Re-Thinking the SES Aspects of 'Climate Change' As a Process of Pragmatic Utopianism in Action

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Abstract

Starting from the avenues indicated for re-conceptualising possible policy directions to deal with coming climate change at the end of the authors' recently published study (Gilder and Pal, 2015), this paper further considers the sociological implications of Vadineanu's (2001) Socio-Economic System (SES) level model (which articulates relationships among what he terms as "natural capital" and: A. Physical capital; B. Social capital; C. Cultural capital; D. Man-dominated components of the Natural capital; and, E. Natural and semi-natural components of the Natural capital) and the practical viability of his advanced Decision Support System (DSS) to foster political decisions supporting sustainable development. These sociological implications will unpacked first via a consideration of Korzybski's (1951)"the map is not the territory" semantic concept, and then via Golay's (2008) expanded notion that the socio-psychological processes of human constructivism articulated by Korzybski makes even the so-called "territory" of the science of climate change "not the territory" of political policies. The paper posits that only by embracing the (anti)-political stance of practical utopianism as posited by US social thinker Goodman (1960) can a way out of the "built-in" socio-political dilemmas of climate change policy silos be (possibly) envisioned.

Keywords: *Socio-Economic System (SES) Model, Decision Support System (DSS), Climate Change, General Semantics, Phronesis, Utopian/Pragmatic Thought (Public Policy)*

1. Introduction: climate change as crisis: humanity facing a stasis or "turning point"

As described at the end of the authors' recent article on the scientific and sociological aspects of climate change in light of Vadineanu's (2001) work, especially his socio-economic system level model (Gilder and & Pal, 2015), along "with N.Taleb [2007] . . ., the authors predict that more and more improbable 'black swan' [climatic] events with unpredictable serious consequences will mark our mid- and long-term future" (p. 138). A crisis with grave security implications is upon us, and, as theorist Boulding (1971) put it, "knowledge pollution" is a major element of the crisis. The problem of uncontrollable climate change is one of individual nations seeking unsustainable economic growth via a destructive "rat race," thereby creating polluted air and dirty flowing water that is used by all. In short, what individual nations spoil and corrupt to "advance," the entire globe suffers from a "decline thereby."

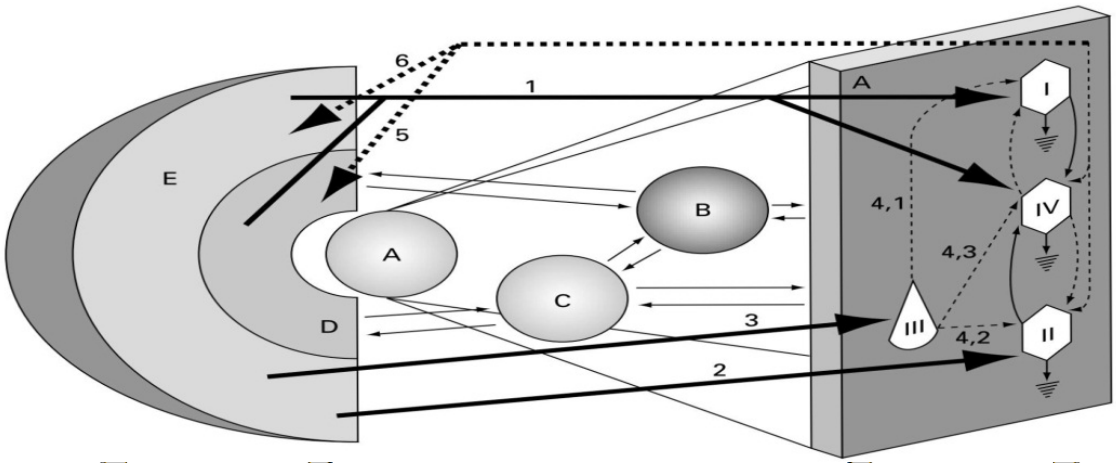

Fig 1. Consisting of, as described by Vadineanu (2001), the following parts: "A - The man-made physical capital: I – the infrastructure of the economic subsystem dependent on the renewable resources provided by the components of the Natural Capital; II - the industrial infrastructure of the economic subsystem dependent on <non-renewable> resources; III - Systems for commercial energy production using as primary resources: fossil and nuclear fuels and hydro-power potential; IV - the human settlements infrastructure. B - Social capital; C - Cultural capital; D - Man-dominated components of the Natural Capital: E natural and semi-natural components of[the]Natural Capital: i - flow of renewable resources; 2 - flow of raw materials; 3 -flow of fossil and nuclear fuels; 4 - flows of electrical energy; 5 - material and energy inputs (fertilisation, pesticides, agro technical works, irrigation, selection etc.) to support [the] management of man-dominated systems; 6 - dispersion of heat of secondary products (wastes) in the troposphere and in the HGMU [Hydro Geomorphic Unit] components" (cited in Gilder and Pal, 2015, pp. 136-137).

Over the last couple of decades, the BRIC countries (especially China and India) started burning fossil fuels in unprecedented quantities, in the race of becoming some of the largest economies of the world, with scant regard to climate and environment (See: Pao, 2010; Escobar, 2012, pp. viii-x). Earlier on, with the onset of the industrial revolution, the so-called now-developed countries today became so by plundering the environment. The fossil fuels - the so-called dirty fuels - had been all lying innocuously beneath the soil. Unparalleled demand by these fast-developing nations, or rather their unbridled greed for accelerated development, pulled them up and burnt with insurmountable consequences to the environment. That precisely is the hallmark of the Anthropocene epoch– the molestation of environment that perhaps started with the industrial revolution of the 18thcentury and now continues unabated with accelerated pace today. As Corlett (2015) states, "the Anthropocene concept has proved a useful shorthand for anthropogenic global change and has made it impossible to treat the present period as 'business as usual', with consequences for how ecological research and conservation management are conceptualized and conducted" (p. 39).The following table and graph show the trends of both rising CO_2, and the rising of global temperatures in the earth's lower atmosphere.

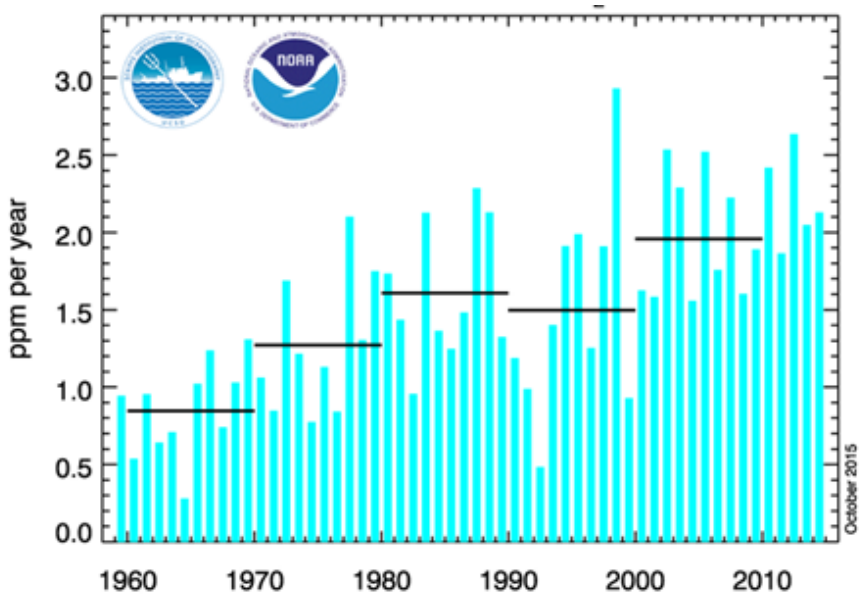

Fig 2. Atmospheric growth trend of CO_2

Source: U.S. Department of Commerce, et al., n.d.

The "graph show[s] annual mean carbon dioxide growth rates for Mauna Loa. In the graph, also decadal averages of the growth rate are plotted, as horizontal lines for 1960 through 1969, 1970 through 1979, and so on."

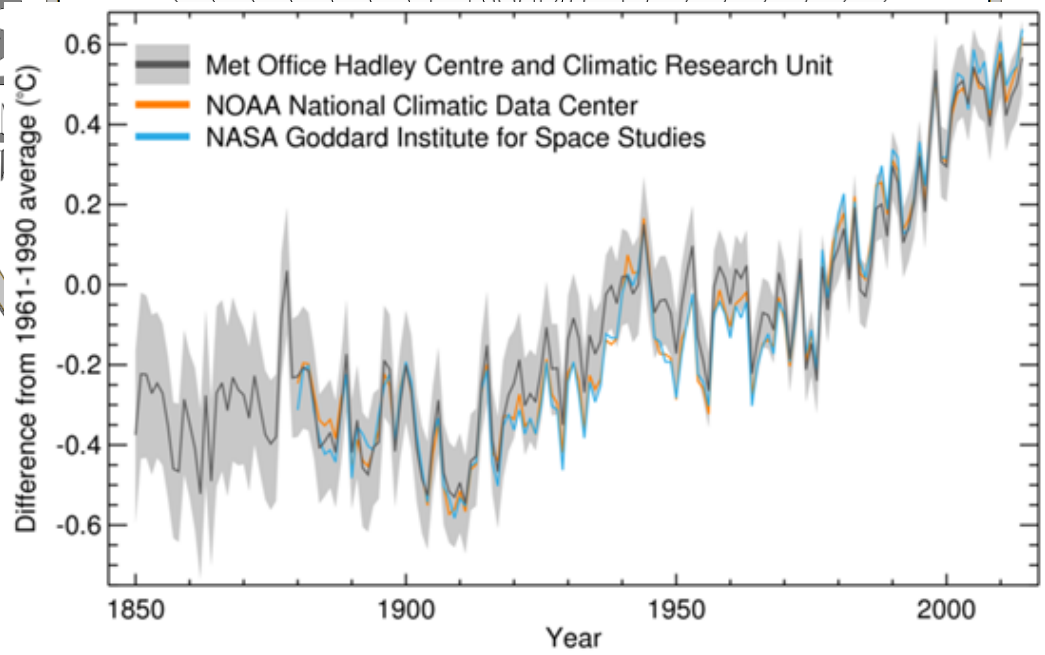

Fig 3. Atmospheric temperature trend

Source: Met Office Hadley Centre, 2014, May 02

"The black line shows the global annual average near-surface temperature anomalies from 1850 to 2013 from the HadCRUT4 dataset . . . The grey area shows the 95% confidence range

> on the annual averages. The orange line shows global annual average temperature anomalies from the GISTEMP data set produced by the Goddard Institute of Space Studies at NASA... The blue line shows global annual average temperature anomalies from the National Climatic Data Center's MLOST data set... Anomalies are defined relative to the 1961-1990 average."

The developed nations, however, also share a burden of some of the blame for all this; flush with new-found fortunes made during the "dirty" second-wave industrial revolutions, they failed in their duty to future generations to earmark necessary funding towards the development of a clean energy technology regime (See: Jaffe and Newell, 2005). Indeed, the development became directly proportional to the burning of dirty fuels. (The cheap LED lightings with very low power consumption technology were discovered too late, when major damage to the environment had already been done).

Thanks to the Saudi-Middle East policy of flooding of the market with crude oil (so to send the "fracking industry of shale gas extraction" out of business), the cheap price of dirty fuel can again stifle and relegate the "clean energy research programs" to the back seat (See: "Saudi Arabia Triggers," 2015). When an incumbent's "salary and progression" relies on not seeing what is imposing and imminent, the science of developing a "clean energy regime "falters, with the "research of climate change-mitigation" being consigned to the receiving end. The pernicious "rat race" (as depicted in the proactive "Man" film short of Cutts, 2012) continues: India started believing that it had to grab its chance when China's capital market went bust in the middle of 2015; when the foreign funds suddenly discovered the untenable bubbles floating around in China, created by their own incessant pumping of cash into the stock markets. India's political class held it must not miss this chance to go for a "pot shot" at a "sitting duck." In doing so, India had been trailing China's progress for decades, driven by policy paralysis in India (engineered by the "crab syndrome" of the opposing political parties); it now had a realistic chance to beat China's GDP growth figures (See: Sharma, 2015; Einhorn, 2014). It needs to be recalled, however, that China's manufacturing industries grew astronomically in the absence of political opposition, allowing it to plunder its climate and environment with sheer impunity (for the autocratic regime of China does not have to go to the public every five years with a begging bowl for votes to remain in power).Ryan (2012) sums up the probable future of India's and China's competition:

> <<There are already short and medium term stresses in the India–China relationship. This will have an impact on U.S. enduring security interests, as well as those of every nation in the Indo-Pacific regions. India's improving economy has had a major impact on its aspirations to be a global power. It views itself as an emerging economic power, that will soon become the world's most populous nation. China's opposition to India's aspirations and its rivalry in south Asia will affect the tone of the relationship in 2030 – as it already does. While economic cooperation is growing between these two giants, it is likely by2030 that there will be significant economic competition, especially as India industrializes and becomes a greater source of a cheap labour pool for the world's corporations. (p. 58)>>

Perhaps future technology will be able to prevent an acute and obvious Jurassic mass-extinction-disaster of the plausibility from a boulder of about 10-km diameter being hurled towards us from space (by either destroying it far away or diverting it away from earth's gravitational field), and

thus save the planet. Yet, our current understanding of risk and accurately measuring its costs might not allow us to discover and enact a technological or lifestyle answer to the unseen, yet growing adverse molecules in the atmosphere and water with concomitant worsening of climate (See: American Psychological Association's Task Force on the
Interface between Psychology and Global Climate Change, n.d.).

In their review of the security implications of climate change, Podesta and Ogden (2007) note that while the physical effects of climate change will likely affect the developing countries to a great extent, developed economies will have their own, uniquely pernicious challenge to face as a result of climate change; a socio-psychological state of denial and avoidance:

> <<That said, science only tells part of the story. The geopolitical consequences of climate change are determined by local political, social, and economic factors as much as by the magnitude of the climatic shift itself. As a rule, wealthier countries and individuals will be better able to adapt to the impacts of climate change, whereas the disadvantaged will suffer the most. (Cited in Gilder and Pal, 2015, p. 139)>>

Yet, because of the "knowledge pollution" process as described by Boulding (1971), wealthier countries face the danger of increasing public apathy as the woes of the "other three billion" populace increase, as Podesta and Ogden (2007) argue, because of "sensory overload and subsequent desensitization." They conclude:

> <<Ultimately, the threat of desensitization could prove one of the gravest threats of all, for the national security and foreign policy challenges posed by climate change are tightly interwoven with the moral challenge of helping those least responsible to cope with its effects. If the international community fails to meet either set of challenges, it will fail to meet them both. (p. 134)>>

So, before Vadineanu's rational decision-making system (DSS) can be realistically implemented by policy makers, we all need to take heed of the danger of this public desensitization, and also realise that willful blindness is in full operation among political and policy elites, given the overwhelming size of resources and fortunes tied to the continuing employment of "dirty" productive technologies. As noted in footnote 15 in Gilder and Pal (2015), S. M. Owen (2007) "quoted Herman Daly (*Beyond Growth: The Economics of Sustainable Development* 1996, p. 215), who said that in the United States, limits-to-growth debates stopped precisely when people [i.e., the economic elite) realized that limits to growth implied limits to inequality. . . [so] let us therefore reject the premise of finitude and entropy and return to the unlimited-growth vision that does not call for political impossibilities . . . [t]hat it called for physical impossibilities instead can be overlooked since most [US] voters have never heard of the laws of thermodynamics' (in Owen, p. 55)."

The authors note here that the term "crisis" originally referred to a "turning point" or a rhetorical stasis. According to sociologist Friedrichs (1980), a crisis is "often brought about by a convergence of events which create new circumstances, threatening established goals and requiring action; it is further characterized by pressures, tensions and uncertainties" (p. 540). In entering this rhetorical space of symbolic action, however, we all need to remind ourselves that it is not what is "objectively" *true* that "matters" about the process of climate change, but what (powerful) people *believe that is true* about the process that "matters," however "false" it might be.In this regard, Mitchell's (n.d.) explanation of the "Thomas Theorem" (and its extensions), as

a way to understand how and why people behave as they do in societies worldwide, is most relevant:

> <<A foundational statement for this work was given by W.I. Thomas when he wrote: ―It is not important whether or not the interpretation is correct—if men define situations as real, they are real in their consequences‖ (Thomas and Thomas 1928:572). The key point of the Thomas Theorem is that an individual's beliefs or perceptions about a circumstance—regardless of their basis in actuality—will have an effect on the individual's related actions. Further, an individual's interpretation of a situation may gain meaning and be reinforced as a result of the actions associated with it, beyond any objective significance this interpretation may have. (p. 3)>>

For this study, the authors first consider a philosophical, theoretical stasis (or starting point), of Korzybski's (1951), that "the map is not the territory" (cited in Golay, 2008). From the perspective of this "perceptive philosophy," the authors can better critique Vadineanu's (2001) rational Decision Support System (DSS) and then suggest another, supplemental way forward, which starts with Korzybski's observations and extends them via Golay (2008).

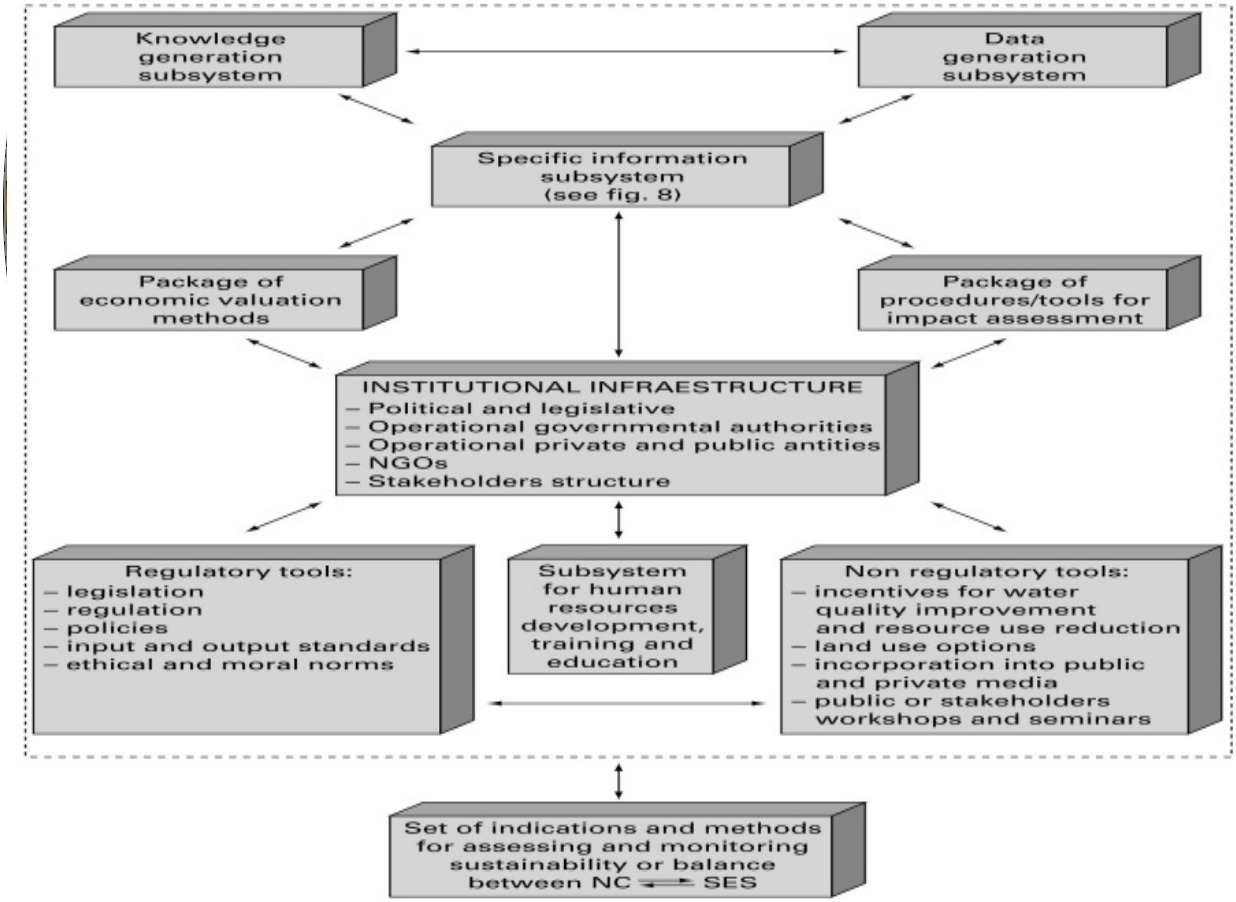

Fig 4. Vadineanu (2001), in which he describes DSS: "The Structure of the Decision Support System for balancing the development of SES and NC or in other terms for «integration ecology and economy» at different spatio-temporal scales" (p. 27).

2. The Need for a Pragmatic Utopian Solution to the Built-in Dilemmas of the Anthropocene Epoch: the insights of Korzybski, Golay, and Goodman

2.1. On Maps and Territories (Physical and Psychic): Korzybski and Golay seek sanity in a science-driven world

In "The Territory is not the Territory: Toward a Responsible Epistemology," Golay (2008) begins with the observation that "philosophical reflections pertaining to language are [often] based on the recognition of two distinct domains, namely, the 'world of things' (or the *extensional* world) and the 'world of words or expressions about this "world" of things'. The former is what is usually labelled as 'reality' and the latter 'language'" [emphasis in original] (p.40). From this (now) constructivist commonplace, he then outlines Korzybski's (1951) elaboration of the assumptions and shortcomings of the "scientific," "depictional" (denotational) use of language and its evasion of detailing of how persons either experience or express the extensional world around them via the connotative use of language. He states:

> <<Korzybski's general semantics brings to our attention this pivotal assumption in the depictional view and takes issue with it. Korzybski highlights that the depictional view of the language-world relation is based on an assumption that overlooks an important fact: the structural 'space' between the *subjective* experience of the 'world of things' and the verbalization of this *subjective* experience (assumed to result in a 'description' of the extensional world) is not immediate but rather punctuated and mediated by twonon-verbal levels. Namely, this experience is mediated by the individual's nervous system and by his larger environment, or what I refer to as the *factfeity* or *situatedness* of his experience, before his experience gets verbalized. The recognition of this fact— viewing the individual not as an "experience" but, due to the mediation of these two non-verbal levels, as rather an" *expresser* of experiences" — makes us reconsider the assumption that language can be taken at face-value to be a non-interpretative tool for *objectively* depicting any experience of the extensional world. [emphases in original] (p.40)>>

Elaborating on Korzybski's famous dictum, Golay (2008) concludes that, "not only are words not things, but the things that I take as 'things' are not the things themselves. To put this metaphorically, one could say that not only is it the case that the map is not the territory, but also that *the [physical] territory we map is never the territory*" [emphasis in original] (p. 46). Drawing from a body of work employed by Gilder, the authors thus hold that the problem of understanding the socio-economic aspects of climate change that Vadineanu (2001) hopes to do, via his SES model and DSS, leading to adoption of sustainable political policies will first require that one dares to enter the semantic "space" that both Korzybski and Golay detail.

In many ways, debate on the SES/DSS factors falls into the dictum of Marcus Aurelius that "Everything we hear is an opinion, not a fact. Everything we see is a perspective, not the truth." This is in spite of "rational" (or even "reasonable") attempt to use "good" sense in the service of "common sense" to move forward in crafting political consensus on climate change, as noted in this US flow-chart cartoon:

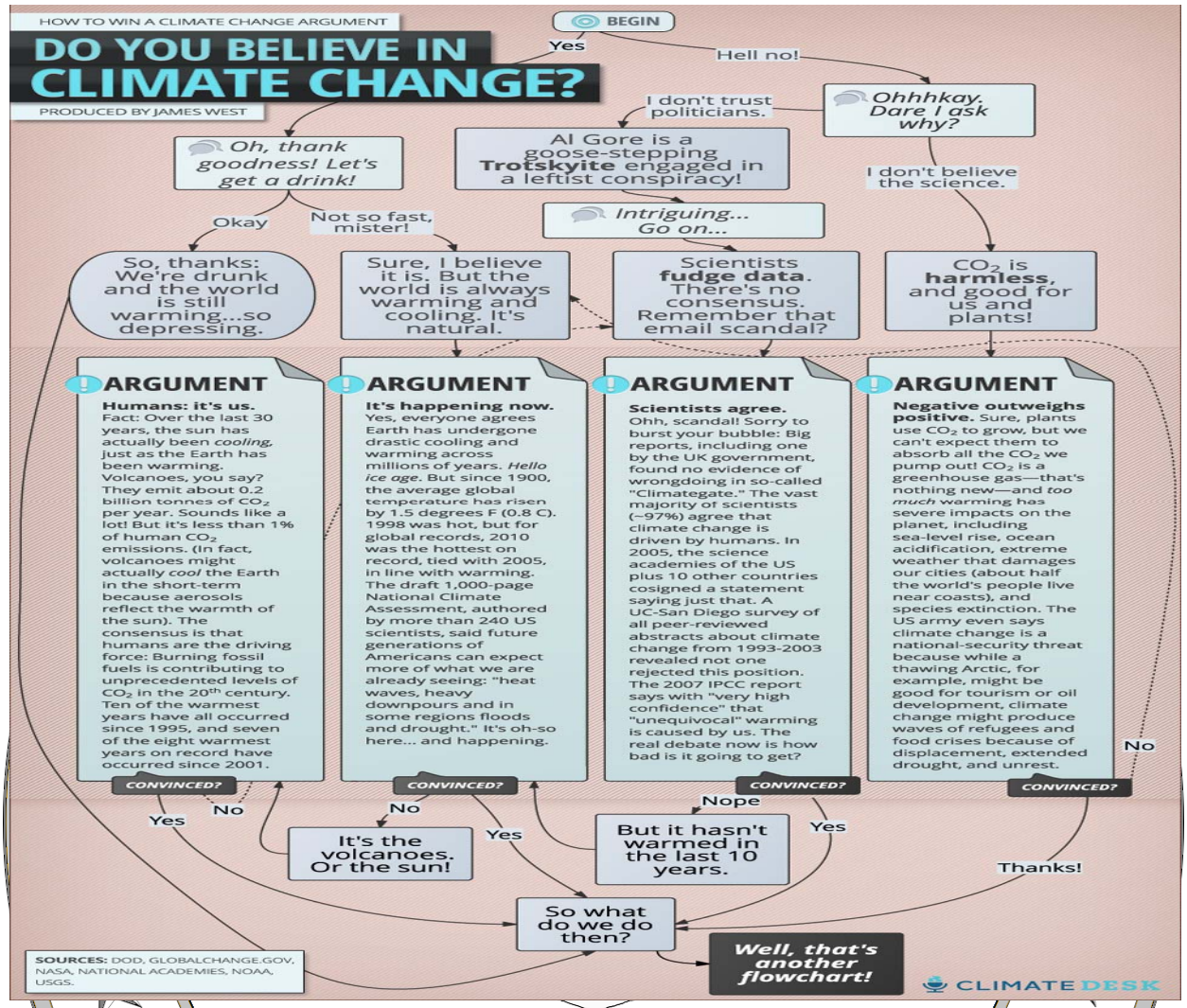

Fig 5. (West, 2015)

2.2 Paul Goodman's achievable utopianism as the true pragmatism by which to adapt to climate change

Goodman (1960), an American thinker, sought to combine the insights of both the humanities and science in our modern age in a "utopian" fashion, of opening our minds to what can be re-seen as a problem to be solved, via what the Greeks had called *phronesis*, or practical reasoning. As he states:

> <<Let me say that I myself have never been able to distinguish between "science" and the "humanities"—perhaps this is *my* blind spot. The reasons for the absolute autonomy and even preeminence of science . . . are all humanistic reasons; they are what belong to a whole, free, risky human existence. The moral criteria for selecting and refining an industrial society . . . are common to scientists and humanists, they are philosophic. If scientists do not think in these terms about technology, it is that they have lost touch with common sense; if humanists do not think about technology at all, it is that they have become withdrawn and therefore

stupid. But finally—and this is a point that most scientists and many modern literary critics are singularly unaware of—the chief content of literature is itself scientific, it is the worldly wisdom and "criticism of life" of good observers who, *in the field of human relations*, had plenty of empirical experience[emphases in original]. (Goodman, 1960)>>

The authors of this study would hold that, with Gilder (2007), even hoping to come to some accord on how to best deal with climate change would require that:

<<the center of our social concern should be *interesting* (i.e., substantial) questions, and we should then be able to *intelligently* use the tools of modernity (as defined in the "hard" sciences, the "soft" sciences, and the "humanities") to craft *appropriate* "lures" or hypotheses to "catch" good answers to solve *real* world challenges [such as climate change]. [emphases in original] (p. 191)>>

Gilder (2007, pp. 193-94) then outlines Goodman's quixotic quest as seeking to bridge seemingly intractable "two cultures" (humanistic and scientific) divide. In so doing, Goodman then describes three strategies that have been adopted by (often-elite) holders of conventional wisdom to discount the "utopian" approach to human problems:1. Using new technologies to solve the problem and/or ameliorate the symptoms of climate change, but along technological and political pathways already "common-sensibly" set; as Goodman noted, "the one thing the 'future' must not change is the rules"; 2. Conversely, ignoring already existing technologies that could be used to effectively counter climate change that upset present socio-economic "realities"; in that "utopian" (in the conventional-wisdom thinking mode) is synonymous to "controversial"; and, 3. Rejecting any policy decision made in the name of a sustainable ecology that would directly challenge core values of "development" or "ways of life" for presently (more-or-less) satisfied, well-off people.

3. Conclusion

To conclude, the authors hold that only such a "pragmatic utopianism" as envisioned by Goodman (via Korzybski) can save us from political/policy paralysis in the face of inexorable climate change processes. In short, as the intense arguments on whether climate change is even underway (mostly in the USA), scientific knowledge alone (as Vadineanu conceives it) will not be adequate to "change the tide" of public argumentation on the topic, much less political policy. Some dash of pragmatic, "utopian" *phronesis and* will become proper and necessary to motivate both people and systems to embrace required behavioural change.

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