

# The Constructivism of Social Discourse: Toward a Contemporaneous Understanding of Knowledge

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## Abstract

Constructivism is frequently met with objections, criticism and often equated with nihilism or relativism. Sometimes even blamed for what some would randomly picture as unwanted side effects of radicalism or of a progressivist era: such misconceptions are not only due to an imprecise grasp of the premises shared by the constructivist family of systems. The structure of media, political systems, and economic models, still up today impel societal understandings of knowledge on neo-positivistic grounds. The first part of this essay outlines such pressures while sketching how language and worldviews play critical roles in our knowledge construction. Focusing on recent mediatic events, this work advances displaying some essential limits regarding the construction of human knowledge. Though unavoidable, some of the distinguishing aspects regarding the nature of our narratives are then critically reviewed. Later, it is shown how a special kind of self-denial that certain sub-stories implicitly hold about their own narrative nature leaves us with clashing worldviews that eventually collide onto crisis. Finally, it'll be argued that it's precisely in this scenario where a constructivist depiction of social discourses may move us away from any adolescent intent of elucidating absolutes within mere heuristics, to the pragmatic need of arriving on satisfactory agreements between parties.

## Keywords

Constructivism, Social Crisis, Epistemology, Social Discourse, Theory of Knowledge

## 1. Introduction: Polarization, Memes, and Social Media Interaction

Why is it that some of us feel we live in an age of a global crisis? What drives this sensation anyway? And what can be done about it? Are we truly living in a time of unprecedented social chaos and information crises? Though at first sight, we may feel such questions are intuitive, settling them beyond personal impressions can prove quite a challenge. We can hardly separate our inner speech from the stories that gain notoriety by means of the technological and ubiquitous sorts of massive media we encounter on a daily basis. Sentiments of social chaos or crisis answer to a continuous negotiation between social discourses and our inner narratives. Opening with examples of what can be interpreted as a social crisis, in this essay we will review some of the discursive restrictions we are held to when understanding reality and imbuing it with meaning. Our main issue will then be to visualize the limits of our practical endeavors on this matter, emphasizing the importance of understanding our constructions as adaptative efforts to produce positive and functional meaning.

### 1.1. The Perception of Social Crisis, Chaos and Instability in Our Current Times

It's hard not to find some political and social instability in our times. In Chile, a social outburst in 2019 forced the government to begin a constitutional process. This "situation altered the country and its inhabitants (...) disrupting transportation and access to healthcare, causing job losses and food shortages" (Sepúlveda, Lavanchy, Heini & Acevedo, 2021: p. 23).

In Europe, chaos and distress spreaded during the world pandemic in 2020 and 2021. Police faced riots and social crisis, thereupon a portion of the masses zealously believed sanitary restrictions were excessive and had to be removed. In Germany, "querdenken-demonstrations (and anti-lockdown protests organized by related groups) have established themselves as rallies at which like-minded people deliberately ignore public health measures (Lange & Monscheuer, 2021: p. 8)".

In United States, the presidential transition was quite a show, resulting in the well-known storming of violent offense to the congress house. The situation was characterized by memes and group polarity. "Between the day after the US presidential election and the coup attempt, the US President unleashed a constant stream of a total of 1718 tweets, claiming the election was rigged and fraudulent (...) [Eventually] Twitter shut down Trump's account" (Fuchs, 2021: p. 247). Unprecedented chaos, broke through the news and media as supporters of the outgoing government claimed that the election process had no legitimacy. All this amidst impeachment intents for the passing president.

We have, actually, quite a lot of examples of extreme clashing opinions unfolding onto social division and crisis. "Starting in December 2010, a revolutionary wave of demonstrations and protests spread the Arab region" (Klomp, 2020: p.

24); the UK has recently witnessed “prominent strikes by doctors and academics alongside huge anti-Brexit protests” (Koch & Reeves, 2021: p. 14), and back to the US, where we must recall that the electoral victory of the United States President on 2016, when the opposing candidate got more persons voting for him, led to several claims of Russian cyber-hacking, interference and disinformation.

It’s all too obvious that these situations come with the disparate pairing of dissenting outlooks. “Difficulties created by the crisis are rather easy to identify and tend to occupy a good deal of space in the media. (...) Crises expose the weaknesses of existing political and economic arrangements, and can produce demands for change” (Peters, 2021: p. 10) fronting the advent of conservative and progressist stances. The problem is that, straightway, perspectives in struggle are prompted into polarity and become extreme, in absolute opposition, representing the consistency and hegemonic intent of clashing worldviews.

People of one camp hold certain truths. People of the other camp have opposite conjugate truths. Massive interactive media increases the stakes by design. Social “network’s topology can reveal echo chambers, where users are surrounded by peers with similar leanings, and thus they get exposed, with a higher probability, to similar contents” (Cinelli et al., 2021: p. 3).

Both parties believe the other has false information and even sometimes, unethical standards. Everyone is then prompted to take active part in the matter. “Love of truth is one of the strongest motives for replacing what really happens by a streamlined account, or, to express it in a less polite manner, [moreover, ironically, it] (...) is one of the strongest motives for lying” (Feyerabend, 1993: p. 247). The emerging familiarity of terms like “fake news” or “post-truth” should not seem surprising at all. After all, each party genuinely argues what their conception of up righteous verity dictates, understood as an unconditional, grander, imperative value.

## 1.2. Memetics and the Polarization in Social Media and News

Media favors drama. Just think about it. How many TV series revolve around the peaceful and smooth lives of unambitious people that don’t face stressful situations so often? News is also led by this same principle, if it makes it to the news, it is because it will catch your attention, usually with surprise, fear, anger, or any other emotion.

Media, including social media, must conform to the same norms of the system motorizing economic development, just like any other human endeavor. Recurring to a diversity of strategies, advertisers seek attention to advertise, hence, people engage more actively, longer and with more interest. For example, “companies know that messages that interrupt people immediately are more persuasive at getting people to respond (...) It’s also in their interest to heighten the feeling of urgency (...) [sadly] ruining global attention spans and causing billions of unnecessary interruptions” (Harris, 2016).

Social media can be surprisingly effective in changing the stories we tell, even

up to affecting democracy. Such was the case of Cambridge Analytica, where “the algorithm and database together made a powerful political tool. It allowed a campaign to identify possible swing voters and craft messages more likely to resonate” (Cadwalladr & Graham-Harrison, 2018: p. 4).

The current model of economic development actually has several effects on our culture, with huge media pressure. As Soshana Zuboff (2019) puts it, “surveillance capitalism has eagerly weaponized behavioral economics’ ideology of human frailty (...) in ways that are designed to elude awareness.” (p. 318) of the public. Ambitious growth, novelty, innovation and obsolescence are an immediate consequence. Individualism, materialism and an exacerbation of realism, as well.

“Social media platforms provide direct access to an unprecedented amount of content (...) [changing] the construction of social perceptions and the framing of narratives (...) [while promoting the emergence of] polarized groups around shared narratives” (Cinelli et al., 2021: p. 5). From the part of the receiver and the specific sender, this is usually not an intentional problem. Masses don’t identify levels of truth in their statements. Maybe when one watches a film, it becomes clear that the content is a fantasy for the sake of entertainment. But this is normally not the case for all media.

As for news in particular, “there are rarely explicit standards (...) to rate statements. Fact checkers [for example] not only decide if statements qualify as truth, but they also decide what truth is (...) [and what] evidence to bring to bear on a statement” (Uscinski & Butler, 2013: pp. 172-173). Still, if we find information in some media, we tend to attribute to it some dichotomous category of truth. It may be either false or true, but rarely some interpretation someone made to understand the current state of affairs.

This is what sets the stage for the clash of opinions. Some will regard some stories as true and others as false. Others will do the opposite. If automated devices are delivering specific content to demographic clusters of users that will tend to consume and multiply specific discourses: it is actively creating these camps with separate, incompatible speech. The understanding that can be achieved between supporters of each worldview, from within their own stories, is minimal, leading to social crisis.

Polar and dramatic memes proliferate fast. “The keying of internet memes is often tied up with their function as emotive communication and, in this respect, memes very rarely deal in half measures (Goodman, 2021: p. 16)”. If some information manages to signify its own sense of urgency, it is much more likely we see people interacting about.

We tend to defend carefully ideas and positions when believing important things are on the line. We try to convince others and probe their positions around these topics with much more energy. When “conservation values are very important for a person, he or she may generally not question experts’ views, but may be more likely to do so if an expert’s view advocates challenging the

status quo” (Ahola, 2017: p. 13). On the other hand, when it comes to ideas that don’t really seem to have an impact, we usually are not too worried about sharing or knowing what others think. These dynamics underpin “an entirely circular knowledge economy that has only one outcome: an amplification of the message” (Cadwalladr, 2016: p. 6) and a magnification of its meaning to extremes.

Anyone can start a meme nowadays. Plenty of tools to ensemble images, videos and shoot them onto the public by means of social media are available. These pieces of information proliferate basically depending on the interest and attention that groups give them, and how they conform to the medium. “The behavioral vision that has informed the design of social media (...) [actually draws upon] the same principles as viral contagion (...) [thus enabling] a truth-less public sphere by design” (Marres, 2018: p. 435). Political content is, of course, always hot as parties have a direct and pragmatic involvement in the matter. This increases polarity of opinions.

To take an example, “the visual and textual examination of fake news discourses on Instagram shows two highly polarized online communities separated by opposite political alliances” (Al Rawi, 2021: p. 287). And while, yes, even these platforms have some guidelines that will modulate the memetic nature operating within, it’s mostly a structural filter.

If someone comes under the impression that something is important, it is very likely that he will engage it through socialization, besides other activities. “Furthermore, when polarization is high, misinformation quickly proliferates (Cinelli et al., 2021: p. 5)”. Today we have at our disposal several multidirectional systems that allow us to share any kind of information: at the grasp of our hands.

But social media isn’t passive. It tries to push us, by design and structure, towards generating memes and interaction wherefore an underlying economic model. Social media is eager to see you upload some memes and hopes they’ll will become viral. All this, almost regardless of the content. For them, the medium is the message.

“We have already reached a point where remedial control, born out of knowledge of media and their total effects on all of us, must be exerted (McLuhan, Fiore & Agel, 1967: p. 12).” But massiveness makes the problem barely manageable. On social media we find only very rare cases in which non automated systems filter out memes. And the growing dilemma between censorship and bigotry really shows up. “Gab [for example,] claims to be a social platform aimed at protecting freedom of speech. However, low moderation and regulation on content has resulted in widespread hate speech (Cinelli et al., 2021: pp. 1-2).”

Even so, when there actually are automated filters, there will always be a way to convey any message in order to bypass the intent behind any of these structural-formal restraints, at least until some human parser may look at the message or change the structure. This is a gap for the viral expression of almost anything eliciting whatever engagement it conjures. Even if we produce laws, many memes start in plain anonymity and legal consensus varies from country to country.

### 1.3. The Unviability of an Objective and Secluded Construction of Knowledge

To remove knowing from social interaction impacts adaptation, leading to social inadequacy. After all, *Gergen (2007)* places the creation of knowledge precisely in coordinating people's actions (p. 218). People might want to at times even must filter content. What kids watch on TV, for instance. Adults are able to hold a more critical and flexible perspective but still always filter, not always deliberately.

Man "only develops his capacities in society, rightly organized for his welfare" (*Aristotle, 1959: p. 12*). We give birth and are born in communities. Totally eschewing social constructions is implausible, it deteriorates resourcefulness and adaptation generating distress and diminishing wellbeing: we only filter a fraction. The mythic archetype of a hermit monk, a scholar or savvy who seeks and finds transcendental understanding without the community is not only sugary. It's accurate solely in virtue of some society accepting any sort of knowledge produced by that figure. The truth is that grounding knowledge on what alone can be construed incubates precarious, less adaptative, knowledge, especially in social situations.

## 2. How Do We Build up Our Social and Individual Knowledge?

Knowledge gradually builds up with socialization and every interaction we have, with every experience. Though "our mental modelling of the outer world may imitate it (...) only [from] that which is fairly frequent (...) a portion will arise to other ideas" (*Craik, 1966: p. 144*).

Operating according to certain habits can be rewarding, can prevent loss or pain, or even relief distress. "Organisms usually must behave in such a way as to [be] (...) able to react to [complex] patterns or configurations of stimulation" (*Hull, 1943: p. 44*). To appreciate this complexity, we say that it is the repeated stimulation of pathways what leads to *ad hoc* network growth and learning.

Incidentally, "learning to solve a problem usually demands more effort than solving other problems of the same kind on later occasions when one has discovered the principle involved" (*Hebb, 2002: p. 292*). Specifically, current "neural theory of thought and language assumes (...) a circuit is turned into a functional circuit when its synapses are strengthened. (...) [Hence] understanding in natural language is accomplished via (...) neuronal groups that are linked together" (*Lakoff, 2012: pp.779-780*). Our needs and interests become convictions and language, incipient shards of our own narrative, that allow bootstrapping and imbue thought with structural meaning and coherence.

If these schemes, networks or habits lead us to better predict the outcomes of our interactions and perform better or rewardingly in certain environments, some consider they implicitly hold information about situations: what we know about them. Jean Piaget strongly advocated for this view of knowledge. In his

writings he urges us to keep “note of diachronic studies (...) [and] considers historical and psycho-genetic studies to be epistemologically important” (Beth & Piaget, 1966: p. 18). If lived experiences are different, if existence happens under diverse circumstances, knowledge relations grow in very divergent directions.

## 2.1. Individual Interpretation of Social Knowledge, Language and Shared Stories

“All our knowledge of the world is the product of our own meaning-making practices” (Harambam, 2021: p. 109). Our prior knowledge determines what and how we can know, not only because it determines our interactions, and not only to what becomes symbolic, meaningful or explicit. Some knowledge is just easier to understand, given certain experiences, while “resistance to the acceptance of new ideas contrary to prevailing beliefs seems to be characteristic of human learning” (Ausubel, 2000: p. 154). Forthwith, any expansion of our schemes must be laid over the rest of the existing system, even if this means having to reaccommodate it to some extent.

Social realities, on the other hand, provide us with tools that enable reasoning and “represent cultural value independent of the individual (...) [But] these cultural signs are not special essences foreign to everything subjective (...) They work continuously in the consciousness of the subject socializing” (Vygotsky, 1999: p. 249).

Language, is one of the most notorious contributors in this process: “meditations and concepts of philosophers of the XX century suggest that the power of language stretches to such extent that language creates reality” (Baidlayeva, 2015). Language reaccommodates to allow this, while any portion of it that doesn’t, ceases to be used.

To become factually effective in the aforementioned allowance, common objects must necessarily be interpreted individually. “Social acts, whether individual or collective, are constructed through a process in which [each of the] the actors note, interpret, and assess the situations confronting them” (Blumer, 1986: p. 50).

## 2.2. On the Permanent Renegotiation of Language and Meaning

“We are so much accustomed to communication through language, in conversation, that it looks to us as if the whole point of communication lay in this: someone else grasps the sense of my words” (Wittgenstein, 1986: p. 114). But our stories, their language and their meanings are also negotiated there. Bootstrapping as dynamic products of communicational interactions, interpretations and valuations, they become slippery and self-sustaining. Language is one of the foundational assemblies of speech enabling bootstrapping and interactions that eventually define it as a set of commonly shared meanings.

Letting such linguistic feedback loop, if we sketch up a core and extrapolate, collective stories, history, cultures, any set of norms or laws: act likewise, taking part in their semantics, oscillating from individual interpretation to public asser-

tion. Any feeling of commonness, collectiveness or sharedness here is fuzzy, even imaginary or construed.

This makes narratives, for a moment let's imagine them as assemblies within virtually shared languages, very indefinite indeed: they are instantiated in particular, evolving and diverse contexts. As a subset of what we can know, they are always an interpretation in someone's concurrent mind, of what was publicly available. Hence, in each and every individual case, "the meanings the speech act acquires and the effects it performs must exceed those by which it was intended, and the contexts it assumes must not be quite the same as the ones in which it originates" (Butler, 1997: p. 15).

Made of expectations and commitments, social discourses dialectically evolve our worldviews (Aparicio, Cornejo, Lain & Mallegas, 2021: pp. 43-44). But with each individual interpretation, more or less hegemonical discourses carry such negotiations further up to political action, eventually planting a "societal conflict over knowledge and truth in contemporary societies, forcing a reconsideration of what counts as legitimate knowledge, and why" (Harambam, 2020: p. 213). The underlying power games that push forward and backward our stories lay a pragmatic contextual field in which worldviews push each other over. Languages and sets of stories, use cases, rules and circumstances, reaccommodate and try to survive claiming minds.

"Human group life is a vast process of such defining to others what to do and of interpreting their definitions; through this process people come to fit their activities to one another and to form their own individual conduct" (Blumer, 1986: p. 10). There is no meaning out of context because there is no interpretation and hardly any message.

Within, psychic consonance, former personal trajectories and cognitive biases, play a major role when it comes to understanding the individual assignment of meaning. This effect can become quite dramatic in the face of "structural inequalities between the educated, scientifically trained experts and ordinary laymen" (Harambam & Aupers, 2015: p. 11). Thereupon, the finally diverse and almost unintelligible level of settings reveals itself, a crucible upon which narratives split into a constructed multiverse. Not only discourse is born in context. With every disclosure it continuously gives birth to a novel individual interpretation that depends on personal context, fragmenting worldviews and what things mean.

### **2.3. From Social to Individual Realities**

On to the inquire of constructing reality, "relations such as agreements, disagreements, elaborations, and disjunctions (...) constitute the process of meaning making" (Matusov, 1996, p. 41). Deeming meanings as shared is an analytic move, removing whimsical private semantics, making social conduct and culture tractable, even if never fully seizable. But strictly, any "attempt to setup a structural definition [for example] of the term 'true sentence', applicable to colloquial

language, is [actually] confronted, with insuperable difficulties (Tarski, 1956: p. 164)".

There's no settling word describing worldviews. Quite usefully, we can only interpret social reality as shared up to interindividual variability.

Nothing is in itself only one thing but the result of mutual contact that gives birth to sensible things (Plato, 2006: p. 171). Generalizations lose relational, essential in-context richness. When objectifying shared realities, we always get entangled in political and power games. When resolving what communities understand as foundational narratives, all samples of meaning are biased "not only by limitations in our instrumentation but also by the precondition that somebody be there to 'have' the data yielded" (Bostrom, 2002: p. 2).

Each interpreter can only state realities in a personal way, from a particular set of knowledge-relations, compelled to act accordingly. And we do need to rationally act in consistency. Not only because acting irrationally is irresponsible, risky and dangerous: it is just not viable. We may believe or not that God gave us inner senses purposedly, that it is a duty to act rationally and deliberately. But either way, actions, and the building and valuation of knowledge, cannot be untangled from responsibility within our own mental reality, and should not.-

## 2.4. The Limits of Personal Realities

We then must make a distinction here. The previous point isn't consistent with acting as if truths were absolute, further less, in our possession. It's utmost rational to hold some skepticism, weighing in context and valuating with perspective. Dogmatism by definition isn't data driven but *a priori* and may deceive us into irresponsibility.

This is no method for nihilism: we have principles and convictions, intuitive, unreasonable or self-willed beliefs. Leaving space for dogmatism, solipsism and skepticism, in spite of cartoonists, is the rational alternative after all. We just need put these in context every time.

Worldviews are ways of consistently understanding from our experience. Any statement, any piece of communication, is saturated not only with historic socio-cultural and individual markers allowing meaning. Hitherto, paradoxically summoning Peterson (2002), this is why "context-dependence, however, makes interpretation of a given symbol difficult, particularly when it has been removed from its culturally constructed surroundings or milieu" (p. 104).

It is dangerous to expropriate ideas from any area and hold them up as eternal or independent truths. This is a door for intolerance and for dialogue to cease, a gateway into censorship and abuse. "No area is unified and (...) [few are] without merit. There is no objective principle (...) [Actually] objective guidance is in conflict with the idea of individual responsibility (...) [hence] doubtful cases always produce experts for the one (...) [and] the other side" (Feyerabend, 1993: pp. 249-251).

For any idea, any fanaticism will eventually meet opposing zealots. Extremists

usually are deaf to arguments, readily available to run over any other's worldview conflicting their absolute ideals. War, violence and atrocities can follow. If one acts as if one holds the truth beyond reasonably responsible contexts, past matters of opinion, outside insight, one opens that door.

### **3. The Impact of Our Knowledge in Human Culture and Progress**

Today we may have the impression we have gone really far with technology. Yet, its problematic to discern to what extent techie feelings are an inherent part of being human. Do they align with some sudden democratization of high-tech advancement many of us have the impression we are living through when facing internet and other recent inventions? To what extent they may be the natural taste of some procedural evolutionary principle that historically filtered out less prolific theoretical sketches in favor of disciplinary aggregation around whatever today we culturally construe as successful and, to quote Putnam (1975), “doesn't make the success of the science a miracle” (p. 73)?

#### **3.1. The Stories of How We Currently Construe and Regard the Speech of Technical Progress**

“Attitudes, participation and any reactions of the public to actions involving science and technology have, in general, been poorly studied” (Massarani & Moreira, 2004: p. 78). The nineteenth-centurish feeling might not be exclusive of the twenty-first century. And technology propelled by prizing indefinite growth and disruptive innovation can lure us into believing we live unprecedented total control and foresight.

Popularization of technical speech doesn't excuse carelessness. Paradigms accompanying empirical advancement, the stories abducted into theories, are often understood by the laymen as ontological or metaphysical. “Today's technologically saturated media ecosystem, and in particular the data-driven turn towards the audience, complicates these matters and highlights the complex tensions between editorial autonomy, audience preferences, technological possibilities, corporate interests and democratic responsibilities” (Harambam Helberger & Van Hoboken, 2018: p. 3). “Research funding is increasingly used as a means to (...) influence the conduct and content (...) [and] direction of research (...) Meanwhile, the overall quality of research is made to increase through competition and selective funding” (Gläser & Velarde, 2018: p. 1-2).

The worth of “a growing number of studies (...) focusing on the influence of economic actors on the production of knowledge” (Boullier, Kotras & Siles, 2021: p. 6) in recent years seems then critical. Disregarding the economic model, blinded to the existence of *ad hoc* explanations, masses might behave, baffled by some implicit unproven overstood methodological preeminence allegedly enabling what some depict as the concurrent miraculous technical cornucopia, as if agglutinating discourses unequivocally describe the nature of reality.

### 3.2. Human Progress Needs and Produces Narratives That Operate as Paradigmatic Frameworks

Nonetheless, “few of these elaborate efforts would have been conceived and none would have been carried out without a paradigm theory to define the problem and to guarantee the existence of a stable solution” (Kuhn, 1996: p. 28), a fostering worldview. Plus, such advancements cannot survive unsaturated of social discourses.

These stories expand towards pragmatic capacity, within the boundaries of intra, inter and extra-disciplinary continuous consonance. Interwoven, we find an outward balanced ripple: challenging or flowing with intradisciplinary notions, confirming or disrupting the contingencies of other pursuits, up to being suitably tuned for ongoing cultural processes; all against how effectiveness is conceived scale wise. An overall appeal to usefulness, parsimony and neutrality, different for different actors, also plays a role in such discursive extension.

Scripting the intimate common semantic history between speech and language, stories superimpose ever-evolving constructs in order to communicate. “We treat the concept *plant* as having an identity through time but no essence, [for example,] and we treat the concept *electron* as having an identity through time but no essence (...) [Yet,] we do not always interpret words in such a way” (Putnam, 2001: p. 13).

Often, it is spoken of “cancer”, “states of matter”, “intelligence”, “reptiles”, “dark energy”, “fever”, “higgs bosons” or “antibiotics” as if each drew a distinctive classifiable kernel, without admonition, not even on the grounds of instrumentalism. Essentialism, research and consensus are summoned as definite, non-social but almost natural, criteria for adequacy. Hence, we never converge to one single set of universally accepted and settled truths on how things work, in spite some expect to. We should doubt that would be a good thing.

Virtual essences constructed in language serve functional purposes, and the needs of different groups in different contexts vary. Any “story appears generated, in its initial stages, by the capacity for imagery and pattern recognition (...) integrally involved in narrative cognition” (Peterson, 2002: p. 71). If discourses are contextually born, it is due to the fact they attend important tropes, have functional value and evolve to serve specific purposes, from individual cognition on to sharing meanings.

We don’t employ every piece of data up to exhaustion, we use stories. But total reach and synchronization limit global coordination of mainstream worldviews. Even convention at this scale is unlikely due to the diversity of languages and mediums. Plus, people are different and need all sorts of abstractions in their speech. Some cannot hear, some cannot read, some have never had access to what others have had, and they may never have. Such is the advantage of natural language, with diffuse semantics and varied interpretations.

When there is food or water shortage, we will meet stories that make sense of this and compel people to act in certain ways, for example, saving and using wisely these resources. Where there is risk of disease, *ad hoc* narratives will ac-

company the social process, helping communities minimize the problem, for example, through sanitary group behaviors. When there is social or environmental chaos, the discourse will tend to protect social order from these situations as well, maybe strengthening or loosening hierarchies. Progress is directed by these stories and their interpretative meaning, towards what societies names, values and needs.

### **3.3. Stories as Adaptive Heuristics, between Diversity, Sensory Data and Social Pressure for Conformity**

From the guidance of our acts of speech, and onto progress, there's still a breach, and things can get very worked up. "When we're in a pack, [for instance,] interactions with others become the most important thing (...) When people are locked in a competitive, hierarchical power structure, as in a corporation, they can lose sight (...) because [of] the immediate power struggle [that] looms larger" (Lanier, 2018: p. 44-45). Depending on the circumstances and social compromises, people value differently interests and needs.

And we live in a disparate globe. Resources, needs, knowledge and interests are diverse. Were we all to accept any *de facto* pieces of narrative, we would also inevitably have to share which value takes precedence. Something on the amount of effort required to do that feels intractable.

Whilst experiencing our surroundings, we take part in a large continuum of open systems, ranging from biological acclimatization onto cognition, all focused in upsurging our viability within that environment (Piaget & García, 1997: pp. 117-118). We cannot keep exhaustive track of such interactions, we recur to stories, a body of heuristics and part of our adaptive devices. "We live by stories, we also live in them (...) [They] either give our lives meaning or negate it with meaninglessness" (Okri, 2015: p. 33). Stories enable pragmatic deployment of group-specific individual conducts equilibrating relative consistence and continuity. The random interpretative nature of discourse impedes arriving to universally accepted narratives. The only feasible way to achieve them would be an imperfect dogmatic dictatorship where some circumstantial dilemmas would be favored over others, arbitrarily.

At the core, it is the need to consciously put everything we can in context while acting within our *milieu* whilst not being able to deplete available information what underlies our necessity for stories. We must share and generalize because we are not able to collect all that information, much less use it and in a timely manner.

## **4. The Position of Diversity within Our Discursive Répertoires**

Diverse socialization is actually an evolutionary advantage subsidizing stouter, adaptative, stories and keeping back up in any scenario. No diversity means changes in the environment would more likely provoke maladaptation. Therefore, having diverse sets of stories has been historically a motor for progress. In-

terestingly enough, “diversity at the level of interactions and behaviors [actually] provides new clues concerning the mechanisms that supply Humans with one of the key social features responsible for our evolutionary success: *Cooperation*” (Santos, Pinheiro, Lenaerts & Pacheco, 2012: p. 94). Without it, *status quo* would stagnate societies into decay and crisis.

#### **4.1. The Role of Doubt, Skepticism and Critical Thinking in Progress and Constructing Diverse Discourses**

Doubt promotes diversity because it helps us to keep a sharp critical mind moving forward change, even if it undermines any hope of pristine truth. Truths cannot ever be complete nor certain because the limits of our apperception and our senses make it impossible to induce or refute anything on absolute terms. As Socrates puts it, it’s not difficult to make the subject of a controversy discerning whether we are awake or asleep (Plato, 2006: p. 111). Absolute refutations of even such drowsy metaphysics are reference-point-biased. If comparing, for example, super simulator theses, versus solipsist skeptical scenarios, in virtue of assuming greater simplicity, we are “overwhelmingly [more] likely to be one of such Brain-in-a-Vat or ‘solo players’, as it is much easier to simulate the inputs to the brain than the full-blown reality” (Pieri, 2021: p. 8).

We just cannot cast off valid considerations on arbitrary conceptual grounds because we can’t resolve. Skeptical considerations then help us putting stories in real perspective. And not only for some formal discourse resting in very proper, serious or arranged circles and dealings. “For everyday practical purposes, a much less-elevated form of skeptical extent, limited both its pretensions and its scope, is all we need and all we use” (Williams, 2015: p. 101).-

It is reasonable to hold reasonable doubt for every argument made, especially when one makes the argument. It is just our best story to make sense of loads of partially available data consistently. To reject these realms and place them off limits is detrimental for communication, especially when parties are in dissent. We can put in parenthesis the problem and make conscious assumptions; not assume it’s gone. Sadly, bringing in ontology, semantics or epistemology is many times met with all sorts of cartoonish rhetoric associated with taboo.

Due to its nature, skepticism cannot shape any consistent body of knowledge. Frequently skeptic positions are regarded with ridicule and dismissal while measured up to their own consistency, as if they had the intent to plant some coherent system. But they are not constructive at all, they are critical.

Though sometimes regarded as an epistemological demon, when taken seriously skepticism leads to fruitful discussion. Furthermore, it shows weaknesses and flaws of our dominant narratives, even if not pretending alternatives. It is quite amusing how, when wielded to scrutinize non-mainstream stories, it acquires better meanings: neutrality, methodology, success guarantee, even realism. Skeptical arguments still hold information after all. They do not share any essential worthlessness and must then be considered on their merit and weight,

not censored. Skepticism draws the limits of our knowledge while indicating where to take provisions. It is not a theory of knowledge.

For what it's worth, under a skeptical lens, it is pretty obvious why we face never-ending debates and opposing worldviews that polarize into social crisis. There cannot be final or certain statements about facts, reality or truths. Dismissing skepticism begs us into discerning true from false truth, a failed *programme*. Up to the extent shared meanings and communications allow; up to the limited fairness power games involve: only consensus can draw an imperfect blurry line that will always risk turning into political enforcement.

#### **4.2. Narratives Are Always Rooted on Dogmatic Prior Shared Substories**

To abduce explanations, creating stories is still essential. With them, we make use of huge amounts of otherwise intractable empirical data. "Maps which have a narrative structure, portray the motivational value of our current state (...) accompanied by plans of action, which are our pragmatic notions about how to get what we want" (Peterson, 2002: p. 23).

The consistency and temporal continuity of such structures enable the narrative to bootstrap: every story begins with universal implicit assumptions, rules or worldviews ultimately based on our interests and values. "There cannot be a question whether these or other rules are the correct ones for (...) without these rules the word has as yet no meaning; and if we change the rules (...) we may just as well change the word" (Wittgenstein, 1986: p. 149). Were there no *a priori* assumptions, speech would have nowhere to pivot, no meaning for Wittgenstein: it'd be only data.

If this seems a bit too debatable, abstract, obvious or confusing, let's just underline the discursive necessity of conventional but diffuse universal principles, customs, interests, convictions or shared understandings to begin with. These pragmatic and dogmatic portions of the narrative further enable their development.

#### **4.3. Discourse Bootstraps from Initial Narratives Presumed as Common Ground**

Language is not the only convention from which these worldviews build. Value systems, including the interests in virtues like generosity, honesty, happiness or courage, must be understood as common for stories to become intelligible. Yet, their meanings are *de facto*, plain dogmas. If these aren't shared to some extent, speech disbands and breaks apart.

If we try to replace such shards with purportedly natural, definite and unnegotiable statements, a widespread ideal of progress nowadays, our puzzle of worldviews will show its face. For Gergen (2007), since meaningful propositions have their origin in human relations, much of the matter lies in returning to culture what has been declared as natural: shifting the verification of truth back to common consensus (p. 218). Specifically for social constructionism, as put by

Pavez (2021), doesn't deny experience as the source of our understanding, it just denies we can ever leave it to compare our knowledge with some alleged reality (p. 6).

We intuit the implicit conviction that doing things faster is worthwhile when we think of technological advancement. We could guess that extending lifespan is one of the values that inheres the medical worldview. But those are not fixed at all, much less determinate, natural nor interchangeable. Their final meaning varies individually and evolves culturally. Just as there are no speeches without implicit *a priori* pragmatic meanings, there are none grounded on definite unnegotiable truths.

#### **4.4. Realist Essentialism, Similarity, Objectivity and Representativity Are Widespread Subtle Paradoxical Substories**

We find distinctive, almost ubiquitous, traditional portions of those presupposed common discursive stubs that enable larger shared stories. Our capacity to perceive reality through senses, that objects share classifiable essences, the regular monotonicity of natural phenomena or that we can arrive at neutral understandings are some prominent examples.

These subtler substories are deeply interwoven in a major portion of the narrative, but are nonetheless subject to the same constructive processes we have up to now explored: with no guarantees and no definiteness. And though speech must always be able to reaccommodate, these particular shards appear to have an immanent contradiction that defies its own rules suggesting themselves as more than just discourse. Their naturalization tempting us with pseudo-certainties also puzzles diversity.

For example, we know that inductive thinking isn't flawless. Assuming we observe the "frequent repetition of some uniform succession (...) we can never, in practice, be sure that we have discovered that [exceptionless governing] law and not one to which there are exceptions (Russell, 2008: pp. 29-31)". Knowledge from sense datum, is always fallible. New information can appear, information that reveals why certain data was observed in certain ways at certain moments.

Testing or falsifying any supposition is strictly impossible. Within any assembly of assumptions nested in a hierarchy, we cannot undoubtedly resolve to which "distribute the sensory evidence (...) [What any] experiment shows is that at least one of those hypotheses is false (...) [but] parts as disparate as you please may be expected to share laws (...) [Contradicting evidence] can be acted on rather by any of various adjustments" (Quine, 1986: p. 5). Outcomes can be interpreted in several ways and any group of underlying convictions may be reaccommodated in different ways too.

#### **4.5. Our Ever-Evolving Stories Are Permanently Renegotiable**

Consider someone with elevated blood pressure ranks higher than 90% of the

population. For us to ascertain that this person is better off taking some special actions and undergoing some specific care, the bundle of hypothesis is huge.

For some instruments, the measurement of blood pressure requires that atmospheric pressure is adequate and average, plus certain capacity to listen to the turbulent flow of blood in a stethoscope. Not only the instrument must be working properly and the measurements are done correctly: the model in which the artery opens up when blocked by pressure release must correlate to the workings of some phenomenon and the person being measured should be examined under the correct conditions by able people, in every sense of the word.

Physical interference adds bias but moreover, we even assume the distribution of blood pressure in the overall population behaves like it has done so, maybe we even approximate with something similar to Bell's curve, hoping arithmetic axioms that allow such estimates are consistent after all. Of course, such level of skepticism is extreme, but on point, to test with absolute certainty that any way of taking care of the situation is for the better, whatever that means for different actors, if at all separable from receiving treatment, in strict undeniable terms is an overwhelming, useless and unfeasible task. For the sake of adaptation, the patient will just assume the whole narrative, including every auxiliary hypothesis and substories like the monotony of the rules of nature.

If blood pressure is an issue, thereupon we can make stouter assumptions only by repeating measurements and collecting circumstantial evidence that outcomes consistent. This makes impressions stronger; we are more inclined to believe, never certain. There is always space for doubt, there is always space for improvement and we need basic assumptions. We will never be able to test with full certainty that one treatment alone is really good or bad for high blood pressure.

Of course, high blood pressure doesn't look like something we might relatively soon begin to blatantly doubt, at least when it comes to its relation with sodium intake, for instance. Anatomy and lifespan are pretty good empirical markers, we have loads of data. Constructs such as underlying conditions, comorbidities or the effects of certain treatments seem less sturdy.

But sometimes this is not the case, sometimes there is much less data, maybe competing incompatible stories, or maybe all we have on the matter is just a forecast from some discourse, maybe just exceeding applicability. Many assumptions rest upon unverified extrapolations of concepts, on to grounds in which their meaning is unknown or undefined. Even if it is the best we can do, it's reasonable to distinguish the knowledge that comes from interpolated large amounts of similar data from extrapolations of small amounts of not so regular data. This is something we forget, especially when knowledge on the weaker side is associated with mainstream speech that takes big part in the *status quo* and currently has an upper hand.

To worsen things up, as noted by Quine (1986), "sentences are interconnected by means of associations entrenched in behavior (...) We can allocate separate

evidence to each observation sentence, but that is about the end” (p. 7). We cannot rule out auxiliary hypotheses, any bad theory could be patched up to infinity with *ad hoc* explanations of why, under certain circumstances, presumed universal principles take particular flavors. Even the narrative of what influences blood pressure must always be understood in context precisely because, in theory, any arbitrary wrong reasons or treatments can potentially be upheld indefinitely.

## 5. The Need for a Constructivist Narrative That Focuses on Negotiating Positive Meaning

So far, we've outlined how and why speech allows us to interpret information from the world around us, and act accordingly. In a world where media conjures polarization, trying to replace negotiable foundational substories with non-discursive natural criteria ignites an un-solvable clash of worldviews. Such a puzzle seems to end only when the power of one position overwhelms the other.

This speech, this meta-narrative, is not present in the main stream of stories that dominate media. We may appreciate, on the contrary, bigger and bigger efforts to elucidate truth and present findings as non-negotiable, adding up to the current global crisis.

No one is in the position to unveil truth once and for all. We've seen this doesn't mean human knowledge, meaning, progress, wellbeing or ethics are doomed. We shall not give into fanaticism, nihilism, nor trash everything we seem to know so readily.

There is another way, the way of constructivism. Instead of losing hope, we acknowledge that our knowledge is not better in virtue of truthfully representing some alleged external reality. We recognize we are permanently constructing knowledge as an effort to adapt. The power and domain of truth are then restrained to the realm of viability.

We do not abandon our constructs, our facts, perceptions, narratives, less our convictions or dogmas, we wouldn't even be able to. Even if we must recognize they are only an effort to make sense of the continuous stream of apperceptions our experience faithfully serves us, they are of utmost value: the only resources we have to derive meaning, provisory and contingent as it is. Our stories are our current best adaptative constructions.

Existence demands openness for mental reaccommodation of schemes. Today, even holding simultaneous conflicting points of views, face off: as points of view. This is not an easy feat. We recur to stories that heuristically substitute large amounts of information, following the “tradition of Kahneman and Tversky (...) [with] something that comes more readily to mind” (Vis, 2019: p. 47). But our minds don't want to deal with doubt. Nonetheless, the tradeoff is inevitable, a psychological tension coming together from a world filled with data and information. We will need to learn how to live with the dissonance and evaluate carefully the amount of faith and fight placed in stories, convictions and debates.

It is an ethical, rational and empirical evaluation that must consider: Who is providing the information? What are the consequences of certain ideas? How many people seem to believe it? How does it match up with moral standards and higher principles? What alternative narratives are about? Is this a viable way of thinking in my personal environment? In the end, we must understand that every worldview and every truth is just a contingent human construction understandable in its context, not split from who builds it.

The undecidability of discourses means claiming possession of real ultimate facts is unsound reasoning. We come under the impression that we grasp information only in virtue of thought and, almost every time, our sense organs. "Experience itself is a kind of cognition requiring the understanding, whose rule I have to presuppose in myself before any object is given to me" (Kant, 1998: p. 111).

Consequently, when we are not within the realm of math, philosophy, or so, things external come into play. But we know our senses fail, testimony is unreliable, memory as well. Social discourses have historically been proven wrong and politically misled. We can never rest assured we are not facing an exception, or the rules of the game have suddenly changed.

Any assertion on the state of some external reality is debatable. Every consensus, every measurement, every testimony, even every time we recall how we felt can be skeptically doubted and is always a renegotiable story.

We are then fully accountable for what we build to know the world. "According to [Ernst Von] Glaserfeld it is us who construct our knowledge of the world. So it is us who are responsible for what we think and do" (Bińczyk, 2019: p. 397). It's in our hands to avoid portraying knowledge as a puzzle of conflicting worldviews, or only as what privileged groups of observed participants that benefit or get understood better provide. Creating our knowledge mustn't destroy things beyond fixing. Our stories should open possibilities, not diminish our essential human freedom.

If we fail to recognize this, we have observed how, sooner or later, we will fall into the traps of intolerance, discrimination, and the abuse of power: it is unavoidable. If we do manage to make these criteria part of the narrative, things are put much in perspective allowing us to evolve, from trying to elucidate truth, to the still difficult, but more tractable subject of how do we arrive at an agreement. Communication, the capacity to arrive at a consensus and being able to assess and reevaluate underlying convictions then become central.

I claim that contemporaneous global society can reduce polarization if we manage to acknowledge such constructivist component of narrative, knowledge and information. A way to gradually develop tolerance, ponderation and peace, in an otherwise troublesome and chaotic time of crisis.

## Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

## References

- Ahola, S. (2017). Why (Not) Disagree? Human Values and the Readiness to Question Experts' Views. *Public Understanding of Science*, 26, 339-354.  
<https://doi.org/10.1177/0963662516637818>
- Al Rawi, A. (2021). Political Memes and Fake News Discourses on Instagram. *Media and Communication*, 9, 276-290. <https://doi.org/10.17645/mac.v9i1.3533>
- Aparicio, J., Cornejo, S., Lain, F., & Mallegas, P. (2021). Discursos Sociales Disonantes y la Reformulación Identitaria en un Centro Integral del Adulto Mayor de Quilicura. *Revista Pensamiento Académico*, 4, 41-58. <https://doi.org/10.33264/rpa.202101-03>
- Aristotle (1959). Politics and Ethics. In T. Page, E. Capps, W. Rouse, L. Post, & E. War-mington (Eds.), *Politics* (pp. xii-xiv). Harvard University Press.
- Ausubel, D. P. (2000). Preconceptions and Misconceptions. In *The Acquisition and Re-tention of Knowledge: A Cognitive View* (pp. 152-154). Springer Science Business Media.
- Baidlayeva, A. (2015). Language in the Context of the Theory of Social Reality of John Searle. *ВестникКазНУ. Серияфилософии, культурологии и политологии*, 52, 13-15.
- Beth, E., & Piaget, J. (1966). Translator's Introduction. In D. Davidson, J. Hintikka, G. Nuchelmans, & W. Salmon (Eds.), *Mathematical Epistemology and Psychology* (pp. xiii-xix). Springer Science Business Media.
- Bińczyk, E. (2019). *Constructivism in the Anthropocene. Unpublished Manuscript of a Scientific Research Grant on Environmental Rhetoric and Lethargy of the Anthropocene: Philosophical Analysis of Discourses* (pp. 395-409). NCN, Ministry of Science and Higher Education of Poland.
- Blumer, H. (1986). The Methodological Position of Symbolic Interactionism. In *Symbolic Interactionism: Perspective and Method* (pp. 1-60). University of California Press.
- Bostrom, N. (2002). Observation Selection Effects. In R. Nozick (Ed.), *Anthropic Bias, Observation and Selection Effects in Science and Philosophy* (pp. 1-5). Routledge.
- Boullier, H., Kotras, B., & Siles, I. (2021). Uncertain Knowledge. Studying "Truth" and "Conspiracies" in Digital Age. *RESET*, 10, 1-22.
- Butler, J. (1997). Introduction on Linguistic Vulnerability. In *Excitable Speech: A Politics of the Performative* (pp. 1-42). Routledge.
- Cadwalladr, C. (2016). Google, Democracy and the Truth about Internet Search. *The Guardian*.
- Cadwalladr, C., & Graham-Harrison, E. (2018). Revealed: 50 Million Facebook Profiles Harvested for Cambridge Analytica in Major Data Breach. *The Guardian*.
- Cinelli, M., Morales, G., Galeazzi, A., Quattrociocchi, W., & Starnini, M. (2021). The Echo chamber Effect on Social Media. *Proceedings of the National Academy of Sciences of the United States of America*, 118, e2023301118.
- Craik, K. (1966). Laws of Association. In S. Sherwood (Ed.), *The Nature of Psychology: A Selection of Papers, Essays and Other Writings by the Late Kenneth Craik* (p. 144). Cambridge University Press.
- Feyerabend, P. (1993). Nineteen. In *Against Method* (3rd ed., pp. 238-251). Verso Books.
- Fuchs, C. (2021). How Did Donald Trump Incite a Coup Attempt? *TripleC: Communica-tion, Capitalism & Critique*, 19, 246-251.
- Gergen, K. (2007). La construcción social del conocimiento. In A. Estrada, & S. Diazgranados (Eds.), *Construcción Social: Aportes para el Debate y la Práctica* (pp. 218-219). Uniandes Ceso.

- Gläser, J., & Velarde, K. S. (2018). Changing Funding Arrangements and the Production of Scientific Knowledge: Introduction to the Special Issue. *Minerva*, 56, 1-10. <https://doi.org/10.1007/s11024-018-9344-6>
- Goodman, B. (2021). Amateur Content Creation as Compositional Practice: Viral Videos and Internet Memes in Online Participatory Culture. In *Sonic Scope: New Approaches to Audiovisual Culture* (pp. 2-40). Goldsmiths University of London.
- Harambam, J. (2020). Contested Knowledge: Popular Incredulity towards Objective Truth Claims. In P. Knight, & M. Butter (Eds.), *Conspiracy Theories, Contemporary Conspiracy Culture, Truth and Knowledge in an era of Epistemic Instability* (pp. 210-212). Routledge.
- Harambam, J. (2021). Against Modernist Illusions: Why We Need More Democratic and Constructivist Alternatives to Debunking Conspiracy Theories. *Journal for Cultural Research*, 25, 104-122. <https://doi.org/10.1080/14797585.2021.1886424>
- Harambam, J., & Aupers, S. (2015). Contesting Epistemic Authority: *Conspiracy Theories on the Boundaries of Science*. *Public Understanding of Science*, 24, 466-480. <https://doi.org/10.1177/0963662514559891>
- Harambam, J., Helberger, N., & Van Hoboken, J. (2018). Democratizing Algorithmic News Recommenders: How to Materialize Voice in a Technologically Saturated Media Ecosystem. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 376, Article No. 20180088.
- Harris, T. (2016). How Technology Hijacks People's Minds—From a Magician and Google's Design Ethicist. *Medium Magazine*.
- Hebb, D. (2002). Differences between Early and Late Brain Injury. In *The Organization of Behavior: A Neuropsychological Theory* (pp. 289-294). Lawrence Erlbaum Associates Publishers.
- Hull, C. (1943). The Hypothesis of Neural Interaction. In *Principles of Behavior: An Introduction to Behavior Theory* (pp. 42-44). Appleton-Century-Crofts Incorporated.
- Kant, I. (1998). Preface to the Second Edition. In P. Guyer, & A. Wood (Eds.), *Critique of Pure Reason* (pp. 106-124). Cambridge University Press.
- Klomp, J. (2020). The Arab Spring and the International Defense Market. *Business and Politics*, 1-19.
- Koch, I., & Reeves, A. (2021). From Social Security to State-Sanctioned Insecurity: How Welfare Reform Mimics the Commodification of Labour through Greater State Intervention. *Economy and Society*, 50, 448-470. <https://doi.org/10.1080/03085147.2020.1844936>
- Kuhn, T. (1996). The Nature of Normal Science. In O. Neurath, R. Carnap, & C. Morris (Eds.), *The Structure of Scientific Revolutions* (3rd edition, pp. 23-34). University of Chicago Press.
- Lakoff, G. (2012). Explaining Embodied Cognition Results. *Topics in Cognitive Science*, 4, 773-785. <https://doi.org/10.1111/j.1756-8765.2012.01222.x>
- Lange, M., & Monscheuer, O. (2021). *Spreading the Disease: Protest in Times of Pandemics*. ZEW-Centre for European Economic Research Discussion Paper 21-009.
- Lanier, J. (2018). The Mysterious Nature of Asshole Amplification and Technology. In *Ten Arguments for Deleting Your Social Media Accounts Right Now* (pp. 44-49). Henry Holt and Company.
- Marres, N. (2018). Why We Can't Have Our Facts Back. *Engaging Science, Technology, and Society*, 4, 423-443. <https://doi.org/10.17351/estss2018.188>
- Massarani, L., & Moreira, I. (2004). Popularization of Science: Historical Perspectives and Permanent Dilemmas. *Quark*, No. 32, 75-79.

- Matusov, E. (1996). Intersubjectivity without Agreement. *Mind, Culture, and Activity*, 3, 25-45. [https://doi.org/10.1207/s15327884mca0301\\_4](https://doi.org/10.1207/s15327884mca0301_4)
- McLuhan, M., Fiore, Q., & Agel, J. (1967). You. In *The Medium is the Massage: An Inventory of Effects* (p. 12). Gingko Press.
- Okri, B. (2015). Nine. In *A Way of Being Free* (p. 33). Head of Zeus.
- Pavez, F. (2021). El Supuesto Declive del Construcción Social en la Psicología Social Crítica. *Límite, Revista Interdisciplinaria de Filosofía y Psicología*, 16, 1-12.
- Peters, B. (2021). Governing in a Time of Global Crises: The Good, the Bad, and the Merely Normal. *Global Public Policy and Governance*, 1, 4-19. <https://doi.org/10.1007/s43508-021-00006-x>
- Peterson, J. (2002). Maps of Meaning: Three Levels of Analysis. In *Maps of Meaning: The Architecture of Belief* (pp. 19-217). Taylor and Francis.
- Piaget, J., & García, R. (1997). Orígenes epistemológicos del enfoque piagetiano de la lógica. In *Hacia una Lógica de Significaciones* (2nd ed., pp. 117-131). Gedisa.
- Pieri, L. (2021). *The Simplicity Assumption and Some Implications of the Simulation Argument for Our Civilization*. OSF Preprints, Center for Open Science.
- Plato (2006). *Teeteto*. Losada.
- Putnam, H. (1975). Realism in the Philosophy of Mathematics. In *Mathematics, Matter and Method: Philosophical Papers, Volume I* (pp. 69-75). Cambridge University Press.
- Putnam, H. (2001). Meaning Is in Part a Normative Notion. In *Representation and Reality* (pp. 11-15). MIT Press.
- Quine, W. (1986). Diffuseness of Empirical Meaning. In *The Philosophy of Logic* (2nd ed., pp. 5-7). Harvard University Press.
- Russell, B. (2008). On Induction. In *The Problems of Philosophy* (pp. 28-33). Arc Manor.
- Santos, F., Pinheiro, F., Lenaerts, T., & Pacheco, J. (2012). The Role of Diversity in the Evolution of Cooperation. *Journal of Theoretical Biology*, 299, 88-96. <https://doi.org/10.1016/j.jtbi.2011.09.003>
- Sepúlveda, D., Lavanchy, A., Heini, C., & Acevedo, A. (2021). Chile, October and November 2019: 'Feel' and Field-Work in Times of Crisis. *Anthropology Today*, 37, 23-25. <https://doi.org/10.1111/1467-8322.12644>
- Tarski, A. (1956). The Concept of True Sentence in Everyday or Colloquial Language. In J. Woodger (Translator), *Logic, Semantics Metamathematics: Papers from 1923 to 1938* (pp. 154-165). Clarendon Press.
- Uscinski, J. E., & Butler, R. W. (2013). The Epistemology of Fact Checking. *Critical Review*, 25, 162-180. <https://doi.org/10.1080/08913811.2013.843872>
- Vis, B. (2019). Heuristics and Political Elites' Judgment and Decision-Making. *Political Studies Review*, 17, 41-52. <https://doi.org/10.1177/1478929917750311>
- Vygotsky, L. (1999). Epilogue. In R. Rieber (Ed.), *The Collected Works of L. S. Vygotsky: Volume 6, Scientific Legacy* (pp. 245-266). Plenum Publishers.
- Williams, M. (2015). The Agrippan Problem, Then and Now. *International Journal for the Study of Skepticism*, 5, 80-106. <https://doi.org/10.1163/22105700-04031179>
- Wittgenstein, L. (1986). Part I. In G. Anscombe, R. Rhees, & G. Von Wright (Eds.), *Philosophical Investigations* (3rd ed., pp. 1-172). Basil Blackwell.
- Zuboff, S. (2019). How Did They Get Away with It? In *The Age of Surveillance Capitalism* (pp. 313-320). Public Affairs.