

The Use and Misuse of Metaphorical Language in Economics

Conference Paper

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Austrian Student Scholars' Conference
Grove City College (Grove City, PA)
February 16-17, 2018

Keywords: metaphors, sociology of language usage, stylistics, Austrian economics, ecological economics, linguistic evolution, cognitive linguistics, philosophy of language, linguistics of economics.

JEL Classification: A12, A13, B25, B53, Q57, Z13

I Introduction

Mark Thornton, Bruno Leoni, Murray Rothbard, Ludwig von Mises, Eugen von Böhm-Bawerk, Jörg Guido Hülsmann, and a few others have remarked that there is a close connection between poor economic reasoning and the sloppy and imprecise use of language. They were especially sensitive to the dangers of relying on metaphors to explain economic phenomena.

As some technology historians¹ and linguists have pointed out, we have a tendency to identify with and explain ourselves through our most advanced machines – water-based technologies in Antiquity gave rise to the Graeco-Roman terminology of humors and pneuma, the presiding metaphors during the Renaissance was that of clockwork, then the steam engine for the Industrial Era, then computers and hard drives for the second half of the 20th century. For the 21st century, it is

1 For a specific application of this insight to the field of ecology and the environmental sciences, see chapter 7 entitled “Industrial ecology and industrial metabolism: Use and Misuse of Metaphors” by Allan Johansson in Robert Ayres & Leslie Ayres (2002) *Handbook of Industrial Ecology* (Cheltenham: Edward Edgar Publishing).

now fashionable to speak of human societies as “neural networks” having “swarm intelligence”, along with being described by a whole host of software metaphors (O’Connell, 2017). The aim of this paper is to uncover a repeating pattern of technological era-guided misuse of metaphorical language in economics.

This expediency of using metaphors bleeds into all manners of scientific and academic discourse, to which economics is no exception. For centuries, economists have unwittingly confused the lay public and largely themselves, with sloppy language, inappropriate analogical extensions, and equivocation. From Adam Smith’s apt but later misused ‘invisible hand’ and ‘gravitation’, to the highly suggestive imagery of Marxist jargon, to the biologism and organicism of the early socialists and historicists, to the pseudo-mechanical language of Keynes and his later mathematically-inclined disciples, economic theory is chock full of oversimplified figurative language and misleading metaphors. Stephan Kinsella goes as far as saying that John Locke’s misplaced and overly metaphorical emphasis on “owning” labor led not only to the monster that is modern intellectual property but possibly also to communism. Examples given in the paper will include economic terminology and metaphors used over the centuries in languages other than English as well.

Of course, it would be absurd to shy away from all instances of metaphorical language – the basic argument here is that economic theory should avoid the error of confusing a practical metaphor, or a visual aid to thought, indulged in for the sake of expediency, with the truth².

II Preliminary notions about language

As an introductory remark in a lecture series³ about the nature of man and the human condition, Hoppe noted that there are three elements that are unique to human beings – one is language, the second is property, and the third is production or technology. Without language, we

2 Quoted by Mark Thornton in his working paper “Is there a “Market” for Academic Research?”, source from Eugen von Böhm-Bawerk (1881), *Rechte und Verhältnisse vom Standpunkte der volkswirtschaftlichen Güterlehre*, 1881 [Eng. trans. 1962 "Whether Legal Rights and Relationships are Economic Goods", 1962], (Innsbruck: Universitäts-Buchhandlung), p. 135.

3 Lecture 1 – Economy, Society, and History, seminar, held on May 31 – June 4, 2004, Mises Institute, Auburn, AL.

cannot even begin to imagine what the world would look like – even fields which are considered metafields of knowledge – such as formal logic or mathematics, it would still be impossible to learn, much less explain, anything about these fields without using language.

Language is not mere communication – after all, many animals, including certain insects and marine creatures, can communicate to some extent, which generally involves a set of biochemical and neural reactions to external threat or stimuli. Human language, as far as linguistic anthropologists have ever been able to tell, is a complex, rule-governed, systematic means of communicating and describing by the use of sounds or later on, conventional symbols. Oddly, unlike the uncontroversial statement that societies with a more primitive division of labor also hold far lower standards of living and less accumulated knowledge, other than in the case of creoles⁴, there does not seem to be any correlation between linguistic complexity⁵ and the human development index, or gross national product, or any other kind of socioeconomic metric.

No matter how far back we go in written historical records or in oral histories, we see that all human linguistic communities developed highly complex, colorful, figurative, and allegorical language. We can thus conclude that deeply ingrained in our 200,000 years or so of linguistic history is our inseparability with our own lived experience.⁶ As Mises mentions in p. 43 of *Human Action*: “[a]s a thinking and acting being man emerges from his prehuman existence already as a social being. The evolution of reason, language, and cooperation is the outcome of the same process; they were inseparably and necessarily linked together.”⁷

4 Creoles are a special case of linguistic evolution – they are formed in essentially a single generation, whereby the children (generally of slaves or of a merchant class that used a pidgin, or simplified commercial language) form a new language based on the languages that arises from contact between two other languages and has features of both.

5 Though this subfield of linguistics remains controversial and relatively little has been written on it since the end of the Second World War, quite a number of mainstream linguists have remarked that, in short, many isolated human communities have developed a very high level of “redundancy-induced complexity,” which are linguistic elements that are in the language for no apparent reason other than historical accident. (Szmrecsanyi & Kortmann, 2012: 11) This has also been called “grammatical baggage” or “ornamental elaboration”. As one linguist puts it, “[s]uch features may include ergativity, grammaticalized evidential marking, inalienable possessive marking, switch-reference marking, inverse marking, obviative marking, »dummy« verbs, syntactic asymmetries between matrix and subordinate clauses, grammaticalized subjunctive marking, verb-second, clitic movement, any pragmatically neutral word order but SVO, noun class or grammatical gender marking (analytic or affixal), or lexically contrastive or morphosyntactic tone [...]” (McWhorter 2001: 163).

6 MacNeilage, F. Peter. *The Origin of Speech*. Oxford University Press, 2008.

7 Furthermore, Benjamin Marks adds: “Mises rightly criticised treating imaginary things (collectives, analogies, metaphors, etc.) as real and warns us to be very cautious when using fictitious auxiliary constructs to

Perhaps we can trace our poor understanding of our scope of metaphor usage to the Ancient Greeks, who formed, after all, the foundations of Western philosophy. Metaphors, according to Aristotle “are a device that consists in giving the thing a name that belongs to something else⁸” (Eisenberg 1992). The word itself comes to us from Middle French *métaphore*, from Latin *metaphora*, from Ancient Greek *μεταφορά* (*metaphorá*), from *μεταφέρειν* (*metaphérein*, “to transfer, apply”), built by the prefix *μετά* (*metá*, “with, across, after”) and the verb *φέρω* (*phérō*, cognate with English “I bear, carry”). This treatment of metaphors as a mere rhetorical device likely led future thinkers astray as to their potency and ubiquitousness in everyday and even technical language. Two of the foremost experts in metaphors in the field of linguistics, George Lakoff and Mark Johnson⁹ explain that our conceptual system is largely metaphorical, and the ways we think, experience, and do things in the world are indeed a product of our metaphors. As starting evidence, they point out the fact that we all use war metaphors to speak of arguments and argumentation; they cite (*italics in original*):

Your claims are *indefensible*.
 He *attacked* every *weak point* in my argument.
 His criticisms were *right on target*.
 I *demolished* his argument.
 I’ve never *won* an argument with him.
 You disagree? Okay, *shoot!*
 If you use that *strategy*, he’ll *wipe you out*.
 He *shot down* all of my arguments.¹⁰

In the realm of emotions, happy is up (I’m feeling *up*, that *boosted* my spirits, my spirits *rose*, you’re in *high spirits*, thinking about her always gives me a *lift*), and sad is down (I’m feeling *down*, I’m *depressed*, he’s really *low* these days, I *fell* into a *depression*, my spirits *sank*¹¹), along with hundreds of

explain things, but has he not himself committed the fallacy of treating the mind as a real thing? The mind does not exist; it has no existence as a noun. We can “mind” our step, but this “mind” has no structure; it is a verb. Yet Mises talks of the structure of the mind repeatedly and it is central to his claim that the proposition that humans act is true a priori.” See: <https://mises.org/blog/synthetic-apriori-truths-and-mind-structure-nominalist-perspective>.

8 In what is perhaps a product of his classical education, Mises, in *Human Action* (p. 114), pithily describes metaphors in the following fashion: “Most of the metaphors used in daily speech imaginatively identify an abstract object with another object that can be apprehended directly by the senses. Yet this is not a necessary feature of metaphorical language, but merely a consequence of the fact that the concrete is as a rule more familiar to us than the abstract. As metaphors aim at an explanation of something which is less well known by comparing it with something better known, they consist for the most part in identifying something abstract with a better-known concrete.”

9 George Lakoff & Mark Johnson (1980) *Metaphors We Live By* (Chicago: University of Chicago Press), p. 3.

10 Ibid. p. 4..

11 Ibid. p.15.

sets of examples they uncovered. They then promptly make the case that the “essence of metaphors is understanding and experiencing one kind of thing in terms of another”.¹² In short, they are a cost-efficient, memory shortcut that slowly accretes through the experiences of each generation, that allow language users to borrow a previous understanding or experience and analogize it with another.

However, just because a specific tool is good at one task does not follow that it will be good for any other task. Accomplished, respected, generally well-meaning people in economics and virtually all other fields of the humanities and social sciences unconsciously, through a step by step process, by analogy, extension, application, and semantic expansion, come to confuse and misuse metaphors to the point of producing incorrect theories and wrong conclusions. To better understand this process, we turn to the elements of metaphor in language itself.

III Elements of Metaphors in Language Itself

We start our analysis with perhaps what is superficially a self-detonating argument – that elements of language itself are actually metaphors, or at least derive from metaphors.

As far as we can tell, the vast majority of all function words (such as prepositions, affixes, conjunctions, etc.) started their semantic lives as common nouns or verbs. To give but a few examples, *from*, one of the most common words in English, ultimately derives from Proto-Indo-European root **per*, whose base meaning is “to go over”, through which we also get Armenian հեւոս (heiu, far), Greek πάρος (*paros*, “up to now,” “formerly”), Latin *per* (“by”, borrowed in English expressions such as “per annum”, “per se”, “per capita”, “percent”), Sanskrit पर (para, “distant, further”), and a whole slew of related English words such as *far*, *forth*, *further*, *first*, and others. Charles Dickens, in a lesser-known article entitled *The Study of Greek*,¹³ sums it up aptly:

It is fatally easy to forget the essentially metaphorical nature of all language, save that which deals with the simplest impressions of the physical senses ; and thus the name which, at first, was but a metaphor, a suggestive comparison thrown out to indicate the impression made upon us, comes to be treated as a clear-cut scientific record of fact. The next step is taken

12 Ibid. p. 5.

13 Published in 1891, p. 164 of “All the Year Round: A Weekly Journal”, volume V (26 Wellington Street, Strand).

when the name so treated is extended by analogy to similar ideas to which the metaphor on which it is based does not apply; and thus the same name comes to be used for a large series of ideas, [...]"

Conventionalization

Excluding vanity scripts and writing systems invented for pleasure or proselytism in the 19th century¹⁴ and beyond, the invention of writing has only occurred thrice in human history – in China, Mesopotamia, and at a much later date, Central America. All three started out as crude pictograms (or pictographs), and through use and spread, slowly had most of their characters conventionalized. Some ideograms are comprehensible only by familiarity with prior convention, but as time went by, different peoples speaking different languages borrowed and adapted existing scripts. These scripts follow a predictable pattern of pictographic to ideogrammatical to syllabic (from here on, characters represent sounds instead of ideas) to consonantary (abjad or abudiga; scripts in which only or mostly consonants are represented in writing) to a full-fledged alphabet. Though the majority of pictographs and even earlier elements of proto-writing never became conventionalized, therefore never became elements of future scripts, a few of them did follow this fairly predictable pattern.

One good example is the Latin script, used in English and more than half of the world's written languages, which derives from Etruscan, itself an adaptation of the Greek script (still alphabetic), which they borrowed from Phoenician merchants (an abjad), which they adapted from earlier Canaanite and Proto-Sinaitic scripts found in the region, and they ultimately trace their origins to Egyptian hieroglyphics (generally held to be ideogrammatical, especially in earlier eras), a system which was possibly influenced by earlier Mesopotamian writing and which started out as pictographic as well.

The Chinese script did not go all the way. Chinese characters for mountain, blade, horse, fish, gate, sun, eye, and tree¹⁵, for example, follow a similar pattern whereby the initial pictograms slowly become conventionalized into their modern forms, during the course of a few millennia, but it did not progress much further down the path as did almost all other scripts. For this reason, learning

14 Such as James Evans, who was an English-Canadian Methodist missionary and amateur linguist, who created the syllabic writing system for Ojibwe and Cree, which was later adapted to other unrelated languages such as Inuktitut of the Eskimo-Aleut language family.

15 Respectively: 山, 刀, 馬, 魚, 門, 月, 目, and 木.

written Chinese or a language which uses Chinese characters is an arduous task, and requires committing to memory many thousands of characters.

Spelling in written language is also a matter of convention – there have been attempts to centrally control the orthography of a language, but this has often resulted in failure, rejection, or disuse. English spelling, for instance, is a product of the late Middle Ages and early modern era, in which the printing press slowly conventionalized and legitimized the spelling that was in common use in the London area in England¹⁶. It has never had a language regulator, and its spelling conventions slightly differ across the Atlantic mostly due to lexicographers’ preferences (the most famous among these are Noah Webster’s¹⁷ numerous spelling changes, most of which American English still uses to this day).

Even the word processor used for the writing of this document¹⁸ contains a small diskette symbol – a symbol which would have been self-explanatory a generation ago, but has since then become conventionalized to simply mean “save”, as in “electronically backing up one’s work or progress”. Soon enough this century, there will be more readers under a certain age than above who will be able to recognize the precise origin of this symbol – such is the fate of most conventionalized symbols.

Though it comes to no surprise to those who have studied Hayek’s works regarding spontaneous order, various groups have attempted to use government to clamp down on natural and inevitable language change by forming what we now call “language regulators”. Most countries have them, much to the surprise of Anglophones. France, for example, has the *Académie française* (French Academy), one of the very oldest of its kind from the 17th century, and the Canadian province of Quebec has the *Office québécois de la langue française* (Quebec Office of the French Language), dreaded by most people due to its tactics of bureaucratic intimidation, fines, punitive measures, extraordinary search and seizure powers, aggressive litigation, and even outright closure of businesses, especially against politically unpopular groups, it has rightfully earned its reputation as Quebec’s “[State] language police”.

16 This directly and necessarily implies the slow elimination of all other competing English spellings.

17 Webster’s Dictionary had become a household name in the United States since 1828, and modern editions still use his name to market their dictionaries.

18 LibreOffice Writer version 5.4.0.3.

Grammaticalization

Words do not shift abruptly from one category to another, but go through a series of small transitions that tend to be similar in type across languages. For example, a lexical noun like *back* that expresses a body part comes to stand for a spatial relationship (“at the back”, “to go through the back of the house”) to becoming an adverb (“fear held him back”), and perhaps eventually a preposition and even an affix (such as back-formation). The potential for change from lexical noun, to relational phrase, to adverb and preposition, and perhaps even to an affix is typical of the process linguists call a “cline”. Even a very basic word such as “not” (as in, “he did not read the book”) can come from unexpected sources, such as the French negative marker *pas* (not) which literally comes from “step”¹⁹.

Interesting to note here is that the very term “cline” is a metaphor for the empirical observation that cross-linguistically forms tend to undergo the same kinds of changes or have similar sets of relationships, in similar orders²⁰.

Just as words undergo grammaticalization and change their nature from a purely lexical word to a grammatical function, entire concepts can undergo similar shifts. A good example is Latin *fructus*, which literally means “fruit”, yet because of the way the term was used in the Roman legal system, it came to also mean “revenue, things produced by another thing or physical property or means”, a usage which we still have today whenever we refer to “keeping the fruits of one’s labor”.

The opposite – semantic shrinking or restriction, can occur as well, such as English *deer*, which can only refer to one type of animal, with its German cognate *Tier*, which both derive from Proto-Germanic **deuzą*, meaning “animal, beast”, a general meaning still found in all Germanic languages other than English. Compare German *Fleisch* (any kind of meat) to English *flesh*. Now that we are armed with these notions, we can get to the meat of the matter.

19 The original Latin-derived negative marker *ne*, which Old French used as a standalone word, slowly became dependent on an intensifier which was context-specific, such as *je ne marche pas* (I don’t walk a step), *je ne bois goutte* (I don’t drink a drop), *je ne mange mie* (I don’t eat a crumb), and after a period of competition between the various negative marker intensifiers, *pas* won out and today, in the oral language at least, most Modern French dialects do not even use the original *ne* construction at all.

20 For a thorough overview, see Paul J. Hopper and Elizabeth Closs Traugott, *Grammaticalization*, 2nd ed. (Cambridge University Press, 2003).

IV Metaphors in Scientific Discourse

The metaphor has entered epistemology to illustrate how models are situated and function in relation to scientific theories, and how theoretical terminology is introduced into scientific language. Given that the most basic building blocks of language often derive from metaphorical thinking, it is not surprising to see the same phenomenon in scientific discourse. Julian Jaynes, moreover, makes it a central argument of his theory of consciousness as a metaphorization of the real; all disciplines are thus creators of metaphors: biology²¹, in the theory of evolution (the “missing link” of Charles Darwin, the tree as image of phylogenesis), in physics (the model of Maxwell and his demon), in ecology (the Gaia hypothesis) and in astrophysics (string theory for example, and some usages of “waves” even though it is generally a mathematical construct).

Kinsella points out that Isabel Paterson or Rose Wilder Lane’s use of *energy circuits* is “very scientific”²², which is fitting given the technological era²³ in which they produced nearly all of their intellectual output. Similar to the way people talk about the “momentum” of a football game or the “energy” of a crowd or a crystal’s glow, the economy is often said to be “overheated”.

In ecological economics, it is commonly argued that labor is in fact energy over time. However, echoing Joan Robinson, Alf Hornborg (1998) argues that both the reliance on “energy theory of value” and “labor theory of value” are problematic as they propose that use-values (or material wealth) are more “real” than exchange-values (or cultural wealth)—yet, use-values are culturally determined.

Remaining in the realm of ecological economics, Romanian economist and mathematical statistician Nicholas Georgescu-Roegen²⁴, in his 1971 magnum opus *The Entropy Law and the Economic*

21 Julian Jaynes (1994) “La naissance de la conscience dans l'effondrement de l'esprit bicaméral”, coll. *Questions* (Paris, Presses Universitaires de France).

22 p. 30 of Stephan Kinsella’s Property & Freedom Society 2011 slideshow presentation.

23 Mises was unimpressed by materialists of his time making such arguments – he writes “The materialist thesis has never yet been proved or particularized. The materialists have brought forward no more than analogies and metaphors. They have compared the working of the human mind with the operation of a machine or with physiological processes. Both analogies are insignificant and do not explain anything” (*Theory and History*, p.94).

24 Early in his life, Georgescu-Roegen was the student and protégé of Joseph Schumpeter, who taught that irreversible evolutionary change and 'creative destruction' are inherent in capitalism. Later in his life, Georgescu-

Process made heavy use of the entropy metaphor to base the very thesis of his work. In his later years, he remained embarrassed that he had misinterpreted, and consequently, overstretched the proper application of the physical law that formed part of the title of his magnum opus.

Organic, mechanistic, ritual, theatrical, playful, and cybernetic metaphors, are a recurrent mode of expression in sociology, especially for the construction of descriptive models of phenomena²⁵. Early sociologists, such as Auguste Comte, made attempts to shape their studies using the epistemological pattern of Newtonian mechanics. Mises criticized these “shallow” and “impractical” tendencies, and remarked in *Theory and History* (1957, 242) that the first generation of Comte’s adherents turned instead toward what they believed to be biological and organic interpretation of social phenomena, in which they freely engaged in heavy metaphorical language and quite seriously discussed such problems as what in the social “body” should be classed as “intercellular substance”; Comte even called sociology “social physics”. When the absurdity of this biologism and organicism became obvious, the sociologists from that era completely abandoned the ambitious pretensions of Comte.

The use of metaphors makes it possible to extract structures and conceptual tools from other fields for reuse in a separate context, as is the case, for example, with game theory²⁶. German historicists were fond of attempting to categorize periods of economic history, and they often likened their comparisons to the periodization of the history of art. Addressing this practice, Mises trenchantly pointed out:

As the history of art deals with the succession of various styles of artistic activities, economic history deals with the succession of various styles of economic activities (*Wirtschaftsstile*). This metaphor is neither better nor worse than other metaphors. But what the historicists who resorted to it failed to say was that the historians of art talk only about the styles of the past and do not develop doctrines about the art styles of the future. However, the historicists are writing and lecturing about the economic conditions of the past only in order to derive from them conclusions about economic policies that necessarily are directed toward the economic conditions of the future²⁷.

Roegen was the teacher and mentor of Herman Daly, who then went on to develop the concept of a steady-state economy to impose permanent governmental restrictions on the flow of natural resources through the (world) economy. This conclusion once again highlights the dangers inherent in overly metaphorical thinking in economics.

25 Sara Franceschelli (2006) “Le rôle de la métaphore en biologie”, *Berder*, March 2006.

26 Giovanni Busino (2003) “La place de la métaphore en sociologie”, *Revue Européenne des Sciences Sociales*.

27 *Theory and History* (1957), p. 204.

We now turn to the long interwoven history between economics and biology. Adam Smith, David Ricardo and Karl Marx also used biological metaphors to explain or form economic theory (Wyatt, 2004, 246). As Hirshleifer (1978, 238) mentions, the relation between economics and biology cannot be more straightforward, even Alfred Marshall said that economics is a branch of biology or as he points out, according to Ghiselin (1978), biology is natural economics.

Mises mentions biology hundreds of times in his works, though it is clear that he would have disagreed with the conclusions reached by Marshall. Mises had a sharp eye for distinguishing between technical and metaphorical language. For example, regarding the term once beloved by socialists “struggle for survival”, he stated:

Action is sometimes viewed as the human variety of the struggle for survival common to all living beings. However, the term “struggle for survival” as applied to animals and plants is a metaphor. It would be a mistake to infer anything from its use. In applying literally the term struggle to animals and plants one would ascribe to them the power to become aware of factors threatening their existence, the will to preserve their own integrity, and the mental faculty of finding means for its preservation²⁸.

According to Marshall, “the Mecca of economics lies in economic biology rather than economic dynamics” (Marshall 1920, xii). David Batten, in chapter 7 of *Spatial Economic Science: New Frontiers in Theory and Methodology*²⁹, explains that one might argue plausibly that economics should be a branch of biology, and quotes Marshall who reasoned that economics had no clear kinship with any physical science, but was like biology insofar as they both dealt with “a matter, of which the inner nature and constitution, as well as the outer form, are constantly changing” (Marshall, 1920, 637). This theme of “constant change” is echoed in Røpke (2004, 296), who also points out that economic phenomena can also be seen as a natural process therefore it can be analyzed as a biological process and change.

28 Ludwig von Mises (1962) *The Ultimate Foundation of Economic Science* (Princeton, NJ: D. van Nostrand Co.). p. 34, which is an elaboration of an earlier statement in *Theory and History* (1957), in which he says: “[b]oth schools misunderstood the Darwinian concept of the struggle for survival. It does not refer merely to combat and blows. It means metaphorically the tenacious impulse of beings to keep alive in spite of all factors detrimental to them. As the means of sustenance are scarce, biological competition prevails among all individuals—whether of the same or different species— which feed on the same stuff.” (p. 39).

29 Aura Reggiani (ed.) (2000) *Spatial Economic Science: New Frontiers in Theory and Methodology* (Berlin: Springer-Verlag).

Medical terminology is often used by modern economists, and especially by economic journalists and business commentators³⁰. Note the countless times such and such industry or the economy as a whole is *ailing*, *weak*, *comatose*, *limping*, *shackled*, that unemployment or poverty needs a *cure*, that investors are *paralyzed*, that the central bank needs to *inject* the economy with *steroids*³¹. In various online lectures, DiLorenzo has even pointed out the ironic appropriateness of describing the economy as a zombie or Frankenstein-like monster that needs to be *shocked* or *revived* with a *stimulus* package or an *injection*³².

Hyperbole and imagery of life and death are also used when speaking of economic matters, such as: markets are *panicking*, the *burial* of a currency, interest rates being pushed *into the red* or *into negative territory*, the banks' balance sheets are clogged with *toxic junk* or *toxic assets*, *dead capital*³³, the government of Iceland is frantically seeking a *lifeline* loan from Russia, and many others.

Both Rothbard and DiLorenzo have pointed out that starting from the early 20th century, central planners increasingly used car, engine, and train metaphors for the economy, with the central bank being the pilot, driver, or captain of the ship. In *Power and Market*, Rothbard exposes the underhanded and metaphorically-loaded “power” language used by anti-free market advocates and central planners:

It is quite common and even fashionable to discuss market phenomena in terms of “power”—that is, in terms appropriate only to the battlefield. We have seen the fallacy of the “back-to-the-jungle” criticism of the market and we have seen how the fallacious “economic-power” concept has been applied to the exchange economy. Political-power terminology, in fact, often dominates discussions of the market: peaceful businessmen are “economic royalists,” “economic feudalists,” or “robber barons.” Business is called a “system of power,” and firms are “private governments,” and, if they are very large, even “empires.” Less luridly, men have “bargaining power,” and business firms engage in “strategies” and “rivalry” as in military battles. Recently, theories of “games” and strategy have been erroneously applied to

30 Many of the examples here are borrowed or adapted from Filippo-Enrico Cardini (2014) “Analysing English Metaphors of the Economic Crisis” *Lingue e Linguaggi*, vol. 11, pp. 59-76.

31 Here, we have the economy as a patient, and the central bank as the omniscient doctor.

32 In an email discussion list (quote found at <https://mises.org/blog/objectivist-law-prof-mossoff-copyright-or-misuse-labor-value-and-creation-metaphors>), Dilorenzo is quoted as humorously saying: “A fun paper [...] would be to ridicule the metaphors in macroeconomics with all the talk of “injections,” “leakages,” shocks,” etc. I would start by comparing it all to the movie *Young Frankenstein*, where they tried to “shock” the monster to life, just as “infusions” of money or tax dollars supposedly shock the economy out of a recession. Then when shock therapy didn't work, Gene Wilder pulled out a giant needle and “injected” the monster, just as money is supposedly injected into the economy by the Fed. The possibilities are endless.”

33 For more on metaphors regarding capital theory, see Peter Lewin, (1995), “Methods and metaphors in capital theory” in (ed.) *Advances in Austrian Economics*, vol 2, Emerald Group Publishing Limited, pp.277-296.

market activity, even to the absurd extent of comparing market exchange with a “zero-sum game”—an interrelation in which A’s loss is precisely equal to B’s gain.

This, of course, is the action of coercive power, of conquest and robbery. There, one man’s gain is another man’s loss; one man’s victory, another’s defeat. Only conflict can describe these social relations. But the opposite is true on the free market, where everyone is a “victor” and everyone gains from social relations. The language and concepts of political power are singularly inappropriate in the free-market society.³⁴

On a related note, Rothbard dedicates some time to writing about and criticizing nebulous concepts such as “consumer sovereignty”³⁵. Today, consumer protection law, consumer advocacy groups, and even some economists continue to make plentiful use of “sovereignty” metaphors that go beyond just mere metaphor, and enter into rights discourse in the legal literature.

On the idea that prices “convey knowledge” - much has been written in the past century, but suffice it to say that this can only held to be valid about exchange ratios of the past³⁶, which are the outcome of past conditions. Human action, however, is never backward-looking but forward-looking in time, to conditions that are yet to appear in reality; thus, we see that it is once again an overreliance on metaphor that has led us into error. Hülsmann, as an aside, mentions:

[o]nly in a metaphorical sense could one say that prices reflect or contain information on present conditions. [...] It is asserted that prices communicate abridged relevant information. This, however, is only a metaphorical expression. [...] It is not prices that coordinate the actions of sellers and buyers of tin; prices are the outcome of (coordinated) action, not its coordinators. It is property, rather than knowledge, that coordinates the separate actions of different people. The terms coordination and communication rather obfuscate than adequately express this fact. This is another example of the dangers linked to the use of metaphors in scientific discourse.³⁷

34 From pp. 1329-1330 of Murray Rothbard (1962) *Man, Economy, and State (Scholar’s Ed.)* (Auburn: Mises Institute).

35 Ibid., p. 630: ““The term “consumers’ sovereignty” is a typical example of the abuse, in economics, of a term (“sovereignty”) appropriate only to the political realm and is thus an illustration of the dangers of the application of metaphors taken from other disciplines. “Sovereignty” is the quality of ultimate political power; it is the power resting on the use of violence. In a purely free society, each individual is sovereign over his own person and property, and it is therefore this self-sovereignty which obtains on the free market. No one is “sovereign” over anyone else’s actions or exchanges. Since the consumers do not have the power to coerce producers into various occupations and work, the former are not “sovereign” over the latter.”

36 Stephan Kinsella (2008) *Against Intellectual* (Auburn: Mises Institute), p. 26.

37 Jörg Guido Hülsmann (1997) “Knowledge, Judgment, and the Use of Property” *Review of Austrian Economics*, vol. 10, iss. 1, pp. 28-29.

Even great economists are not immune to this confusion. For instance, regarding “friction” as elaborated by Böhm-Bawerk, Roderick Long says: “Ironically, in his memoirs Mises accuses Böhm-Bawerk (in their dispute over Cantillon effects) of being led astray by the idea of “friction” and other metaphors from the physical sciences.”³⁸

The overuse of metaphors can blunt our sense of categories as well. The mental process is akin to that of semantic expansion as seen above. Take, for example, the sharp distinction that Mises draws between economic and juristic (or legal) ownership of a good:

Ownership means full control of the services that can be derived from a good. This catallactic notion of ownership and property rights is not to be confused with the legal definition of ownership and property rights as stated in the laws of various countries. It was the idea of legislators and courts to define the legal concept of property in such a way as to give to the proprietor full protection by the governmental apparatus of coercion and compulsion, and to prevent anybody from encroaching upon his rights. As far as this purpose was adequately realized, the legal concept of property rights corresponded to the catallactic concept.

Quoting and commenting on this passage, Kinsella points out³⁹ that the term and concept “ownership” has different meanings in different contexts; in economics, it can mean the power to control a resource. It is akin to the concept of possession in most legal systems. Legal ownership is normative, it’s the *right* to control⁴⁰ and exclude. The failure to recognize that such concepts are used differently in economic and legal analysis leads to confusion in other situations – for example, when we refer to a *sale* of labor or of ideas, people will erroneously conclude that one must legally own labor or ideas – after all, how can one economically sell something that one does not own legally? This is a clear case of category-mixing, an error of thought historically induced by a mix of metaphors. A related two-pronged confusion appears in contracts – that if one can sell it, one can own it, and conversely, that if one can own it, one can sell it. A “sale” of labor or service implies that

38 Quoted here: <https://mises.org/blog/objectivist-law-prof-mossoff-copyright-or-misuse-labor-value-and-creation-metaphors>

39 From his social media discussions regarding these topics as applied to Bitcoin, found at: <https://www.facebook.com/nskinsella/posts/10155259986183181>

40 Kinsella says that even the private thief, for example, by taking a person’s watch, is implicitly acting on the maxim that he has the right to control it — that he is its owner. He does not deny property rights — he simply differs from the libertarian as to who the owner is (Kinsella, 2009, p. 181 FN6). In fact, as Adam Smith observed: "If there is any society among robbers and murderers, they must at least, according to the trite observation, abstain from robbing and murdering one another." Adam Smith, *The Theory of Moral Sentiments* (Indianapolis: Liberty Fund, [1759] 1982), II.II.3.

we own it – but this is really a sloppy equivocation, as it is really a unilateral contract, not a title exchange⁴¹.

From an Austrian point of view, a sale of labor is a transaction that is engaged in economically, but it is not legally an actual sale of labor, as in the transfer of title to something that one legally owns. In legal terms, according to Rothbard's title-transfer theory of contract, a sale of labor (in economic terms) is really just a one-way transfer of money in exchange for and conditioned upon someone performing a specified action. But virtually everyone conflates the two realms and assume that a sale (economically) of labor implies that one had to own (legally) the labor. The ability to rid ourselves of ownership cannot apply to one's body – one is a homesteader, one does not homestead himself in the same way as we homestead land or objects.

Yet another related imprecision is equivocation, for example, when one says they oppose aggression, which is a form of “harm”, many people then reanalyze their principles and end up opposing other types of “harm” that are not aggression (reputation rights, rights in potential or future customers' money). The same type of equivocation⁴² made by left-libertarians who oppose the State's authority or political authoritarianism, and then extend their concept to non-aggressive types of authority and even all hierarchy (employer-employee, companies, family, church, natural elites).

One of the main reasons why property eludes so many scholars is because the concept of property, appears to be so basic that everyone seems to have some immediate understanding of it, most people never think about it carefully and can, as a consequence, produce at best a very vague definition. Following Hoppe's explanation, starting from imprecisely stated or assumed definitions and building a complex network of thought upon them can lead only to intellectual disaster, for the original imprecisions and loopholes will then pervade and distort everything derived from them⁴³. His prescription is thus to clarify the concept of property.

41 From slide 15 of “Libertarian Controversies – Lecture 5: Controversies and Conundrums” by Stephan Kinsella, Mises Academy, 2011.

42 The practice of using an ambiguous term in more than one sense without making it clear which one is which, thus making an argument misleading.

43 Hans-Hermann Hoppe, *A Theory of Socialism and Capitalism*, ch. 2, p. 7.

V Short case studies

The rabbit hole of communism via the labor theory of value

One of the most striking (and eventually tragic) examples of metaphors leading thinkers astray is that of the labor theory of value. Much like the flat earth theory or geocentrism, there is a superficial plausibility to the untrained mind, and its specter still haunts the social sciences up to this day, though it is no longer considered orthodox in most schools of economics.

Many historians of economic thought have traced this fallacy back to John Locke's exploration of homesteading as the origin of property rights through the use of the "mixing labor [with land]" metaphor. Unfortunately, through a series of blunders as explained by Rothbard, many historians, especially Marxists, have taken glee in claiming that John Locke is thereby the founder of the Marxian labor theory of value (which Marx in turn acquired from Smith⁴⁴ and especially Ricardo). What these historians have failed to see is that Locke's theory is one of property, that is, how material property justly comes into ownership by means of labor exertion or "mixing". This theory has absolutely nothing to do with what determines the value or price of goods or services on the market, and therefore has nothing to do with the later labor theory of value⁴⁵. Rothbard, referring to thinkers further back in time, explains:

This 'homesteading' theory of property has been held by many historians to be the ancestor of the Marxian labour theory of value. But this charge confuses two very different things: determination of the economic value or price of a good, and a decision on how unused resources are to go over into private hands. The Aquinas-John of Paris-Locke view is the

44 For background information, see footnote 77 of *Against Intellectual Property*: "See, e.g., Murray N. Rothbard, *Economic Thought Before Adam Smith: An Austrian Perspective on the History of Economic Thought*, vol. 1 (Brookfield, Vt.: Edward Elgar, 1995), p. 453: "It was, indeed, Adam Smith who was almost solely responsible for the injection into economics of the labour theory of value. And hence it was Smith who may plausibly be held responsible for the emergence and the momentous consequences of Marx." Even otherwise sound thinkers sometimes place undue stress on the importance of labor to the homesteading process and its ability to be "owned." Rothbard himself, for instance, implies that an individual "owns his own person and therefore his own labor." Rothbard, "Justice and Property Rights," p. 284, emphasis added; see also Rothbard, *The Ethics of Liberty*, p. 49. It is a misleading metaphor to speak of "owning one's labor" (or one's life or ideas). The right to use or profit from one's labor is only a consequence of being in control of one's body, just as the right to "free speech" is only a consequence, or a derivative, of the right to private property, as Rothbard recognized in *The Ethics of Liberty*, esp. chap. 15."

45 Murray Rothbard (1995) *An Austrian Perspective on the History of Economic Thought*, vol. 1 *Economic Thought Before Adam Smith* (Auburn: Mises Institute), p. 317.

'labour theory' (defining 'labour' as the expenditure of human energy rather than working for a wage) of the origin of property, not a labour theory of value.⁴⁶

The precise truth of the matter is of little importance here, sadly, since, as Ralph Raico used to say, “most people judge more from words than from reality.”⁴⁷ The irony here is that John Locke himself was very wary of metaphors and disliked their use in scientific discourse, as shown in the following passage from Locke’s *An Essay Concerning Human Understanding* (spelling modernized):

Since wit and fancy finds easier entertainment in the world, than dry truth and real knowledge, figurative speeches, and allusion in language, will hardly be admitted, as an imperfection or abuse of it. I confess, in discourses, where we seek rather pleasure and delight, than information and improvement, such ornaments as are borrowed from them, can scarce pass for faults. But yet, if we would speak of things as they are, we must allow, that all the art of rhetoric, besides order and clearness, all the artificial and figurative application of words eloquence hath invented, are for nothing but to insinuate wrong ideas, move the passions, and thereby mislead the judgment; and so indeed are perfect cheat; and therefore however laudable or allowable oratory may render them in harangues and popular addresses, they are certainly, in all discourses that pretend to inform or instruct, wholly to be avoided ... 'Tis evident how much men love to deceive, and be deceived, since rhetoric, that powerful instrument of error and deceit, has its established professors, is publicly taught, and has always been had in great reputation: and, I doubt not, but it will be thought great boldness, if not brutality in me to have said thus much against it.⁴⁸

In brief, we may say that a misunderstanding of the origins of property rights led proto-Marxists and Marxists to base their entire economic edifice on the supposed objective (and “scientific”, but that was mostly dropped by later Marxists) labor theory of value. “Surplus value”, “class struggle”, “metabolic rift”, and many other Marxist terms, most of which are metaphors themselves, hinge on this initial misunderstanding.

Intellectual monopoly (a.k.a. “property”)

In discussions regarding the creation and the source of rights, it is often maintained that there are three means of creating and coming to own goods: original appropriation (homesteading), contractual exchange, and production. The last of these three is of particular interest here – mental

46 Ibid., p. 62.

47 Ralph Raico, in a lecture entitled “Peace and Liberalism”, October 24-25, 2003, “Prosperity, War & Depression” conference hosted by the Mises Institute. He also mentioned the Orwellian language used in war (such as “peacekeepers”), and elaborated on the name change of the “Department of War” to “Department of Defense” in 1947.

48 John Locke (1689) *An Essay Concerning Human Understanding* (London: St. Paul’s Churchyard).

images of gold nuggets or stacks of paper bills are imagined whenever we think of the process of transforming a natural resource into a more sought-after good, yet upon closer examination, we realize that production is only a source of wealth, not a source of rights. As Hoppe states in “Banking, Nation States, and International Politics: A Sociological Reconstruction of the Present Economic Order”, whose ideas are reincorporated into chapter 3 of *The Economics and Ethics of Private Property*: “[o]ne can acquire and increase wealth either through homesteading, production, and contractual exchange, or by expropriating and exploiting homesteaders, producers, or contractual exchangers. There are no other ways.” Thus, new property rights do not arise from the production of wealth – using clear language, we can reformulate these ideas as follows: homesteading *creates* new property titles; contracts *transfer* existing property titles; and, production *transforms* already-owned goods⁴⁹.

By combining a utilitarian approach (presuming that State-granted IP protections and privileges are necessary as a reward for their artistic or intellectual labor) and by focusing on creation and labor, rather than on first occupancy of scarce resources, as the touchstone of property rights, IP advocates are led to place undue stress on the importance of “rewarding” the labor of the creator, much as Adam Smith’s flawed labor theory of value led to Marx’s even more deeply-flawed communist views on exploitation⁵⁰, explains Kinsella.

Two related confusions are the ownership of “labor”, as it is redundant with body and property ownership (a consequence of it), and the fact that there are no property rights in the value of property but only in its physical integrity. The latter gives rise to the garbled and illogical idea of reputation rights (e.g. competition law, antitrust law, defamation, right to be forgotten). Reputation rights, as applied in most of today’s States, when logically and consistently analyzed, ends up being a bizarre “property right” in other people’s minds.

49 In many countries, like Canada, the State, conventionally called “the Crown” *de jure* owns almost all natural resources on its 9.9 million kilometer square of surface area over which it claims ownership – those with a simple fee title upon the land, which is the fullest form of property right that a non-sovereign may hold in Canada and all commonwealth nations, do not actually own the valuable minerals, natural gas, uranium, potash, or oil, found deeper on their land. Furthermore, in what is lamented but poorly understood by non-economically trained environmentalists, is that mining and lumber companies do not actually own any of the land on which they exploit the natural resources – they merely have a State-issued license that grants them specific economic rights that allows them to remove some of the Crown’s natural resources and convert them into consumer or producer goods.

50 Stephan Kinsella (2012) “The Case Against Intellectual Property”, in Christoph Luetge (2013), *Handbook of the Philosophical Foundations of Business Ethics* (Springer Science+Business Media B.V). The term “exploitation” has the added benefit of eliciting a visceral emotional reaction.

Production is not the creation of new matter – it is the transformation of things from one form to another – the transformation of things that someone already owns, either the producer or someone else. Labor and creativity transform property into more valuable finished products thus resulting in greater wealth, but not additional property rights. The idea that one owns anything that he or she creates is a confused one – it is, in a conceptual sense, “double-dipping” or “double-counting” (having property rights for the raw materials and recounting a new property right for the rearrangement of this selfsame matter); leads to the idea of intellectual property⁵¹ and other confusions.

Rothbard, Mises, and Hoppe are in agreement when they explain such matters – that creation of new property rights *per se* does not happen, and that such a phenomenon is best explained as rearranging already-owned scarce resources. Even Ayn Rand, who is unclear regarding the fundamental notions of intellectual property, says that “the power to rearrange the combinations of natural elements [...] that had not existed before” is the only creative force that mankind has.⁵² Unfortunately, her confusion regarding intellectual property infected entire generations of libertarians and constitutionalists; add to this the near-obsessive focus on utility by mainstream economists, and we are left with the strange conclusion that the goal of law is not justice and the determination of property rights, but tweaking incentives to produce or maximize wealth, yet tyrannical intellectual property regimes fail to even do that (Kinsella, 2008)⁵³.

With this sloppy use of language and overreliance on metaphors, copyright becomes “theft” (and copying digital code is deemed “content theft”), and “intellectual property infringements” allow supposed victims to use court-enforced orders to affect actual property – real things such as printers, papers, electronic equipment, computers, hard drives, and even people’s bodies, to remedy

51 See Stephan Kinsella’s lecture at the 2017 Property & Freedom Society entitled “Reflections on the Theory of Contract ” (<https://www.youtube.com/watch?v=JqjgmqpQkgU>) – at 18:20 or so, he gives a brief overview of ‘selling’ one’s services as a simple metaphor, which leads to intellectual property.

52 Ayn Rand (1980) *Philosophy: Who Needs It* (New York: New American Library), chapter 3.

53 For a justification as to why the free market, without qualifications, produces the greatest possible overall social welfare, see Jeffrey Herbener (1997) “The Pareto Rule and Welfare Economics”, *Review of Austrian Economics*, vol. 10, issue 1, pp. 79-106.

the situation. What the entire intellectual property community, and countless scholars continue to ignore is the fact that property rights must be rooted in scarcity⁵⁴. As Kinsella points out⁵⁵:

As noted before, some libertarian IP advocates, such as Rand, hold that creation is the source of property rights. This confuses the nature and reasons for property rights, which lie in the undeniable fact of scarcity. Given scarcity and the correspondent possibility of conflict in the use of resources, conflicts are avoided and peace and cooperation are achieved by allocating property rights to such resources. And the purpose of property rights dictates the nature of such rules. For if the rules allocating property rights are to serve as objective rules that all can agree upon so as to avoid conflict, they cannot be biased or arbitrary. For this reason, unowned resources come to be owned— homesteaded or appropriated—by the first possessor.

However, it is important to remember that property rights are valid in scarce resources only – information is not ownable. Rothbard’s emphasis on rights as property (other “rights” like freedom of speech are derivative, not free-floating or independent⁵⁶). Indeed, intellectual property advocates have built entire industries based on this very notion.

A far better way to conceive of intellectual property is to call it by its old name – intellectual monopoly – a licensed privilege, and to regard it as essentially a State-enforced nationwide or even

54 For further details, see footnote 120 of *A Theory of Socialism and Capitalism*: “only because scarcity exists is there even a problem of formulating moral laws; insofar as goods are superabundant (“free” goods) no conflict over the use of goods is possible and no action-coordination is needed. Hence, it follows that any ethic, correctly conceived, must be formulated as a theory of property, i.e., a theory of the assignment of rights of exclusive control over scarce means. Because only then does it become possible to avoid otherwise inescapable and unresolvable conflict. Unfortunately, moral philosophers, in their widespread ignorance of economics, have hardly ever seen this clearly enough. Rather, like H. Veatch (*Human Rights*, Baton Rouge, 1985, p. 170), for instance, they seem to think that they can do without a precise definition of property and property rights only to then necessarily wind up in a sea of vagueness and adhoceries. On human rights as property rights cf. also M. N. Rothbard, *The Ethics of Liberty*, Atlantic Highlands, 1982, Chapter 15.

55 Stephan Kinsella (2008) *Against Intellectual* (Auburn: Mises Institute), p. 36.

56 Murray Rothbard (1982) *The Ethics of Liberty* (Auburn: Mises Institute), p. 114 (footnotes excluded): “Furthermore, couching the analysis in terms of a “right to free speech” instead of property rights leads to confusion and the weakening of the very concept of rights. The most famous example is Justice Holmes’s contention that no one has the right to shout “Fire” falsely in a crowded theater, and therefore that the right to freedom of speech cannot be absolute, but must be weakened and tempered by considerations of “public policy.” And yet, if we analyze the problem in terms of property rights we will see that no weakening of the absoluteness of rights is necessary.”

worldwide (given the reach of certain international treaties) negative servitude⁵⁷ imposed upon all, regardless whether they validly contracted with the “owner” of the idea.

VI Conclusion

Since this paper has essentially described an inevitable byproduct of human language and cognition, it would not be possible to give a complete prescription to the problem presented (insofar as it is a problem that leads us astray in specific instances in economics and other fields). But we are not mere automata, forever slaves to our instincts and built-in universal grammar apparatus – we can and should, periodically, critically analyze and reanalyze time-honored metaphors in all fields of human knowledge – study them, prod them, readjust them, and constantly strive to refine our understanding through clearer language.

As Walter Block states, Austrians certainly do not quarrel with metaphor-filled ordinary language, since they and the common man occupy two different universes of discourse. Our conflict is with mainstream economists and other specialists in the humanities and social sciences who mistakenly employ the ordinary language notion of envy, happiness, utility, indifference, or a myriad of other fuzzy concepts, to technical issues. By being aware of the intrinsically metaphorical nature of human language, we can hopefully learn to separate metaphorical shorthand from precise technical language.

⁵⁷ Servitude is a useful legal concept used in Roman-based civil law countries, here understood as dismemberment of a property right which cannot impose the performance of a positive duty on the owner of the burdened property but only duties either to refrain from exercising certain rights to which an owner could be otherwise entitled (said to be a negative servitude) or to suffer certain things to be done to his property which an owner otherwise could be entitled to forbid or resist (positive servitude). Article 1177 of the Quebec Civil Code provides a suitable definition: “a servitude is a charge imposed on an immovable, the servient land, in favour of another immovable, the dominant land, belonging to a different owner.”

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