. Disasters in relation to other major risks.*

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45 Conflict, environmental change, pandemic disease, radicalisation and population
46 increase will affect all three fields and the areas in which they overlap in the most
47 pronounced way. If we are ever to interpret disasters in the 21st century, we need to
48 develop theory that will come to grips with these issues as a plexus of problems, not
49 as separate, fragmented entities.
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52 Organisations charged with providing positive solutions to disaster risk reduction
53 problems tend to concentrate on the positive outcomes. They seldom like to confront
54 harsh realities. However, more effort must be made to do so, as we have entered a
55 period in history in which disaster risk *creation* is becoming as important as disaster
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3 risk *reduction* (Lewis and Kelman, 2012). To achieve the latter, we must understand
4 the former. Disaster is a window of opportunity for change, and scholars have
5 concentrated on the positive aspects of this (e.g. Birkmann et al., 2010). However,
6 there is also the negative window of opportunity, as exploited by unscrupulous
7 elements in society who wish to increase illegal trade, consolidate undemocratic
8 power structures, sow conflict and discord, propagate fanaticism, and so on. Hence,
9 to understand extreme events in order to know how best to reduce them, we need a
10 "Pandora's box" theory of disasters. Pandora's Box (in the Classical formulation it
11 was a jar) contained all the world's ills, and when, driven by curiosity, she opened it,
12 they all flew out. However, at the bottom what remained was hope. It is a good
13 analogy for the current situation.
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16 We all wish that a journal like *Disaster Prevention and Management* were not
17 necessary. However, there are clear signs that the challenges in this field are
18 increasing, not diminishing. The future is opaque, but I believe we can count on this
19 journal to be offering the same valuable service to its authors and readers in 25
20 years' time as it has done for the past quarter of a century.
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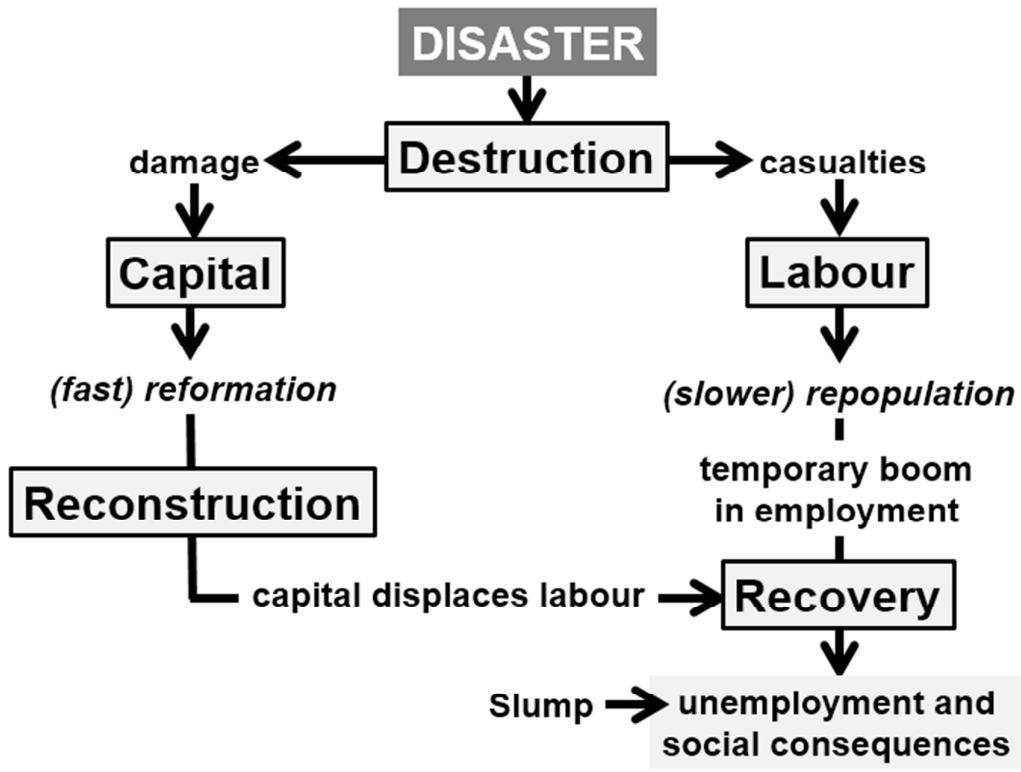
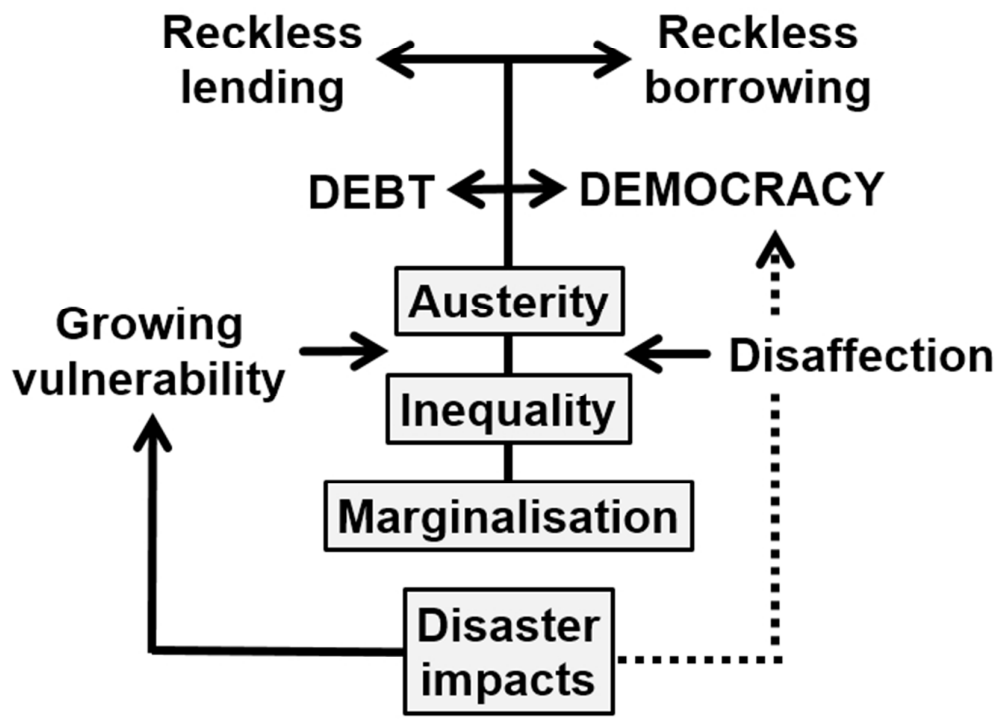


Figure 1 (above), Figure 2 (below).



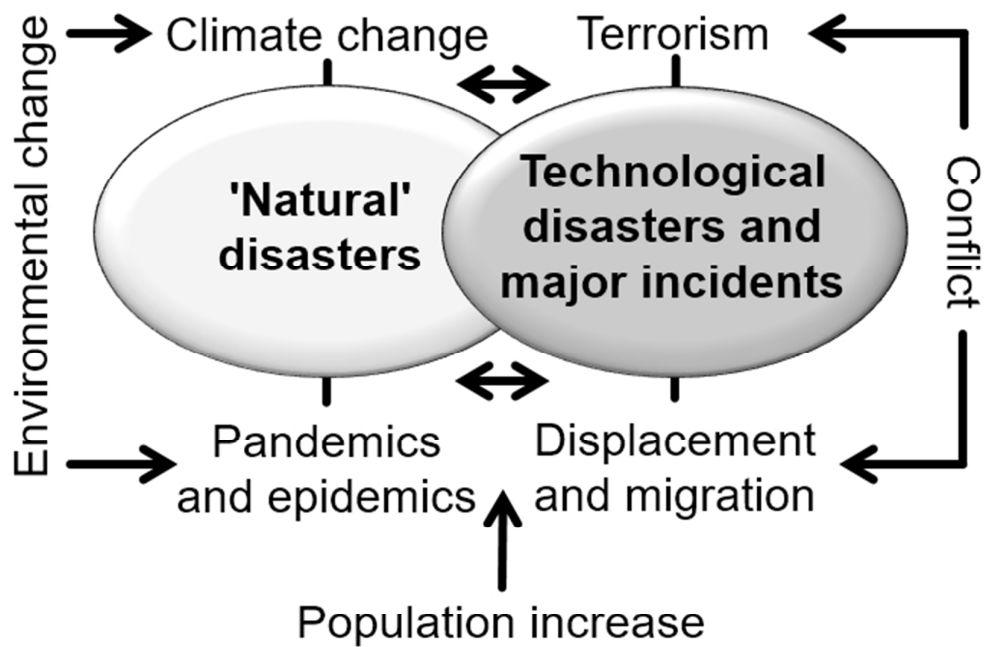
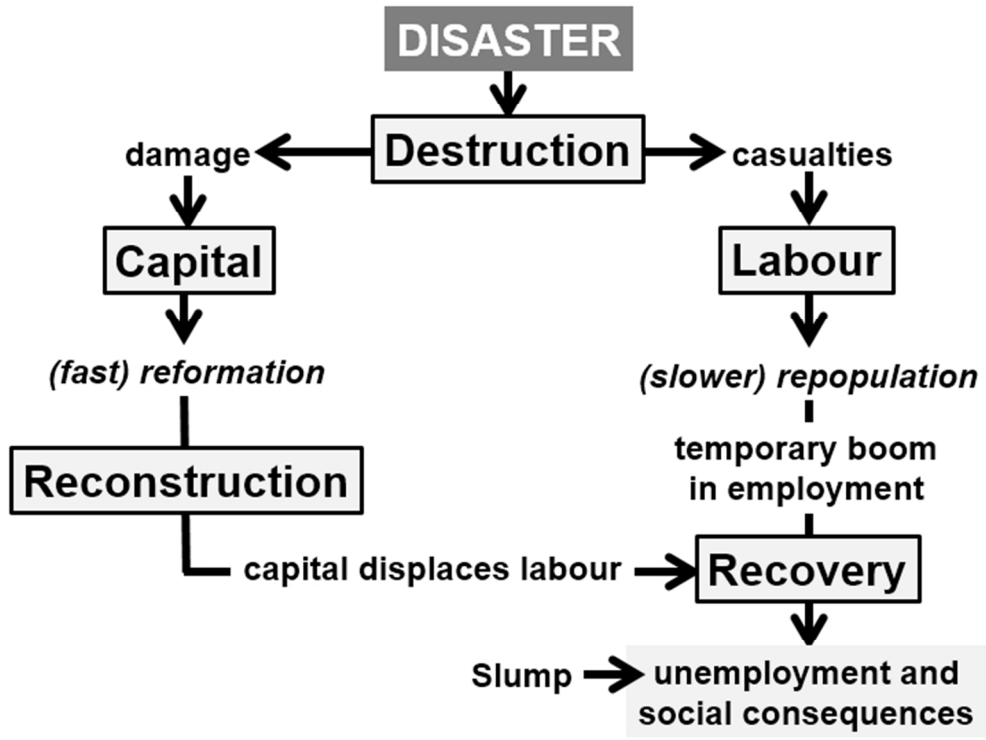


Figure 3.

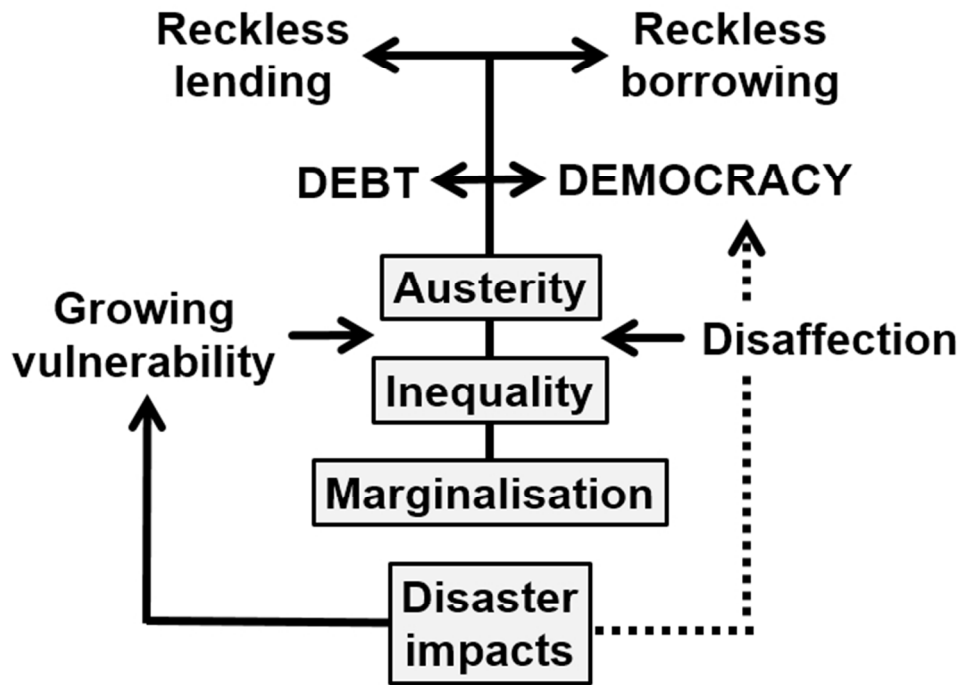
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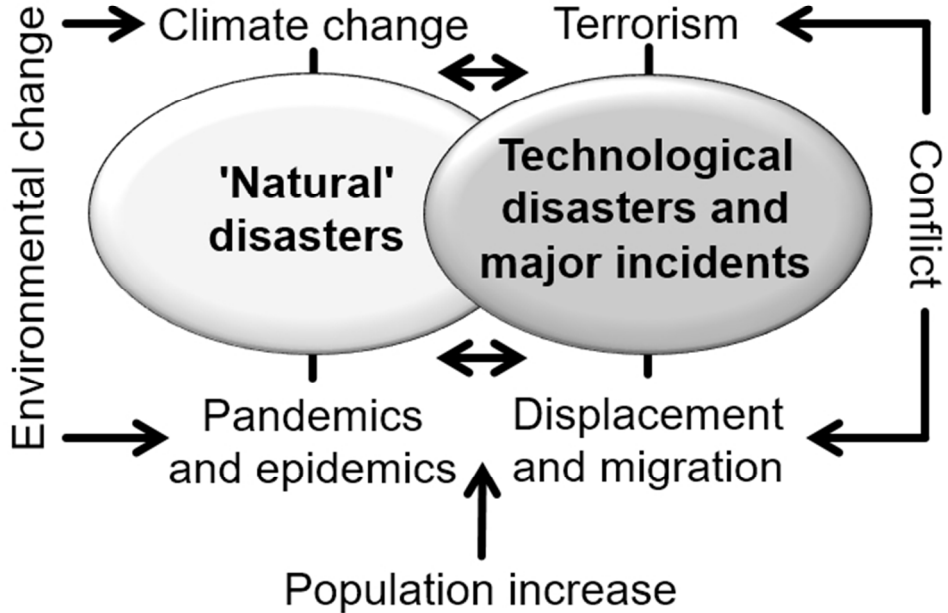
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254x191mm (72 x 72 DPI)

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Review