Humanities Therapy as a Remedy for Detriments of Technosociety

Lou Marinoff*

Abstract: Globalization and the digital revolution are transforming human civilization in unprecedented ways, in large measure via innovation as well as imposition of emergent technologies on growing numbers of consumers. While these transformations confer undeniable benefits to humanity, the benefits are bundled with a corresponding set of detriments. This paper does not contest the benefits, but confronts the detriments. It appeals to humanities therapy as a remedy for many of the cognate problems experienced by individuals and societies alike, problems that stem from overexposure to technologies and underexposure to humanities.

Keywords: technosociety, monoculture, detriments, cognitive deficits, behavioral deficits

1. What do we mean by "Technosociety"?

First, we need to distinguish between technocracy and technosociety. A technocracy is a society governed by elites whose expertise is primarily technological. A technosociety is a society governed by a received political system, but whose daily personal, social, economic, and cultural transactions are mediated by intervening or imposed technologies. Prime

* Professor, The City College of New York, USA
E-mail: lmarinoff@ccny.cuny.edu

examples of such technologies are clustered in an acronym known as "The FANG": Facebook, Amazon, Netflix, and Google. In addition to and beyond these, it is increasingly impossible to conduct any kind of personal, social, economic, or cultural transaction without engaging with one or more digital devices, interfaces, and networks. Thus the fundamental process of human-to-human interaction has been supplanted by one of technologically-mediated interaction. This is what we mean by "technosociety." That said, however, the demarcation between technocracy and technosociety may not be as impermeable as implied by the foregoing distinction. Since governments themselves depend on emergent information technologies no less than their citizens, one can envision cybernetic power-struggles that could transform salient dimensions of technosociety into technocracy itself.

2. "The Two Cultures"

Since the theme of this ICHTT is "bridging the gap" between sciences and the humanities, it is germane to inquire into the nature of the gap itself. If one seeks to build a functional and enduring bridge, one must know something about the terrain on both sides of the gap, in which the bridge's foundations and supports must be rooted. In the West, the historical rift between sciences and humanities opened after World War II, and was first assessed by the physical chemist and novelist C.P. Snow in his memorable Rede lecture of 1959.¹ This division, which he called "The Two Cultures," has percolated throughout Western—and global—higher education, such that universities have become "siloed" institutions, in which undergraduate students are encouraged to specialize in either sciences or humanities, each to the exclusion of the other. This mutual exclusivity is neither necessary, nor salutary. The human brain is

¹ http://s-f-walker.org.uk/pubsebooks/2cultures/Rede-lecture-2-cultures.pdf
bicameral, with the left hemisphere housing the functions of *logos* (including science); and the right, *mythos* (including humanities). Like yang and yin, the two hemispheres are complementary, and work best in conjunction with each other.2) It was Snow's thesis that this division was "a major hindrance" to solving the world's problems.

3. Monoculture: Humanities under Siege

While scientific and technological societies have undeniably solved many large-scale problems, they have also created and exacerbated many others, including the alienation of masses of people from fundamental conceptions of what it means to be human. Technological accelerations driven by globalization and the digital revolution have shaped a transition from "The Two Cultures" of Snow's era to the "Monoculture" of our own, namely technosociety itself. In universities across the West and Westernized countries, Humanities programs are under siege by university administrations3) whose chief rationale in funding programs is not qualitative excellence (which they no longer know how to gauge) but rather quantitative criteria such as prospective employability of graduates. At the same time, and by their own admission, they are attempting to educate students for jobs that do not yet exist, and whose requirements are therefore unpredictable. Nonetheless, increasing budgetary allocations are being made to the so-called "STEM" disciplines—Science, Technology, Engineering, Mathematics—with corresponding defunding of programs in Humanities and the Arts. This tendency is producing a "Monoculture," which consumers experience as technosociety. If the ongoing eradication of Humanities continues, there will no longer be a gap to be bridged. This would be a great tragedy for humanity.

2) E.g. see L. Marinoff (2012), pp. 27-48.
3) E.g. see T. D'haen (2011), pp. 136-146.
4. Technosociety's Detriments

The bulk of this address is devoted to identifying and summarizing eight of the main problems imposed by technosociety. Some are relatively distinct, while others overlap to varying degrees. Each of these problems could become the focus of a separate paper or even a book; the time allotted for this talk will permit brief elaboration of only a few of them.

First, the instantaneity of digital communication—e.g. email and texting—has caused a shrinkage of time in which the mind can reflect, and a corresponding impoverishment of linguistic skills—e.g. use of "mojis" and alphanumeric shorthand instead of well-formed thoughts expressed in natural languages. If one compares contemporary digital communications with hand-written correspondence from previous centuries, one is struck by the relentless degeneration of written language. The supplanting of the written tradition by the digital revolution has induced moderate to severe cognitive deficits in the general population. ⁴)

The causal chain of cognitive deterioration—or indeed of re-sophistication, for the process is reversible—was possibly first explicated by Thomas Hobbes in 1651. In the bifurcation of logos into speech and reason, Hobbes observed the primacy of the former over the latter. He wrote: "And in wrong, or no definitions, lies the first abuse [of speech]; from which proceed all false and senseless tenets." ⁵)

The fuller implications of Hobbes's insight were articulated in the 20th century, in what became known as the Sapir-Whorf hypothesis: ⁶) In Whorf’s words, “language is not merely a reproducing mechanism for voicing ideas but

⁴) For more detailed treatments see e.g. L. Marinoff (2007), Chapter 10 and L. Marinoff (2003), Chapter 9.
rather is itself the shaper of ideas, the program and guide for the individual’s mental activity.” In other words, natural language forms the tokens of reason itself. Speech is not so much a function of cognition as cognition is a function of speech. In consequence, as linguistic skills deteriorate in the general population, as a direct result of the supplanting of the oral and written traditions by the digital, Hobbes, Sapir and Whorf predict, and we are witnessing, a general deterioration of cognitive skills as well. To the extent that people use emojis (for example) as shortcuts to represent more complex ideas and emotions, they lose the ability to cognize their own inner states. Their reflective self-awareness is therefore impoverished.

This general deterioration is evident in everyday speech-patterns, in mainstream media, and of course in our education system. Moreover, it also has economic and political implications, as George Orwell knew only too well: “the slovenliness of our language makes it easier for us to have foolish thoughts.” We will encounter some direct effects of foolish (or uncritical) thinking in our subsequent examples of technosociety's detriments.

Second, the expectation of instantaneity has also induced behavioral deficits, such as a lack of patience and even feelings of anger (e.g. when responses to texts or emails are not immediately forthcoming), and an increase in stress (e.g. when people feel increased time pressure to respond to digital demands including multi-tasking). In spite of increasing life expectancies, technosociety's accelerations cause shrinkages of available time among other pressures, which raises stress levels. While the most adaptive and purposive biological stresses are felt by people striving to survive life-threatening situations—whether natural disasters or man-made circumstances—members of technosocieties are experiencing

---

8) G. Orwell (1946).
increased levels of maladaptive and counterproductive psycho-physical stresses, notwithstanding conditions of average material affluence, technological advancement, and civil rights unprecedented in human history. Such stresses are clearly induced by cultural factors, not biological ones. Diagnoses of Post Traumatic stress Disorder (PTSD) have risen dramatically in developed and developing nations in years.\(^9\) A global survey of stress for 2017 is depicted in [Figure 1].\(^{10}\) It cannot be a coincidence that the highest levels of stress are experienced by the most technologically developed societies; and the lowest levels, by the least developed. But why are people with the greatest material affluence, economic prosperity, social mobility, civil rights, and political stability experiencing the highest levels of stress? Perhaps because they have lost touch with their humanity. Let us explore this further.

![Figure 1](https://ourworldindata.org/mental-health)


\(^{10}\) https://ourworldindata.org/mental-health
A revealing behavioral deficit of technosociety is the widespread divorce of minds from bodies, engendered by incessant use (and abuse) of mobile phones and their endless proliferation of apps. Citizens of technosocieties are virtually living on their phones while they walk, drive, work, socialize, or sit down for a meal. Their bodies move zombie-like through reality, while their conscious minds are transported into virtuality. The disconnection between body and mind produces both individual and social detriments. Individually, this technology potentiates stress by making each user constantly accessible to everyone and everything, further increasing demands of multitasking and reducing time for undisturbed reflection, and simply for being. This technology also reduces attention span, by scattering consciousness instead of focusing it. And it increases the risk of personal injury or death, through inattentive walking into traffic or driving while texting. Socially, this technology also creates stress for others, by creating noise pollution in otherwise tranquil public places, by obliging others to listen to conversations they would prefer not to hear, and by causing zombie-like walking bodies to collide heedlessly with others in public spaces. Overall, this amounts to disregard of one's personal well-being, and anti-social disregard for the well-being of others, on an increasingly time-consuming scale. The average American adult now spends six hours per day—around 33% of their waking life— with digital media.11)

The pervasive divorce of mind from body engendered by abuses of digital technology (including so-called "internet addiction") results in culturally-induced illnesses including stress, mindlessness, and unhappiness. The most effective remedies for this condition happen to be ancient Asian practices—such as Indian yogas, Chinese tai chi, qigong and allied arts, and Buddhist meditations (e.g. mindfulness) These

11) https://blog.textmarks.com/time-spent-on-mobile-phones-greater-than-on-desktoptopslaptops/
practices focus on breathing, posture, balanced energy flow, and re-unification of mind and body. They enhance attentiveness, awareness, concentration, cognition, appreciation, and compassion. They are becoming more and more widespread among Westerners seeking to recover their humanity. These practices are undergirded by profound philosophical systems, and their effectiveness is corroborated by contemporary scientific studies.\textsuperscript{12)} They are the original and most empowering humanities therapies.

Third, artificial intelligence is contributing to the rapid deterioration of two fundamental cognitive skills: mathematics, and language composition. The earliest known computing machine, dating from around 500 B.C. and used by many ancient and some contemporary people, is the abacus. Utilizing this device requires an understanding not only of arithmetic operations, but also of some first principles of mathematics, in addition to a good attention span and active memory. The earliest known analogue computing machine is the slide rule, which requires the same skill set as the abacus plus even greater understanding of mathematical first principles. In other words, these devices are extensions of the active human mind. In fact, their "power source" is none other than the human mind. Similarly, when cashiers rang up items on mechanical cash registers, they had to input the prices manually. Only the total amount due was displayed, and cashiers therefore had to mentally compute any change owed to the customer. But nowadays cashiers merely scan the items' bar codes, requiring no mental activity whatsoever. Digital cash registers display (and lately even dispense) the change due as well, so cashiers no longer need arithmetic. In consequence, many experience difficulty just counting the change. In other words, the human mind has become a passive extension of the active machine, to the extent that mental ability to perform even fundamental arithmetic operations has atrophied.

\textsuperscript{12)} E.g. see L. Marinoff (2016), pp. 581-608.
Technosociety has therefore impaired human cognitive function. Similarly, saying something meaningful formerly required understanding of linguistic first principles, namely vocabulary and syntax. Writing something meaningful required similar understanding, as well as additional eye-hand coordination; which could be elevated to exquisite art-forms such as calligraphy, or demand superb high-speed accuracy on typewriters. Once again, these media were passive extensions of the active human mind, powered by the human mind itself. But nowadays, digital apps transpose oral speech into text, and also correct grammar and spelling. In consequence, many users of such apps no longer understand grammar or know how to spell. To the extent that their minds become passive extensions of active machines, their linguistic skills are impaired and their semantic horizons are correspondingly restricted.

The inevitable conclusion is that widespread artificial intelligence is actually undermining and diminishing human intelligence. A frightening corollary pertains to the human moral dimension. Since technosociety is debilitating cognitive abilities, must it not also erode our capacity for moral reasoning? Since the human mind is becoming a passive extension of active computational and linguistic engines, what will prevent us from becoming morally passive as well? Since we can now replace human cashiers and human language instructors with machines, perhaps we can eventually replace judges and moral philosophers with machines as well. If so, then the human mind itself may become obsolete.

Fourth, the developed world is witnessing so-called "epidemics" of depression and ADHD, among other mood dysfunctions and cognitive-behavioral disorders, to extents unprecedented in medical history. At the same time, there is no discussion of the two most important facets of any epidemic, namely pathology and epidemiology. If these so-called "epidemics" are in fact culturally-induced, as many philosophical practitioners and humanities therapists have argued, this would account for the absence of pathological and epidemiological
explanations. But at the same time, pharmaceutical treatments for these conditions have escalated in conjunction with their frequencies of diagnosis.

Critical thinking about the history of medicine shows that whenever medical science succeeds in "carving nature at its joints"—that is, in achieving a sound understanding of the pathology and epidemiology of a given illness, and in developing an effective remedy, we see a decrease in the frequency of the given illness in proportion to the dissemination of effective treatment. For example, the polio virus, which once afflicted millions of children worldwide, has been reduced to negligible levels owing to the availability an effective vaccine.\(^\text{13}\) For another example, measles has been similarly controlled.\(^\text{14}\) One can give many more such examples.

By contrast, consider depression. Unlike viruses such as polio and measles, whose symptoms, diagnoses and treatments are definitive, "depression" can have many meanings, many causes, many symptoms, and many treatments. And unlike polio and measles, depression is increasing in technosocieties worldwide, and in every age group, in tandem with the prescription and consumption of so-called "anti-depressant" medications.\(^\text{15}\)

Similarly, consider attention deficit hyperactivity disorder, or ADHD. It has no definitive pathology or epidemiology, but is nonetheless being diagnosed and treated in epidemic proportions. And as with depression, we see simultaneous increases in incidence and treatment.\(^\text{16}\)

\(^\text{13}\) https://microbiologysociety.org/publication/past-issues/halting-epidemics/article/polio-what-are-the-prospects-for-eradication.html
\(^\text{14}\) https://vaccines.procon.org/view.additional-resource.php?resourceID=005969
\(^\text{16}\) For example, see https://www.cdc.gov/nchs/products/databriefs/db70.htm;
It has been obvious for many years to philosophical practitioners and humanities therapists alike that numerous contemporary maladies, including most forms of depression and ADHD, belong to a large cluster of culturally induced illnesses. It is merely their symptoms, and not their root causes, that are being diagnosed and treated. Since these illnesses are actually increasing in frequency, and also in proportion to the increased consumption of prescribed medications intended to cure them, then these medications are having either no effect, or indeed a negative effect: that is, are making the problems worse. I believe that they are making the problems worse, not only because they mislead consumers into buying ineffective remedies, but also because they pre-empt the search for root causes and the implementation of effective cures.

In 2013, the New York Times arrived at the same conclusion, blaming ADHD on cultural and not biological factors. The New York Times asserted that the leading cause of the ADHD epidemic is television advertising by pharmaceutical companies, who panic ignorant or uncritical parents into drugging their children ostensibly to enhance their academic performance. An outraged parent in the UK, who was not hoodwinked by this unconscionable profit-driven scandal, challenged the UK office that regulates medicines to share the clinical evidence that demonstrates the efficacy of Ritalin. The UK regulator replied that it "cannot find the clinical evidence that justified the licensing of Ritalin." Around the same time, the National Institute for Mental Health (NIMH), the world's largest scientific organization for research into mental illness and mental health, rejected the DSM V, on the same grounds as I have


18) Ibid.
elucidated above: it is diagnosing symptoms, not illnesses.\textsuperscript{20)}

This gargantuan industry of pseudo-scientific diagnosis and ineffective treatment is driven by predatory capitalism: multinational pharmaceutical companies have colonized psychiatry and clinical psychology, and utilized their licensed practitioners as licit drug-dealers. It amounts to government-approved drug trafficking and consumer fraud on a massive scale. These culturally-induced epidemics can be reversed only by recognizing their root causes, which lie in the dehumanizing manifestations of technosociety; and by re-humanizing people via humanities therapies and allied philosophical practices.

Fifth, material affluence in tandem with spiritual poverty, overemphasis on technologies to solve human problems, and corresponding neglect of humanities and the arts, have all contributed to a generalized loss of meaning among inhabitants of the developed world. This loss of meaning was first observed clinically by Viktor Frankl following World War II, and he developed logotherapy as a remedy.\textsuperscript{21)} The problem was also addressed by existentialists, and arguably exacerbated by postmodernists. When people become mere cogs in machines, or mere nodes in networks, and see their traditional mytho-poetic narratives deconstructed and devalued, they lose meaning in their lives, and become susceptible to many kinds of spiritual problems.

For example, in pre-technosocieties, if an ordinary family wanted to enjoy music, they had to produce it actively themselves. [Figure 2] provides an illustration from the 16th century Renaissance. Making music together as a family has many beneficial side-effects, in addition to the enjoyment of the music itself. For example, it deepens familial bonds; it establishes intercommunication; it rewards cooperation; it enhances socialization; it reinforces attentiveness; it develops motor skills. I am

\textsuperscript{20)} V. Feary and L. Marinoff (2014).
\textsuperscript{21)} V. Frankl (1959).
sure that you can think of yet other benefits of such activity.

[Figure 2]

Now contrast this picture with today's ordinary family in technosociety, depicted in [figures 3] and [4]. If its members want to enjoy music, they consume it passively and separately, each one wired to their own world. Passive consumption of music as isolated individuals has many detrimental side effects. For example, it weakens family bonds; it prevents intercommunication; it encourages isolation; it neglects socialization; it de-necessitates attentiveness; it prolongs physical lassitude. I am equally sure that you can think of yet other detriments of such passivity.
This is but one example of technosciety's transformation of human beings from active producers to passive consumers of culture. This kind of transformation arguably impoverishes the spirit, and makes people more vulnerable to the constellation of culturally-induced illnesses discussed in the previous sections.

Sixth, the virtualization of identity is also problematic, especially for younger people. Essentially, platforms like Facebook dislocate identity from real spaces into virtual ones, making it more tenuous, ephemeral and also vulnerable. If we reflect on the meaning of friendship as understood since antiquity by Aristotle and Confucius, it takes place in reality between embodied beings, is deeply meaningful, and is qualitatively highly valuable. Contrast that with Facebook's process of "friending" someone with a mouse-click. Nothing could be more shallow or less meaningful. So while it is possible to have a quantitatively large number of virtual "friends," it is incomparably more desirable and healthy to have only a few embodied friends of real quality.

Seventh, the migration of consciousness into virtual spaces poses many other problems as well, chief among which is the mistaking of perception for reality. In the West, the written tradition—which provided blueprints for every institution of modern civilization—is dying. Human consciousness no longer assimilates knowledge by reading and reflecting cognitively on ideas, but rather by watching live video streaming and
reacting emotively to images and slogans. This is exactly what Plato tried to counteract in his Allegory of the Cave: the pervasive confusion of perception with reality. In technosociety, perception has become reality. Thus the masses have been herded back into Plato's Cave. The dangers of transforming people into sheep, and thoughtful citizens into a mob, cannot be overstated.

Eighth, although literacy rates are increasing overall in the developing world (a benefit of globalization), cultural illiteracy is increasing in the developed world. Cultural illiteracy is the condition in which one is able to read words, but unable to understand their meaning.22) For example, most Americans can read "Lee surrendered to Grant at Appomattox." But most Americans no longer know who Lee and Grant were, not where Appomattox is, nor that this surrender ended the American Civil War. Cultural illiteracy is the disappearance from collective consciousness of literally thousands of items of cultural knowledge that were once considered essential to a general cultural orientation, and were formerly taught as part of a uniform educational curriculum. This applies not only to history, but also to geography, literature, philosophy, and all traditional subjects. Technosociety has obliterated a shared curriculum, and replaced it with an undifferentiated continuum of disordered information, a storm-tossed ocean of informational chaos, ordered not by a consensus of thoughtful persons (e.g. as a library catalogue) but according to opaque algorithms of search engines, concocted in secrecy and without accountability. In consequence, general ignorance (i.e. cultural illiteracy) has increased as a function of information overload.

5. Conclusion

First, it may surprise some people to learn that in 2013, the Association

for Advancement of Arts and Sciences (AAAS) submitted a report to the US Congress, citing marginalization of Humanities as a leading cause of cultural decline and social malaise.\(^{23}\) This lecture not only shares that view, but also identifies specific facets of the problem. If one asks what effect the AAAS report has exerted toward the legislative branch of the US government (Congress) remediating this situation, the answer is unfortunately none whatsoever. To the contrary, the decline and malaise have only worsened since 2013. This indicates that the US government, broadly construed, is part of the problem, not part of the solution.

Second, it may surprise some people to learn of the existence of an MLA degree, which appears tailor-made to help remedy the problem. MLA, or Master of Liberal Arts, is an interdisciplinary program that integrates studies from humanities, arts, behavioral sciences, natural sciences, and social sciences. Dozens of American universities, among them leading institutions, now offer this degree. But is there evidence that graduates of such programs are making measurable differences in remediating the problems of technosociety? Unfortunately not. This is because the focus of these programs is almost entirely theoretical, not practical. While they are rightly concerned to offer alternatives to premature overspecializations on which technosociety depends, they are pursuing knowledge primarily for the sake of satisfying intellectual curiosity, and not for the broader purpose of remediating cultural and social ills.

Third, it follows from the previous two conclusions—that solutions are emanating neither from government nor from academe—that remediating the detriments of technosociety depends on grass-roots initiatives taken by humanities therapists, including philosophical practitioners. We hold the keys to understanding the detriments of technosociety; Western governments and Western universities do not. We have evolved practices

most conducive to remedying the human afflictions of technosociety; Western governments and Western universities have not. And we can work with people on a grass roots level to help alleviate the distresses engendered by technosociety; Western governments and Western universities cannot. Our numbers may be small, but our challenge is large, and what we have to offer is invaluable. I therefore encourage you all to continue your fine work in this domain, and assure you that your endeavors make a significant difference toward the amelioration of the human estate.

References

———. 2016. "Mind Over Mind, Mind Over Brain, Man Over Man: A


https://blog.textmarks.com/time-spent-on-mobile-phones-greater-than-on-desktops/laptops/
https://journalcswb.ca/index.php/cswb/article/view/6/30
https://ourworldindata.org/mental-health
https://vaccines.procon.org/view.additional-resource.php?resourceID=005969
https://www.cdc.gov/nchs/products/databriefs/db70.htm
https://www.cdc.gov/nchs/products/databriefs/db283.htm

<table>
<thead>
<tr>
<th>Date of the first draft received</th>
<th>Oct. 13, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of review completed</td>
<td>Dec. 09, 2019</td>
</tr>
<tr>
<td>Date of approval decided</td>
<td>Dec. 11, 2019</td>
</tr>
</tbody>
</table>