

Addiction

Author

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Summary

Addiction has become an overwhelming global problem. The addictions are causing great harm to individuals and societies (Courtwright, 2019).

I hope to explain in this paper why the problem of addiction has come to seem overwhelming, and how we can bring it under control on a global level.

I propose that the main reason for our collective failure to control the addiction is that almost all of our policies, treatments, and laws are based on a very old story about drugs and addiction that is culturally entrenched, although it has outlived over decades.

In this article, i am proposing a paradigm shift from the "old story" to a "new story" about additions.

Keywords

Addiction; drugs; social displacement; decriminalization and legalization of drugs; reception of addicts

Addiction

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I assume that everyone has heard some version of the old story, because it is deeply rooted in Western Culture and relentlessly publicized. The old story tells of a drug with the powers of a demon or devil! Once people have used a few times it transforms them so that they must spend the rest of their lives craving and pursuing it. Some of these people can be saved by undergoing treatment, but the rest become not only irresistibly addicted, but also depraved and violent in their pursuit of the demon drug, and damaged by the drug's direct effects on their bodies and their brains. The demon drug is the cause of society's addiction problem and many of its other problems of crime, degradation, and misery. The demon drug must be banned from the face of the earth by any means necessary!

Although the old story remains essentially the same over the decades, the drug that has the central role in the story changes from time to time as different drugs are alternately demonized and normalized. Generations of people in different countries have been terrified by the old story as it has been proclaimed about dozens of different drugs over the decades, and there are literally hundreds of theoretical and scientific explanations of how the current demon drug robs people of their willpower and leads them into self-harm and crime.

Of course there are real dangers, including the possibility of harmful addiction and physiological damage, associated with misuse of most of the drugs that have been demonized by the old story. But these dangers cannot be eliminated by declaring a War on Drugs or by terrifying anti-drug propaganda or by vastly increasing the availability of treatment. Legal regulation of distribution and marketing of these drugs and social control over excessive and inappropriate use is often useful. But, for the most part, the old story has only created fear, rigidity, and violence.

The amazing changes in the governmental and public perception of marijuana in Canada during my own lifetime illustrate how absurd the old story can become. A drug can be demonized in the old story at one time in history and be normalized at other times, while other drugs take on the role of the demon and the old story continues to terrify people and dominate their understanding of addiction.

In 1939, the year of my birth, marijuana was strictly prohibited and stringently punished in Canada. Smoking marijuana was said to cause homicidal and sexual madness, and it was hysterically demonized by politicians, doctors, judges, clergy including Canadian popular writer Emily Murphy (1922) and the American popular movies "Reefer Madness" and the "Assassin of Youth" that played in Canadian theatres everywhere.

Eighty-one year later, in my old age, marijuana is legally sold for recreational and medical use to adults throughout Canada. In the midst of this year's Covid-19 pandemic, marijuana appeared on the list of products that the government of my Canadian province has declared *essential* to the public to keep our spirits up (Province of British Columbia, 2020)! According to a recent, humorous book, even Jesus now approves of marijuana, at least in Canada. When it becomes possible to laugh at something, it has lost its demonic powers. Marijuana has become normalized, but the old story is still told, now directed primarily at opioid drugs and methamphetamine.

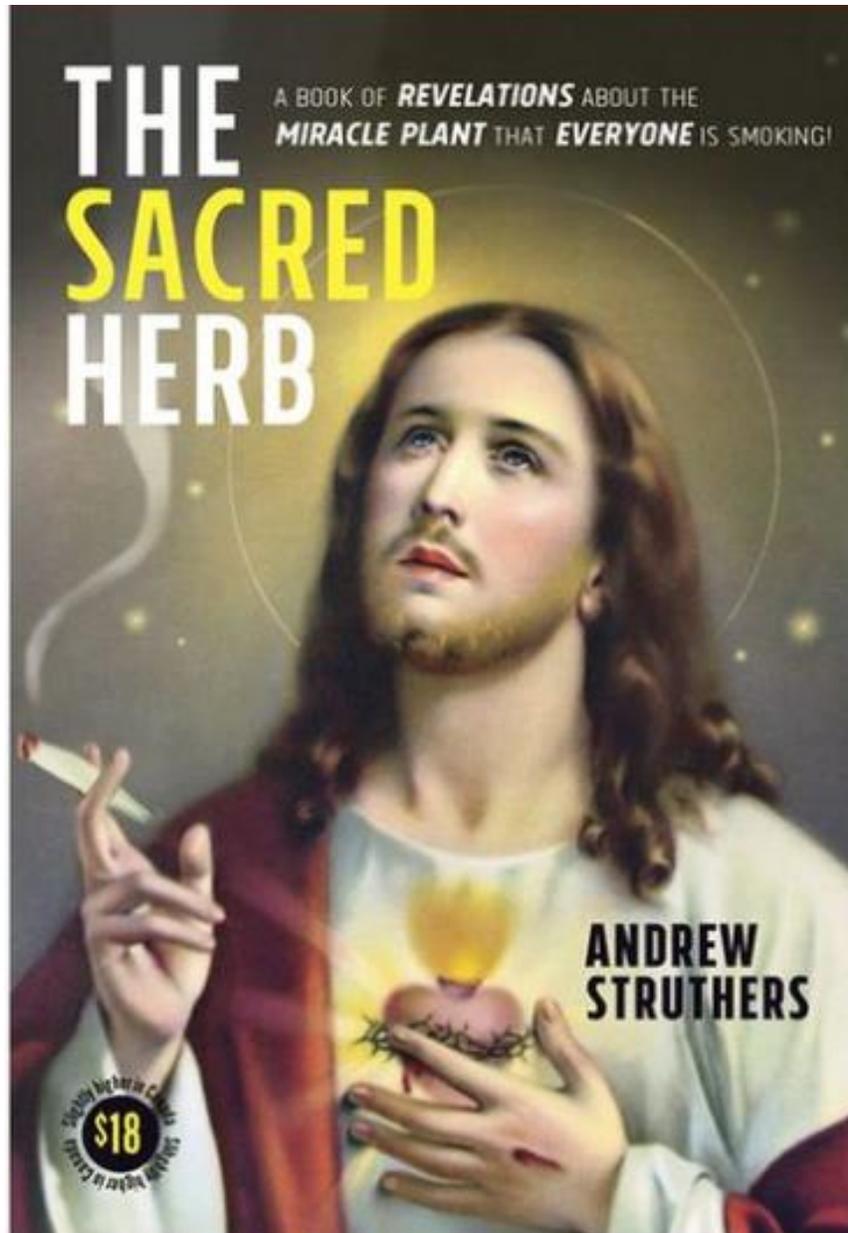


Figure 1- A recent Canadian book (Struthers, 2017).

I was too young to learn the old story about marijuana in the 1940s, so I first learned the old story as it was applied to heroin in the 1950s, from my parents, classmates, and comic books. When I went to university to become a psychologist, I relearned the old story as explained by the behavioural “conditioning theory” of the late 1950s and 1960s, which made it sound more scientific, although it was still the same old story, usually applied to both heroin and cocaine in those days.

Later I learned to tell the old story using other theoretical formulations: psychoanalysis, the doctrine of Alcoholics Anonymous, evangelical Christianity, epigenetics, today’s “Brain Disease Model of Addiction”, and others. These different formulations each give the story a special colouration, but all of them, including the neuroscience-based Brain Disease Model, depict a drug with the powers of a demon: it steals a person’s will power, or “flips a switch in their brain” after which addicts will do anything to get it.

The old story has been told about a great variety of drugs. During my long lifetime, it has been told most convincingly in Canada and the USA about marijuana, heroin, powder cocaine, crack cocaine, amphetamine, methamphetamine, prescription opioids, and fentanyl, but many other drugs have played the demon drug role in the story for shorter periods. These lesser demons include barbiturates, benzodiazepines, LSD, and meprobamate. For a brief time, when I was a young psychologist in the 1970s, the story was being told with terrifying seriousness about certain common household products that teenagers were said to be addictively inhaling, including a type of glue (Brecher, 1972, pp. 321-325)! This type of glue was often not declared fully addictive itself, but it was identified as a gateway to serious drug addictions to other drugs and prohibited in some places.

In its most ancient versions, the old story had nothing to do with drugs. For example, demon possession is mentioned at least 100 times in the Bible, mostly in the New Testament (Mark 5:1-20; OpenBible.info, 2020). It is said, even today, that the people who are possessed by the demon are antisocial, dangerous, and disgusting, and cannot be helped without a divine intervention so that the “demon will free your body and your soul”. The old story is also built into the famous legend of Dr. Faustus that has been told throughout Europe for more than four centuries. Dr. Faustus pledged his soul to the devil, in return for magical powers on earth. Even though the magic the devil offered did not bring Dr. Faustus any real satisfaction in the old legend, his pledge to the devil, really did bring him eternal damnation. No drugs were involved in the versions of this myth that I have read.



Figure 2- Faust and Mephistopheles: The power of Demons

Of course, there are also stories of virtuous people in western culture, who are able to resist, no matter what the devil offers them. These virtuous people include Jesus in the wilderness, who never yielded to Satan's deadly temptations.

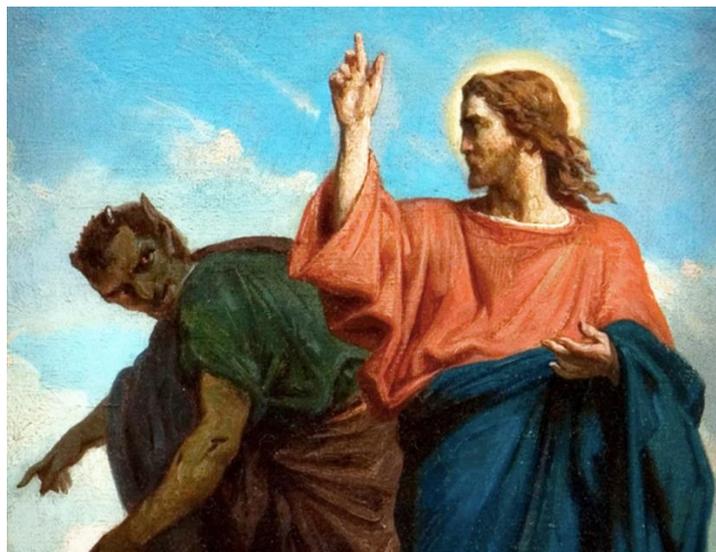


Figure 3 - Jesus and Satan in the Wilderness (Mathew 4: 1-11)

Today, however, this ancient story of demonic incorporation is most often associated with drug use. There are three basic elements of the old story as it has been applied to drugs for the past century:

1. Many individuals use foolishly or wickedly drugs that “cause addictions”, seeking ecstatic bliss and forbidden pleasure.

2. Those drugs that “cause addictions” steal the willpower of some or all of the foolish users, transforming them into drug addicts. By frantically attempting to satisfy their irrepressible cravings for drugs, drug addicts would propagate degeneracy and violence throughout society.

3. Recovery from addiction would be extremely difficult but not impossible. It would require close supervision by expert medical professionals, including psychiatrists and psychologists, or by specialized self-help groups, frequently including “the 12-step theory”, or by “religious leaders”. Since most addicts desperately crave their drugs, police must often force addicted people to accept treatment.

Some variations of the old story emphasize the evil power of the drug and human wickedness, stressing elements 1 and 2 of the old story. In these variations, the problem must be solved either by prohibiting demon drugs or by making people so terrified that they would never try one. These variations have served to justify a cruel and futile War on Drugs in many countries. The War on Drugs follows logically from the old story. If there really were drugs with demonic powers, violent repression of them would be a sensible last-ditch strategy, and the terrifying anti-drug propaganda would be true.

The Drug War inspired by the old story (emphasizing elements 1 and 2) has failed to control drug use and drug addiction everywhere, although it has been massively funded and ruthlessly pursued in many countries. Its failure has been endlessly documented (e.g., Alexander, 1990, 52-93; Hari, 2015).

Although some Drug War supporters were convinced and truly believed that it was the only possible solution to prevent the spread of these “demonic substances” in societies, history shows that the War on Drugs has often been used as a tool to extinguish minority groups in several countries. These countries include Canada, where the war on drugs was quite openly directed against Chinese immigrant labourers in the first half of the twentieth century (Alexander, 1990, 29-32). The Canadian drug war was at least as brutal prior to 1970 as the American drug war at its worst moment (Alexander, Schweighofer, and Dawes, 1996).

The United States is famous for using its drug war enforcement measures to suppress its black population (Hart, 2013; Hari, 2015; Baum, 2016). I have learned that Brazil is using the drug war in this same way to suppress the most distant from the dominant classes. This evidence seems quite persuasive to me (Ribeiro, 2016; Rodrigues & Labate, 2016).

Less harmful variations of the old story stress element 3, and emphasize that supposedly out-of-control drug addicts need highly specialized help to overcome their cravings. Help can come

from innumerable kinds of treatment, and research is constantly underway to develop more effective kinds.

Good and Bad News About Old Story

The good news is that the last fifty years, even as the old story has remained the dominant way of understanding addiction, many parts of the world have moved steadily away from War-on-Drugs variations of it (emphasis on elements 1 and 2) towards compassionate treatment and harm reduction interventions (emphasis on element 3). Along with this shift in emphasis, this half-century has also seen a tangible movement towards a more compassionate attitude throughout society, in which addicted people in many countries are treated with less stigma, more factual knowledge, and more empathy. Portugal provides the most publicized success story right now. Its successes in lowering the overdose fatality rate and HIV infection among drug users are widely celebrated (Transform, 2020). The growing worldwide acceptance of harm reduction in combination with partial decriminalization – even in the United States (Associated Press, 2020) – is good news.

Canada is a less well-known example, but our progress in the last few decade has also been dramatic. We too have used harm reduction and partial decriminalization to dramatically reduce our HIV infection rate as well as reducing the violent abuse of drug users by the police and addiction arrests. Drug addicted people are not only healthier than they used to be, but they are no longer segregated and despised. Recognition of their shared humanity has steadily increased. The city of Vancouver has been at the forefront of Canada's progress, and many Canadians, including me, are very proud of what we have accomplished.

There is bad news too. One piece of bad news is that the movement towards a more humane regime is still suffering serious resistance. Canada's previous government was conservative vigorously resisted moving away from the Drug War. Fortunately, that government lost its legal challenges to harm reduction programs in the Canadian Supreme Court and was defeated in our 2016 election. In Vancouver today, the city, province, and federal government are all on the side of compassionate treatment and harm reduction in most of the country and partial decriminalization continues.

Resistance has been much stronger in the US, however, and it seems to have gained strength under the Trump government as illustrated, for example, by President Trump's strong advocacy for a death penalty for drug trafficking (Holpuch, Glenza, & Jacobs, 2018). In a more recent news conference (U.S. Department of State, 2020), the American President appeared to reactivate the War on Drugs, by committing a new naval task force to intercepting drugs coming to the United States from South America.

Public resistance to more humane treatment of addicts is also visible in Brazil, most famously in the case of Sao Paulo's Cracolândia. When I read the "Letter from Manguinhos" that Fiacruz

becomes public (Oswaldo Cruz Foundation, 2017), I was delighted to note that four prominent Canadian organizations are among the 110 organizations that endorsed the letter.

Unfortunately, there is even *worse* news coming from the old story. The worst news is that, despite the compassionate movement towards emphasizing treatment and harm reduction within the scope of the old story in many countries, serious problems of addiction to drugs and other habits have not decreased and seem to be increasing alarmingly in many places. Even in Portugal, with its wonderful life-saving advances with harm reduction and treatment, which provide ample proof of the benefits of moving from the first and second to the third element of the old story, provides little evidence of a significant reduction of drug addiction or of other kinds of addiction. The same is true of Denmark, Finland, and Norway who have long been leaders in supportive treatment of people addicted to drugs (legal and illegal) and alcohol.

My own city of Vancouver provides one of the most discouraging examples of the failure of moving the emphasis to the third element of the old story to reduce the addiction problem. Even though Vancouver is away from the War on Drugs now has consistent support from government, police, the professional community, the media, and the public, and even though we have successfully lowered HIV infection and police brutality in our downtown core, we are currently suffering from an all-time high number of overdose deaths to opioid drugs, especially fentanyl. Many people fear for their children as they grow up in a time of high overdose deaths. And our overdose deaths increased sharply when social isolation measures were introduced to protect us from Covid-19. In fact, British Columbia has recorded many more deaths from drug overdose than from Covid-19, at the height of our virus pandemic (Larsen, 2020)! Fortunately, our provincial and federal governments are so far responding to the increase in overdose deaths by increasing harm reduction and treatment services, rather than regressing to the War on Drugs.

New reports suggest that my city is also suffering from a rapid growth in Internet addiction: Gambling, pornography, social media, and computer games. Likewise, we appear to be experiencing growing addiction to unhealthy eating patterns: Obesity, anorexia, and type 2 diabetes. We have other serious kinds of addiction as well and many of them seem to be trending upwards.

I propose that the old story of the demon drugs can *never* provide an adequate foundation for overcoming our globalized addiction problem, no matter which elements are emphasized! I would not deny that compassionate and well-researched treatment and harm reduction practices and partial decriminalization are a vast improvement over the War on Drugs. Nonetheless, I believe they will never bring our fearsome addiction problems under control, no matter how much we invest in them. Furthermore, I propose that we already have the outlines of a new story that *can* bring the drug addiction problem under control, although doing so will be very far from easy.

The Collapse of the Old Story

In recent years, more and more high-quality research has seriously challenged the old story. In fact, many researchers are beginning to see that all three are wrong. The evidence is

overwhelming. It comes from many sources, particularly neuroscience, history, anthropology, sociology, clinical case studies, genetics, population surveys, biography, and autobiography (e.g., Alexander, 2008; 2014; Satel & Lilienfeld, 2013; Heim, 2014; Lewis, 2015; Hall, Carter, & Forlini, 2015; Heather et al., 2017; Grifell & Hart, 2018; Hart, 2019; Satel, 2020; Heather, Field, Moss, & Satel, in press).

Perhaps the single most conclusive piece of evidence disproving the old story comes from research on hundreds of thousands of American soldiers returning home following the Viet Nam War in the 1970s. Extraordinary amounts of cheap, high-quality heroin had been available to these soldiers in Viet Nam. Individual heroin use was much higher than that of typical street addicts in the United States at the time. Thousands of soldiers became addicted. There was great alarm in the United States about the chaos that this surge of returning addicted soldiers would cause when they arrived home, because even the best-informed observers of the day believed the old story: That heroin use caused a chronic disease of addiction that was most often incurable (Brecher, 1972). The only hope was imposing lengthy treatment on the addicted soldiers. Where would the facilities for all that treatment come from?

However, to everyone's surprise, this unachievable mobilization of treatment was never needed. Only 12% of the addicted soldiers continued their addictions following repatriation and discharge from the army (Robins, Helzer, and Davis, 1975)!

Why were most of these addicted men able to control their addictions after returning home? It was not because the American army punished them or forced them into treatment, because they had been discharged from the army. Nor was it because heroin was unavailable in the U.S., because the men reported finding ready access to heroin on the American streets at that time (Robins, Helzer, and Davis, 1975). Many of them reported continuing casual, but not as addicts. These unexpected findings enabled many people to see that the old story of addiction was simply wrong (see Alexander, 1990, chap. 4)

I will assume that readers already have the resources available to review the extensive scientific and academic evidence regarding the failure of drug policy stemming from the old story (which fuels and sustains the "War on Drugs"), if they wish. So I'm not going to worry about the old story anymore and I'm going to assume that the "War on Drugs" didn't lead mankind to find the solution we're looking for for addictions or its large-scale addict treatment programs, absolutely wrong, although trillions of dollars have been spent (Thornton, 2018) on this strategy. It should be noted that the old story not only did not allow the world to control the problem of addiction (it has only worsened and expanded over the past few centuries), but it is also still being used by unscrupulous politicians as a justification for persecuting many of us that are far from the heart of power, mainly in peripheral countries and young afro-descendants (Hart, 2013; Hari, 2015; Baum, 2016; Rodriques and Labate, 2016). Not only has the old story not enabled the world to control the addiction problem, but it is also still being used by unscrupulous politicians as a

justification for persecuting large numbers of people in the racial and economic underclasses in many countries (Hart, 2013; Hari, 2015; Baum, 2016; Rodriques and Labate, 2016).

We need a new story, or, more precisely, a new paradigm. The one that I am proposing is gaining ground everywhere, and is supported in various ways, by some of western civilization’s deepest and most honoured thinkers. This new story is well known to some researchers and specialists working in the field of drug addiction, although it has only begun to find a place in the center of that field and in public opinion.

The “New Story”

The new story contradicts and replaces all three elements of the old story and negates the narrow way of looking at addiction that is implicit in them. The essence of the new story is that the “drug addiction problem” is only one aspect of the malaise of addiction, despair, and self-destruction that is built into modern society. The new story asserts that the full addiction problem is not limited to drugs but includes the well-documented “process” or “behavioural” addictions (Sussman, Lisha, and Griffiths, 2011) as well as the more varied addictions that are known primarily from clinical observation, history, biography, and autobiography (Lemon, 2018). Although drug and alcohol addiction are important, they fill only one corner of the dreadful tapestry of addictions that beset the modern world. The new story ultimately points to the daunting conclusion that this wide-ranging addiction problem can only be solved by epochal changes in the emerging, modern world society.

I have centered my representation of the new story around a portrait of Christopher Columbus, looking worried. I hope you will quickly see why Columbus should be the central image, and why he was right to worry.



Figure 4. Addiction Feedback Loop.

The modern age has spawned dangers that are even more terrifying than the rising tide of addiction, including imminent environmental catastrophe, potential nuclear annihilation, extreme income inequality, and violent mass public resentment. This presentation focuses on addiction,

but I also hope to show that one part of the reason that addiction matters so much today is that it is tightly interwoven with the other potentially catastrophic dangers of the modern age.

“The modern age”, comprising the five centuries of western history since Columbus’ voyages, has long been a topic of intense study among historians, literary scholars, and social scientists. For a compact description of how social scientists conceptualize the modern age, see Berman (1988, pp. 15-21). For more recent, but less compact, descriptions, see Mishra (2017), Monbiot (2017), Han (2017), or Deneen (2018).

Many great thinkers have described the psychological problems of modernity eloquently in their various works: I am thinking especially of Fyodor Dostoyevsky, Charles Dickens, Franz Kafka, Aldous Huxley, George Orwell, and Byung-Chul Han for powerful nightmare critiques, and Vaclav Havel, Ignacio Martín-Baró, Eduardo Galeano, Naomi Klein, George Monbiot, and Pope Francis for critical analyses that point towards a way out.

Emphasizing the psychological problems of the modern age is not the same as advocating a return to the Middle Ages or to tribalism! Every historical era of civilization has its characteristic achievements and successes as well as its unwanted side effects. Although the side effects of early modernity were obscured by its dazzling accomplishments and the wealth that it brought to many people, today’s late modern society must face and rectify the side effects of modernity if it is to avoid catastrophe.

Saying that addiction is built into the modern age, does not mean denying that well-documented risk factors for addiction such as degrading poverty, early-life traumas, family dysfunction, depression, loneliness, racial prejudice, insidious advertising, perfectionism, predisposing genes, and deliberately addicting social media, games, and gambling machines that increase likelihood of addiction. Rather, the new story shows how the structure of modern society tilts the playing field in favour of addiction by increasing the likelihood that people are exposed to most of these risk factors, as the consequence of social and economic forces beyond their control and by limiting the ways of responding to the risk factors that do not involve addiction.

The new story, as depicted in Fig. 4, envisions a feedback loop with four major components.

Fragmented Society

From the time of Christopher Columbus onward, Western European powers crushed pre-modern societies and aboriginal tribes around the globe. This social fragmentation was made possible by modern advances in science and technology, like the ship’s compass, steam engines, heavy gunnery, mass production of cheap trade goods. It was also made possible by modern ideologies that brilliantly justified exploiting the entire planet to increase the wealth and power of individual monarchs and great trading companies and nations (Columbus, 1505/2004; Galeano, 1973; Mann, 2011).

As the colonizing European nations fragmented societies overseas to magnify their national wealth and power, they also crushed and impoverished the rural subcultures of their own

homelands, although with somewhat more restraint. Agricultural and industrial revolutions, which accompanied global colonization, devastated stable peasant farms and commons throughout Europe. Refugees from this domestic fragmentation were cruelly stigmatized and economically exploited in European slums or shipped abroad to populate the colonies.

Although it is sometimes overlooked now, the modernizing European nations also fragmented their own upper classes. Rich adventurers, manufacturers, and bankers competed ferociously to maximize their individual wealth and glory, and many wound up in ruins (Galeano, 1973, 22-28, 55-56). As Viennese scholar Karl Polanyi (1944, p. 128) described early modern England, "... the most obvious effect of the new institutional system was the destruction of the traditional character of settled populations and their transmutation into a new type of people, migratory, nomadic, lacking in self-respect and discipline—*crude, callous beings of whom both labourer and capitalist were an example.*" In the late modern age, countless works of philosophy, fiction, poetry, and song lament the fragmented lives of the affluent and well educated as well as the poor and exploited.

The fragmentation of society that began in the early modern era still escalates in the 21st century. This fragmentation has been shaped by different economic and political regimes in different times and places over the centuries of the modern era, but it is currently shaped primarily by the dominance of free-market capitalism; neoliberal politics; consumerism; gross economic inequality; ubiquitous social media; third world "development;" financialization with its periodic global recessions; high-tech surveillance; real estate bubbles and crashes; technological unemployment caused by relentless efficiency increases in manufacturing and agribusiness; and continuing plunder of the remaining aboriginal territories. Today's continuing global fragmentation is not only propagated by original European colonial nations and the United States, but also by other emerging major powers (Norberg-Hodge, 2018) as they modernize along the lines that originated in Western Europe five centuries ago.

Perhaps the best-known, current example of modern fragmentation of society is the "data mining" of social networks like Facebook to produce targeted advertising and propaganda. The social networks are designed to fulfill a need for intimate engagement for people who are on the move, far from their families, and have little time to spare. Often, opportunities for real, slow pace cultivation of human contact are lost as people engage in high-speed superficial communication on tiny screens (Wylie, 2019; Zuboff, 2019).

In my earlier writing, I focussed on free-market capitalism as the cause of modern fragmentation (Alexander, 2008). I still see free-market capitalism as centrally important, especially in my own country, but broader historical thinkers have shown that the cause runs deeper, to the very roots of modernity itself. Christopher Columbus was not a capitalist, nor were Vladimir Lenin, Joseph Stalin, Fidel Castro, Deng Xiaoping, and Xi Jinping. But they have been vigorously and sometimes mercilessly *modern*. Christianity, Marxism, and free-market capitalism have all provided justifications for the fragmenting advance of modernity in different times and

places.

Modern fragmentation creates obvious economic and environmental destruction, but my focus here is on its devastating social destruction. Beneath the steamroller of modernity, extended families and communities are scattered; nuclear families become dysfunctional; local cultures are pulverized; legitimate authority is toppled, religious traditions are twisted; and traditional arts are reduced to production of tourist-shop trinkets from the cultural rubble. People and social groups that do not contribute to the advance of modernity are marginalized or exterminated.

Societal fragmentation has come to seem an inescapable consequence of the modern miracles that have enabled the earth to support more than seven billion people. But this miraculously modern, emerging world society is in deep – possibly terminal – trouble. Part of this trouble comes from the many side effects of fragmentation, most obviously environmental destruction, obscene inequalities of wealth and power, and the possibility of nuclear war. The most important of these threatening side effects for this paper, however, are mass dislocation and, in its trail, mass addiction.

Mass Dislocation of Individuals

Dislocation is brutally obvious in the poor and homeless of today's world, but it not confined to them. It afflicts every level of society. In richer societies, dislocation is devastating the affluent as well as the poor (e.g., Luthar, Barkin, & Crossman, 2013; Powell, 2016; Curran and Hill, 2017; Han, 2010; 2017; Culkin, 2019).

Mass dislocation has come to seem inevitable. The modern market system requires that individuals must perform competitively and efficiently, unimpeded by sentimental ties to families, friends, religious values, or norms of compassion. Children must be prepared for a life of competition, even if stupid and meaningless. Until children know this for themselves, they must be relentlessly pushed to achieve by their parents, supposedly for their own good. After all, "business is business" and we expect our politicians to produce "economic growth" and to "create jobs" at all costs. Stringent economic rationality is said to make the law of supply and demand function efficiently, and thus to "clear the markets" each day. China, India, Brazil and other nations that have joined the economic superpowers are paying the price in surging dislocation – and addiction.

Seen in a positive light, individual dislocation can provide a space for initiative and creative freedom for people who have felt stifled by their societies (Han, 2017, chap 13; Bruder, 2017). However, prolonged, radical dislocation exacts a high price, because it ultimately generates misery in the form of anxiety, suicide, depression, hopelessness, and resentment. In fact, prolonged dislocation is so unbearable that it has been imposed as an extreme punishment from ancient times to the present. Punishments like exile, ostracism, banishment, shunning, excommunication, and solitary confinement are, essentially, imposed dislocation. Radical social isolation is an indispensable part of today's terrifyingly scientific technology of torture (Klein, 2007, chap. 1).

Although it is widely experienced, “dislocation” resists quantitative measurement. For example, psychologists like myself may speak of dislocation as the lack of attachment, belonging, identity, meaning, and purpose. But how are these experiences measured? Can a strong identity make up for a weak sense of purpose? Can a strong sense of attachment and belonging make up for other lacks? Such questions cannot be answered precisely at this time. Nonetheless, dislocation – under its various names – has long been recognized by the most honoured thinkers of the modern era. It is easy to overlook the importance of dislocation in an academic milieu that is dominated by empirical epistemology and reductionist ontology. Unfortunately however, positivism and reductionism cannot legislate dislocation out of existence. They can only obscure it.

The Addictions pandemic: Severe addictions as a result of adaptation to Dislocation

Just as individual dislocation historically comes from fragmentation of a society’s traditions and institutions, a flood of destructive addictions historically follows the spread of dislocation (See Fig. 1.) Extensive historical, anthropological, and clinical evidence documents this predictable sequence (Case & Deaton, 2017, pp. 429-434; see review in Alexander, 2008, chap. 5).

Addictions are a consequence of dislocation because they can provide dislocated people some alternative to, and compensation for, bleak and empty lives due to episodic traumas. Severely dislocated people would definitely be banned from social life, which became essential for the evolution of humanity (Darwin, 1871/1981, vol. I, chaps. 3.5; Wilson, 2012, ch. 7). Without their addictions, many dislocated people would have terribly less reason to live.

All of our human ancestors successfully adapted to their environments behaviourally, as well as anatomically and physiologically. We have inherited our adaptive capacities from them. The ability to become “addicted,” in the broad English language sense of being immoderately devoted, dedicated, or attached to something (see Oxford English Dictionary definition 1a), is one of these adaptive capacities. Although adaptations usually help individuals to survive and thrive, all adaptations can become harmful if worked to exhaustion by individuals who have found no better recourse for adapting to a long-term stressor. The term “diseases of adaptation,” is sometimes used for physiological or behavioural adaptations that become dangerous when they are either worked to exhaustion (Selye, 1950) or over-respond to threats (Angeli, Minetto, Dovio, & Paccotti, 2004; Yong, 2020).

Opioid addiction provides a well-studied example of the adaptive functions of drug addictions, as well as the danger of addictions that are pushed beyond their limits. Opioids, including heroin as well as prescription opioids, provide real relief for the physical and psychological pain. It is easy to understand so why many people use opioids for comfort in a lonely, over-worked world. It is easy to understand why, opioid overdose deaths have increased dramatically during the months since Covid-19 has necessitated widespread social isolation (American Medical Association, 2020; Swift & Goodnough, 2020).

However, the great majority of opioid users do not overdose or become addicted (Alexander, 2008, chap. 8; Satel, 2018) and most of those who do become addicted, do not become *severely* addicted or remain addicted for very long (Heyman, 2019; Morgan, 2019). But there are many people in the modern world who must endure crushing dislocation for extended periods. For them, severe opioid *addiction* – not just opioid use – often provides the best available relief or at least a desperately needed substitute for what is missing in their lives.

How can opioid addiction be adaptive? When street addicts wake up each day, at least they know what they need and what they must accomplish that day. Rather than being devastated by unbearable emptiness, they keep busy frantically chasing drugs and interacting with other drug chasers within a loose addict community that justifies itself with cultivated disdain for the hypocrisies of the “straight” world.

At the same time that opioid addiction can give dislocated people a purpose, it can enhance their identity and self-esteem by symbolically linking their forlorn lives with gloriously tragic, opioid-addicted celebrities like Phillip Seymour Hoffman, Michael Jackson, Robin Williams, or Johnny Depp (e.g., Pryor, 2003; O’Donnell, 2018).

The enhancement of self-esteem that heroin can provide is not entirely unjustified: Heroin addicts know that few “straights” would have the courage to “mainline” the world’s most feared drug. Fentanyl users know this even better and understand that peak risk may provide a special kind of joy or *jouissance*. (Allouche, 2001; Willie, 2018). People who find capitalist greed intolerable may see using the most condemned drug of capitalist culture as a tragically hip form of personal resistance (Culkin, 2019, pp. 23-36).

Methamphetamine provides a more recent example of the effects of fragmentation and dislocation on addiction. An American methamphetamine panic broke out at the end of the 20th century in the US. The surge in methamphetamine use and addiction was interpreted within the old story as a result of using an irresistibly addictive drug. Some champions of the old story announced at the time that methamphetamine was “the drug with the greatest power to cause additions in the world”. Then, investigative journalism showed why methamphetamine was spreading so fast. Mass dislocation had emerged in the American farming states following legislation and immigration practices that destroyed what had remained of the traditional American family farm culture. Large numbers of dislocated former farmers and dislocated workers from meatpacking and other agricultural industries appeared in a region with abundant farm chemicals that could be converted into methamphetamine. Methamphetamine parties provided a way for people to express their dislocation amidst a community of fellow sufferers. The result was a devastating increase in methamphetamine use and addiction in the American farm belt, which was later renamed “Methland” by one author (Reding, 2009; Alexander, 2011).

Gambling addictively on slot machines, roulette tables, or the Internet can be adaptive too. Addicted gamblers do not find the human engagement that heroin and methamphetamine users do so much as a “zone” of intense engagement with colourful gambling machines ingeniously

designed to be interactive and seductive, without the annoying qualities of actual human beings (Ross, 1987, pp. 232, 234; Schüll, 2012; 2015; Dixon et al., 2017). Commodities traders, who engage in another type of gambling in the exchanges where they work, report experiencing a similar “excitement” as they scan their screens full of rapidly changing data for profit-making patterns (Zaloom, 2010).

Many people addicted to gambling, whether at the track, casino, or commodities market, are too under-confident to achieve real economic power in society but crave the excitement and “action” that comes with handling large sums of money. They can feel important, engaged, and powerful – like daring risk takers – even as they lose everything (Dostoyevsky, 1866; Ross, 1987, pp. 196-199, 295; Larcombe, 2017). People addicted to gambling cannot be helped by lectures on the unfavourable odds: Winning money is not the most important reason that they are gambling.

Severe addiction to wealth and power also has conspicuous adaptive functions. Biographical and autobiographical literature provide vivid testimony that wealth and power addiction bring rich, but deeply dislocated people some desperately needed personal recognition (e.g., Slater, 1980; Polk, 2017; M.Trump, 2020; Cohen, 2020).

On a larger scale, addictions to fanatical political ideologies and spiritual cults can provide the experience of dedication, devotion, belonging, and power for masses of people suffering from prolonged dislocation, even as they sometimes destroy lives, families, and fragile democracies (Arendt, 1968, 312-324; 474-479; Mishra, 2017; Grigoriadis, 2018; Duplass, et al., 2018). Perhaps the most poignant example now comes from those hospitalized people who continue to adamantly deny the existence of Covid-19 on ideological grounds, sometimes right up to the day that it takes their life (Villegas, 2020). The most dangerous of political cults, including QAnon, function on-line, and propagate globally at Internet speed (Asthana & Wong, 2020; Alt, 2020)

People who are not too seriously dislocated can use drugs, accumulate wealth, gamble, associate with cultists, or participate in countless other potentially addicting practices without taking serious risks. They have reasonably full lives already, and they can use addictive practices without needing to become overwhelmingly involved. Even if they become addicted for a time, they can usually leave their addictions behind if they encounter unacceptable consequences (Granfield & Cloud, 1999; Polk, 2017; Heyman, 2019) However, millions of people follow their addictions to tragic endings, because they can find no foundation for a fuller life (see arrow #3, Fig. 1).

Saying that harmful addictions are *adaptive*, does not mean denying that they can become catastrophic when they are worked to exhaustion. But it does contradict the old story completely. The cause of addiction does not lie in the neurochemical effects of any particular drugs or in reckless hedonism, but in the tragic failure of modern human society to meet some of the deepest human needs and in the evolved behavioral adaptations that can help people adapt to that failure, although they can also turn dangerous and destructive. The ultimate irony of the War on Drugs is that the countless billions of dollars expended in the futile attempt to eliminate addictive drugs

from the planet could have been spent on public welfare and social justice measures that really would have reduced drug addiction, at least among the most disadvantaged people.

To speak of addiction as adaptive negates any categorical distinction between people who are addicted and those who are not. Like many familiar adaptations, there are degrees of addiction, all of which can help people to endure, at least for a time. When addictions are mild or short-lived, *as they most often are* (Heyman, 2019), they can help people to cope with dislocation until they can build more sustainable lifestyles and then subside (Granfield & Cloud, 1999; See arrow #2 in Fig. 1).

If addiction functions adaptively in a fragmented, dislocated world, it would logically follow that *most* people would *want* to be addicted, consciously or unconsciously. Today's commercial marketers make profits by sharing this counterintuitive conclusion. Why else would so many of them overtly advertise their wares as "that can cause addictions"? Self-proclaimed "addictive" products include videogames with millions of players (including my own grandchildren), my family's favourite television series (advertised as "Sweet, stirring, and completely addictive"), books, restaurants, recipes, recorded music, fashions, and countless other products. Here is an Internet experiment. Take *any* consumer product, for example ice cream or lingerie, and Google it together with the word "addictive." I have found very few products (with the exception of drug and alcohol products) that at least one maker does not market by proclaiming how "addictive" it can be.

Consequences of Severe Addiction: The Cycle Continues.

Many severely dislocated people cling to severe addictions because they are, for these people, indispensable adaptations to dislocation in an increasingly fragmented modern world. And some kinds of intense, prolonged addiction, such as addictions to work, achievement, consuming, and shopping are encouraged and promoted by society because they help to maintain high levels of production and economic expansion (e.g., Han, 2010, pp. 8-11). But there is still a more fundamental reason why severe addiction is intrinsic to the modern world. As depicted in Fig 3 (arrow #3), long-term harmful consequences of severe addictions exacerbate the fragmentation of modern society, thereby increasing the dislocation that society causes. Increased dislocation leads to more addiction. The Addiction Feedback Loop takes another turn.

Because of its long-term socially fragmenting consequences, severe addiction it is not only a cause of social fragmentation, but also a consequence, as it is structurally incorporated into modern society.

The cycle of addictions that is built into modernity cannot be allowed to continue indefinitely. Eventually the strain on the earth's ecosystems and on human culture would become unsustainable, and modern civilization, like every civilization that has preceded it, will collapse (Toynbee, 1948).

Controlling Addiction in the Modern Age

The new story envisions addiction as a much more daunting problem than the old story. If addiction is built into the modern age structurally and if it besets all social classes and can be expressed in any kind of habit or practice, it is the modern age itself that must change. And on an epochal scale. The idea that fundamental social change will be necessary to control dangerous addictions was unthinkable, but times have changed. It is growing ever clearer that addiction is upon us, no matter how many prisons are built, how long the sentences last, how accessible treatment becomes, how much social justice is achieved, how many safe injection sites are opened, how carefully drug laws are reworked, or how well language is de-stigmatized. Simultaneously, we must also collectively confront other existential threats to global society in the modern age, seemingly unrelated to addiction, that cry out for fundamental social change. These threats include environmental collapse, expansion of nuclear weapons arsenals, vast social inequalities (of rights and wealth,), increasing populist authoritarianism and, deadly pandemics etc.

We currently have a small example that this is possible, and it comes from Iceland (Young, 2018). When the European Union was created, Iceland had one of the three groups of teenagers and young people who consumed the most licit and illicit drugs in the entire place.

They adopted an aggressive social welfare policy, in which they transformed schools and universities into social nucleus, and from then on they no longer had the function of transmitting knowledge, but generating knowledge that directly involved the community where they are involved. In addition, they brought parents and students closer to schools, even creating a law that required parents to attend schools whenever they were asked to.

From this relationship, the Icelandic government detected that their young people and adolescents were without any activities to when they left their schools and demanded spaces for socio-cultural sports practices. Thus, spaces were made available to practice these activities in large scale.

The set of these actions, combined with the fact that Iceland is a country located on an isolated island, with a high degree of social development, in which the population has a great participation in the destiny of their country, made it 20 years later Iceland has teenagers and young people who least use drugs in the European common market, without any kind of repression of any substance. Just to remind everyone, at the last Soccer World Cup, held in Russia, the Iceland team, which was participating in a Soccer World Cup for the first time, reached the quarterfinals of the competition, eliminating powerful teams and having the unique amateur team in the competition, in which the goalkeeper had the profession of bus driver in Iceland and the team's coach was also a dentist in Iceland.

As we see, it is difficult, but it is possible!

Younger, fresher minds than mine, and generations of trial-and-error, will be needed to achieve a future society that can control addiction along with today's other existential crises. The

unprecedented task of re-organizing modern civilization, socially, politically, and environmentally so that it can accommodate the fundamental needs of billions of human beings belongs to everybody, as the environmental movement is demonstrating (Klein, 2014; Boyd, 2015). This task will require unprecedented global solidarity as well as the energy of local groups in millions of places. Ultimately, our collective future depends on nothing less than finding new ways to cultivate our greatest human potentials: cooperation, intelligence, and compassion, on a global scale. Presently, we still waste too much time looking for shortcuts. It is my dream that the new Observatory that is coming to life in Brazil will play a major role in the vital creative process that is now needed.

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