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LINGUISTIC RELATIVITY AND ITS RELATION TO ANALYTIC PHILOSOPHY

SUMMARY: The history of so-called ‘linguistic relativity’ is an odd and multi-faceted one. After knowing alternate fortunes and being treated by different academic branches, today there are some new ways of investigating the language-thought-reality problem that (i) put into dialogue the latest trends in language-related disciplines (ii) generate room for philosophical themes previously overlooked, (iii) reassess the very idea of linguistic relativity, despite its popularized versions which have circulated for decades and which have led an otherwise fruitful debate to extremes. It is argued that a multidisciplinary approach is desirable in order to broaden future research. In the last few years the opportunity to study this matter following a common trend in several disciplines has been created. Language, and cognition too, are now conceived as intrinsically social phenomena. It is argued that relativistic effects should be investigated in social realms, and that analytic philosophy could help with this task.

KEYWORDS: linguistic relativity; Sapir-Whorf hypothesis; Philosophy of language; psycholinguistics; extended mind

INTRODUCTION¹

This paper will address a single line of research within the many ways in which the language-thought relationship has been studied,

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namely the so-called *linguistic relativity* principle (LR), also known as the ‘Sapir-Whorf hypothesis’.² Let us define this idea in an expanded fashion:

Linguistic relativity is the idea in accordance to which speakers of different specific varieties of natural languages, which differ in a number of respects studied by linguistics (such as phonetics, syntax, semantics, and pragmatics), could experience³ the same objects and activities of the world (such as, but not limited to, physical objects perception, colour perception, space relationships, discourse interaction, calculus, shaping of categories, decision making) in different ways, on the grounds of that very linguistic diversity – and not because of other factors such as explicit cultural elaboration, or cognitive deficiencies or deviations.

More concisely, speakers of two languages that do not have similar linguistic structures in an identified respect could be affected by this asymmetry in the way they think of or experience that respect. As (1) shows, there is a wide variety in the domains supposedly interested by such LR effects.

But how many kinds of linguistic relativity exist? A very common historiographic solution is to pair a ‘strong’ and a ‘weak’ hypothesis. The former is used as a synonym for a more transparent ‘linguistic determinism’, *i.e.*, the conceptual system of a certain language is *incommensurable* to the others. Lakoff, among others, has analysed the “commensurability issue” in its composite meanings, with the result of highlighting that “there are several kinds of commensurability,

² This label, albeit popular, should be dispreferred because, as Lee (1996) stated, there is simply no such thing as a “hypothesis”, formulated by Sapir or Whorf, let alone jointly. In Whorf’s words, LR was a “principle”, therefore a “conviction” (Dor 2015, p. 89–90). See also Everett (2013, p. 2), who notes that as contemporary research is in fact rapidly evolving, it is probably pointless to label the “hypothesis” as belonging to one or another scholar. Furthermore, it is worth underscoring that present studies in linguistic relativity are inspired by Whorf’s work only in a broad sense. Criticism on Whorf’s own positions does not automatically affect present-day researchers’ claims, and *vice versa* (*ibid.* p. 22).

³ Even if the word “experience” surely rings a phenomenological bell, the intent was to cover a vast number of aspects of human life (see *infra*) with one single term. It also takes into account Dor’s (2015) complex proposal on considering language as a communication technology that constantly tries to overcome the *experiential gap* between individuals. This framework challenges a lot of mainstream assumptions and has implications for LR studies (see *ibid.*, chapter 5) as well, but for reasons of space it will not be discussed here.

and commentators are by no means clear about which kind is being discussed” (Lakoff 1987, p. 322). Even so, the ‘weak’ hypothesis – that linguistic structures affect in some non-dramatic, temporary, and reversible way our cognition – is the one that has caught the interest of scholars, especially in cognitive psychology.

However, more recent and in-depth definitions, such as Wolff and Holmes’s, seem more useful in order to understand more clearly what we are referring to when we speak of linguistic relativity. LR is defined as a “‘family’ of related proposals that do not necessarily fall along a single strong-to-weak continuum” (Wolff, Holmes 2011, p. 253). The authors sketch a tree-diagram in which linguistic determinism (the ‘strong hypothesis’) has a premise that thought is indeed separate from language (*i.e.* language is not language-of-thought, in a Fodorian fashion), but nonetheless thought and language are considered to have parallel structures. From this assumption follows the incommensurability thesis discussed above. Thus, the contrary assumption, namely that thought and language differ structurally, corresponds to the ‘weak hypothesis’. However, in Wolff and Holmes’s account, this is not sufficient to single out the whole spectrum of specific manners in which language can affect thought: another seven classes and subclasses are individuated by the authors. That is to say, ‘weak hypothesis’ is too broad a label for scholarly purposes, albeit useful for differentiating that sub-family of hypotheses from the deterministic one. In fact, the *strong v. weak* account may have gained ground because it does not force the proponents of the ‘weak’ one to defend themselves from all the perilous ethical, and epistemological issues connected with the deterministic view.⁴

This paper aims to shed light on the relationship between philosophy and the study of LR in the last two centuries or so, especially analysing the last few years in which the whole branch has gained new vitality in its aims and methods, also – I argue – thanks to analytic philosophy. I mean to do so by a brief overview of the most interesting paths recently taken by scholars.

⁴ See Lakoff 1987, p. 304 *ff.*

1.1 THEORETICAL PREMISE

Before engaging in sketching a history of the treatment of this line of work, I wish to explain the criteria upon which the following partition has been organised. As a premise, I need to state that I follow the opinion that language sciences, and philosophy of language as well, should try to treat their object of inquiry not as something abstract from its actual use in everyday contexts. Hypostatizing certain features of the linguistic structure may have the countereffect of making us stray from the ultimate scope of investigating language itself, namely to understand how and why humans *use* it. The concrete patterns of interaction – and of action in solitude as well, even if language arguably originated as a tool of communication (Tartabini 2011; *contra* Humboldt, see Koerner 2000, p. 10) – should be the starting point of an enquiry into its functioning, as well as its arrival point. Certainly, conceptual analysis and theoretical knowledge require some degree of abstraction, but, especially in psycholinguistic research, the output of scholarly elaboration should, eventually, describe the state of affairs without overlooking any of the actual situations in which language is used by (and among) individuals.

2. A BRIEF HISTORY OF LINGUISTIC RELATIVITY

	APPROXIMATE DATE	REPRESENTATIVE SCHOLARS	RL EXISTS / RELEVANT	RL AFFECTS ACTUAL BEHAVIOUR / ACTION	PHILOSOPHICAL INFLUENCES
1 st WAVE	18–19 th cent.	Hamann, Herder, Humboldt	Yes	Yes	Romantic Philosophy
	1890s–1950s	Boas, Sapir, Whorf	Yes	Yes	(Theosophism – Whorf ^a)
2 nd WAVE	1960s–1980s	Berlin, Kay, Rosch, Penn	No	No	/
	1990s–2000s	Lucy, Levinson, Slobin, Boroditsky	(Mostly) Yes	Mixed	/
3 rd WAVE	2000s ...	Michael, Enfield, Sidnell, Zinken	Yes	Yes	Analytic Philosophy

^a See Whorf 2012, p. 23–25.

Figure 1.

Figure 1 summarises the criteria through which I look at the history of LR: first, a small number of representative scholars from each wave or sub-wave have been chosen; then it was noted if they supported the existence (and relevance) of LR. Thirdly, it was assessed if their approach was consistent with the idea that RL effects affect speakers in their everyday life and not only in artificial settings. Finally, the broad philosophical influences for each (sub-)wave were indicated. Let us now examine in greater detail each one of them.

2.1 THE 1ST WAVE: THE ORIGINS

The relationship between language and thought, broadly construed, has been a topic of philosophical elaboration since the Presocratics. Even the Bible offers much food for thought in this respect – just think of the myth of Tower of Babel. However, this particular line of study, namely the influence that *each* different language may have on thought sparked at a particular time. According to Dor (2015, p. 87–88), four historical and ideological factors decisively contributed to the outbreak of interest in such an approach:

First, the rise of the nation-state as a political model, with its romantic ideology of nationalism [...] brought along a vested interest in a view of language as both an exact reflection of the national spirit, the *Volksgeist*, and a major determining factor in its construction.

Secondly:

Europeans, in the course of the project of colonialism, discovered more and more languages around the world that were ostensibly very different from the languages known to them at the time. Travelers, adventurers, and priests began to describe and analyze these languages, and suggest ideas as to the relationships between them and the cultures within which they emerged.

Thirdly:

secularization: the question of linguistic relativity in its modern form could only begin to emerge with the weakening of the conviction that both human language and human thought, whichever way one thinks about them, are the divine creation of God.

And finally:

Kant's philosophy of mind, was decidedly universalistic – the categories and intuitions are shared by all rational minds – but it immediately opened the door for

a relativistic re-formulation: what if we look at the world through the categorical lenses of our different languages?

Within this ideological environment, 19th century German scientist and intellectual Humboldt was the most eminent voice to offer some in-depth insights into the relationship between natural languages and the way in which one sees the world (*Weltansicht*). Humboldt wrote that “the world in which we live [...] is exactly that into which the language we speak transplants us” (Humboldt 1904, p. 332), meaning that every language brings a world-view that, mostly unconsciously, “mirrors” the way in which language categories “construct the world” (see Koerner 2000, p. 10). Again, language is seen as something that strongly mediates the external world and the subject that afterwards gets to perceive it:

[...] there resides in every language a characteristic *world-view*. As the individual sound stands between man and the object, so the entire language steps in between him and the nature that operates, both inwardly and outwardly, upon him [...] Man lives primarily with objects, indeed, since feeling and acting in him depend on his presentations, he actually does so exclusively, as language presents them to him. (Humboldt 1988, p. 6)

As Koerner has accurately shown, there exists a line of thought that unites German philosophers (Hamann, Herder, and Humboldt) and linguists and anthropologists based in North America (Boas, Sapir, and Whorf). Oddly enough, each one of these scholars had been the teacher of the next in line – or at least the two had been in contact for academic reasons. Sapir was the first, in 1924, to use the term ‘relativity’ to name the ‘linguistic relativity hypothesis’ as it was popularized by Whorf’s papers, which also took advantage of the analogy with Einstein’s theory of relativity⁵ in physics.⁶

However, in the historical partition that I am trying to sketch, the German–North American circulation stage of LR still falls in the first of the three waves. This is due to the circumstance that the actual implications of linguistic diversity were described in terms of “action”,

⁵ This claim is consistent with the one made in footnote 1, as speaking of a “Sapir-Whorf Hypothesis” entails many factors that are not necessarily true, *e.g.*, that the two had the same view on the matter.

⁶ See Zinken (2008) for a repertoire of the various metaphors used in the language-thought debate.

“behaviour” and “habits” – which are mostly alien to the second phase of the debate. But first let me clarify what Whorf, as the most prominent representative of the first phase, meant with the aforementioned notions. He wrote:

[the grammar] of each language is [...] itself a shaper of ideas, the program and guide for the individual’s mental activity, for his analysis of impressions, for his synthesis of his mental stock in trade. (Whorf 2012, p. 272)

Further, he adumbrated a definition of

a new principle of relativity, which holds that all observers are not led by the same physical evidence to the same picture of the universe, unless their linguistic backgrounds are similar [...]. (*ibid.*, p. 274)

Language helps us “organize” the world as we perceive it, and then, on the basis of this mental organization, we get an already (at some level) elaborated blueprint for making decisions and acting. As Whorf clarified, he did not “wish to imply that language is the sole or even the leading factor in the types of behaviour mentioned [...] but that this is simply a coordinate factor along with others” (Lee 1996, p. 153). The point I want to make clear is that, in Whorf’s view, language-driven perception is something that is linked in a causal chain to behaviour, that is, to action.

2.2 THE 2ND WAVE: CHOMSKIANISM AND THE WHORFIAN RENAISSANCE

This last link in the chain had been missing in the LR debate from, *grosso modo*, Whorf’s posthumous publications in the 1950s until the last decade. So, phase two began as a consequence of the renovated *milieu* in psycholinguistic research due to the hegemony gained by Chomsky’s Universal Grammar theory. Universalist interpretations of the language-thought problem were generally preferred over relativistic ones (Berlin, Kay 1969, Rosch 1972). Meanwhile, experimental cognitive psychology procedures and techniques were improved and fine-tuned, so that perceptual domains, conceptualisation or orienting in space were the dominant themes in LR research. Such a trend had the effect of lowering interest in the cognitive consequences of linguistic diversity, because if it was nothing but a superficial phenomenon and there existed a cognitive unity of mankind, then LR ought

to be false or, in the best case, irrelevant (see Penn 1972, p. I or Pinker 1994, p. 57).

One of the champions of the Chomskian standpoint on the Whorfian hypothesis is former Boston MIT and now Stanford cognitive psychologist Steven Pinker. Pinker is well known not only in academic circles and in his books *The Language Instinct* (1994) and *The Stuff of Thought* (2007) he criticised in neither uncertain nor diplomatic terms Whorf's arguments and the idea of LR in general, which were, according to him, "wrong, all wrong" (Pinker 1994, p. 54). The problem with Pinker's criticism is that, in both books (*i.e.* even after a remarkable thirteen-year interval), he seems to obstinately equate linguistic relativity (as well as Whorf's hypotheses) with what should be properly called linguistic determinism (see *supra*). Linguist and anthropologist Phraao Hansen (2009) has noted that attacking the deterministic version of the issue most surely falls into the so-called straw man fallacy: since there is a consolidated and widespread consensus in psychology about the fact that language is nothing but *one* of the many factors contributing to the formation of thought, consequently linguistic determinism has long been removed from every serious research agenda, due to the untenability of the argument. So, arguing against a thesis that is not actually supported by anyone in academia and, on the other hand, misrepresenting the neo-Whorfian (see *infra*) has little use.

Apart from the specific case of Pinker's production, it remains true that for many years cognitive scientists and linguists have followed the innativist paradigm endorsed by Chomsky. Its non-relativistic basic assumption was that crosslinguistic variation should be treated as a "surface-level" feature. In Levinson's words, works such as Berlin and Kay's (1969) on colours wanted to demonstrate that "universals, or more exactly typological constraints, may lie behind the apparent semantic diversity of languages". The rejection of the relativity argument, then, was rooted in Chomsky's "conception of language as an autonomous formal system" (Dor 2015, p. 90), combined with the (Fodorian) thesis that "language and thought, so conceived, are separate modules, each with its own essence" (*ibid.*). In general, thus, it was assumed that taking seriously data which conveyed linguistic diversity was not as important and meaningful a task as concentrating on retrieving the common deep features that must have associated all

known languages.⁷ Therefore, theoretical research in LR had suffered a “decades-long delay” before a number of previous proponents of Universal Grammar “became complete[ly] disenchanted” with such a universalist linguistic paradigm (see Everett 2013, p. 21).

So, in the early 1990s LR received new attention thanks to the seminal work by Lucy (1992b) and Gumperz, Levinson (1996) who represented a different stream in LR research, as they *confirmed* LR effects (e.g. Boroditsky 2001, on time and space, or Imai, Mazuka 2003, on objects and substances; Levinson 2003, on spatial frames of reference; see Casasanto 2008, 2016 and Everett 2013 for an overview).⁸

Slobin’s proposal of “thinking for speaking” is an important one, but has a different history, since it refers to “online” effects. More clearly, Slobin (1996) holds that the words of the language we are using in a specific situation influence our cognition *only as long as* we use them, so that their constraints cease to be effective when the speaker stops talking. This kind of effect of language on thought is generally not considered a good representative of the relativity principle, since “offline” influences – *i.e.* when linguistic structures affect cognition even when speakers are *not* engaged in language-related tasks – would be less expected and much more interesting.

This whole movement has been tagged as “Neo-Whorfian” or as a “Whorfian Renaissance”, but these names need clarification: virtually all work done under these labels is not strictly related to Whorf’s, even though it is obviously inspired by his writings. As Everett (2013, p. 22) puts it, “[neo-Whorfian research] is very non-Whorfian methodologically”, as Whorf’s program does not meet the present standards in psycholinguistic research, so it is probably safer to use a more neutral label like ‘linguistic relativity’.

Multiple perspectives were adopted in relation to a range of ontological domains, though “mostly nonsocial”, as linguistic anthropologist Enfield points out:

⁷ For example, Bloom and Keil (2001) offered an alternative explanation to Lucy’s (1992a) empirical data bringing into play the causal role of *culture*, instead of language.

⁸ Lakoff’s chapter (1987, p. 304–337) on relativism too had helped to re-evaluate Whorf’s ideas, paving the way for the “Rethinking Linguistic Relativity” conference held in Jamaica in 1991, which in turn led to the essential volume edited by Gumperz and Levinson (1996).

research that has been done [...] has covered only a thin slice of the possible scope of this topic because Neo-Whorfian work has been fairly consistent in its narrow interpretation of the three key concepts. *Reality* has been taken to mean the realm of objective, nonsocial facts: “concepts of ‘time,’ ‘space,’ and ‘matter’”. *Thought* or *mind* has been taken to mean general, nonsocial cognition: forms of categorization, reasoning, and memory about reality as perceived. And *language* has mostly been taken to refer to structural and semantic features, synchronically framed, with a focus on the referential functions of words [...] Restricting the scope in this way has delivered valuable progress. But it is time to consider the larger space of things that could or should be regarded as instances of linguistic relativity. (Enfield 2015, p. 213)

Enfield has indeed good reasons to claim that the majority of research has gone in a certain direction, even if he slightly exaggerates the actual state of affairs. It is true, as pointed out in detail by Björk (2008), that in many experiments artificial settings have been employed and that the methodology is certainly “non-social”; at the same time, a different approach to the problem has not been absent, even since Gumperz, Levinson (1996, part IV where discourse-based approaches are considered). Moreover, volumes like *Grammars of Space*, edited by Levinson and Wilkins (2006), consider the semantic parameters involved in ‘Where-’ questions: many languages were taken into account and all the studies were based on fieldwork – such a methodology excluded, e.g., laboratory experiments. But, more importantly, its companion volume *Space in Language and Cognition* (Levinson 2003), where the linguistic data meet the study of crosslinguistic cognitive diversity, shows that relativity effects appear in everyday situations (see, for example, p. 216–244).

2.3 THE 3RD WAVE: THE EXPANSION PHASE

The last quotation by Enfield could be a starting point for a new generation of LR researchers as it represents the third phase; I propose to call it the ‘expansion phase’. This choice of words is justified by a common trend shared by recent developments in many different disciplines, namely, the *extension* of their object of inquiry. This is happening in branches such as philosophy of mind, the so-called 4E-cognition in psychology, linguistic anthropology, linguistic pragmatics, and conversation analysis.

More precisely, the focus of their investigation is shifting from the individual, taken “in isolation”, to the individual as an agent who

interacts with the environment she happens to inhabit; namely, when she deals both with other people, and with the so-called cognitive artefacts, that is, the artificial devices that affect human cognition (Norman 1993, Clark 2003, Heersmink 2013).

All the approaches of that kind seem to fit well with the theoretical concerns expressed *supra* (section 1.1). In order not to overlook the actual linguistic practices we are normally engaged in while doing research, it is useful to conceive language as a tool that primarily exists for communicating with other humans (Enfield 2010) and only secondarily for self-improving one's cognitive operations (Everett 2012). Consequently, a new wave in LR studies could find fruitful suggestions and notions apt to pursue the aforementioned goals. Let us see how.

4E-cognition relies on the assumption that every thought process is not entirely abstract, but is grounded on contextual axes related to the physical bonds on which mental characters are realised (DiFrancesco, Piredda 2012). Interaction with the environment, then, is a factor that contributes to defining the ongoing mental processes. From this perspective, among all the factors that affect cognitive processes, the first should be our body: in fact, low-level processes, such as perceptual and motor ones, seem to be in strict continuity with high-level ones, such as reasoning and cognition in general (Lupyan, Clark 2015). So, 4E-cognition employs a *situated* – and not abstract – notion of cognition, which conforms to the faithful picture of psycholinguistic processes sought here.

Linguistic anthropology too has always considered it crucial to study language in ordinary, daily contexts (Everett 2012, Lupyan 2012). Since language is intrinsically social (Enfield 2010), it seems clear that this proposition supports the notion of distributed cognition (Michael 2002), which serves as a *trait d'union* between research on the functioning of thought and on the nature of language. In this last vein, conversation analysis (Sidnell, Enfield 2012, Enfield, Sidnell 2015) falls within those approaches in philosophy of language and language sciences which study ordinary language and all its possible functions. The aim is not to lose the dynamic features which define the actual use of language.

Now my point should be clearer: there are new domains in which LR effects should be looked for. Nonetheless, LR researchers should be informed of the latest trends in all these disciplines which share

their core interests: language, cognition, what kind of relationship links these two elements of human life, and how speaking two different languages can affect this relationship.

This point is not that original *per se* but, in fact, previous attempts (see Enfield 2015, p. 214) apparently have not been adequately followed up by scholars – philosophers in particular. This new frame for research on LR should bring into play a plurality of disciplines. This is not a simple purpose and, it may seem rather more perilous than promising. Nonetheless, I argue that it is the matter involved itself that demands such a complex approach, without which our understanding of the language-thought problem is bound to remain incomplete. My further claim is that philosophy needs to regain a role in this expansion phase.

3. PHILOSOPHY IN PAST AND PRESENT LR RESEARCH

3.1. NEW PATHS IN RESEARCH

Let me illustrate a few examples of (future) LR research that could benefit from a philosophical contribution. Michael's attempt to reformulate LR may be a starting point: his is an example of empiric research that goes beyond the cognitivist paradigm, thanks to two “theoretical shifts”:

first, from a concern with grammar to a concern with discourse in the context of face-to-face interaction; and second, from individual, isolated cognition, to socially-distributed cognition among a group of individuals. (Michael 2002, p. 108)

This new paradigm unwraps many challenges. First, it is recognized that, so far, the conversational approach to culture has been tied to an individualist model of cognition – which should be integrated. Andy Clark's Extended Mind model (Clark, Chalmers 1998) fulfils this prescription, as it posits that, in Michael's words, cognition is “rarely, if ever, a process bounded by the skull” and “involves interaction with other individuals, and with semiotic artefacts such as texts and maps” (*ibid.*).

Indeed, according to Clark and others, humans inhabit a language-permeated environment (Clark 2003, Steffensen 2009, Enfield 2010). This has consequences for their epistemic access to the world, if we

acknowledge that cognitive artefacts play a critical role in enhancing cognition (Heersmink 2016, p. 78) and that language is “in many ways the ultimate artefact” (Clark 1997, p. 218). If we accept that, then language emerges as “central” for human cognition (Lupyan 2016), both for the high-level processes of abstract prediction and for the perceptual level, which is “cognitively penetrable” (Lupyan, Clark 2015).

It is clear that LR studies need to redefine the role of cognition in the light of this different paradigm. Should we look for LR effects in distributed cognition situations? The answer is yes. This kind of collective cognitive process will, to some extent, depend on the features of the means allowing such a communicative act. Therefore, the linguistic features of cognitive artefacts could be relevant: different languages may have different feedbacks from the artefacts involved, depending on the quality of linguistic diversity between the two, thus generating LR effects.

Following Michael’s suggestions on the linguistic side of the problem, linguistic interaction should represent the basic scenario in which LR has to be studied. Scholars belonging to the first two waves were mostly concerned with grammatical structures (e.g. Lucy 1992) and tended to ignore the multiple ways in which they could have been *used* in linguistic interaction (see *supra* for a few exceptions). Language has many more functions than the referential one, which for many (contingent) reasons has been privileged (Enfield 2015, p. 215). This trend had the result of hiding one of its fundamental traits: language is a *social* tool for *action*, as well as for communication and for cognition. The distributed approach to cognition, then, seems a promising frame in which to investigate the nature of human language. Language turns out to be no longer an isolated or individual tool, but a situated and intrinsically social one, given that “human sociality is at the heart of language” (Enfield 2010). In conclusion, experimental research whose subjects are abstracted from “real-life contexts” (*ibid.*) in which everyday social action happens cannot claim to be depicting the actual state of affairs.⁹

For example, it has been shown that in situated social interaction, different languages may have different effects on the kinds of social

⁹ See Björk (2008) for a detailed elaboration on LR empiric research and its “segregation” from real-life contexts.

actions that can be achieved, thanks to their different linguistic and pragmatic paths to construct the conversational schema. Here, relativity is about “the different rights and duties that speech acts [...] can give you. [...] Language-specific side-effects on normative obligations in a next conversational move arise because of the unavoidable introduction of collateral effects when communicative tools have multiple functional features” (Enfield 2015, p. 218). Speakers of different languages are thus lead “to linguistically relative collateral effects, which lead in turn to differences in our very possibilities for social agency” (Sidnell, Enfield 2012, p. 320–321).

Crosslinguistic differences may have dramatic relevance in domains such as heuristics because decision making is often a less rational process than we may think (Gigerenzer et al. 2011). Since it must be efficient and quick, we rely on simple cues to take decisions, and language sometimes plays a role in this task, since “concepts are sieves” (Enfield 2015, p. 210) that filter what is brought to our attention. In fact, categorisation is one of the most powerful and frequently exploited functions of language. Categorisation is the means through which the concepts which are the basic units of many everyday actions are built up (Clark 1998, Diodato 2015, Enfield 2015).

Before I address in detail these new possibilities of interaction between philosophy and LR studies, let me first discuss *analytic* philosophy.

3.2 LANGUAGE AND REALITY IN ANALYTIC PHILOSOPHY

To be fair, the very notion of analytic philosophy has not a single univocal nor a universally accepted definition. Or, at least, even lengthy attempts at finding strict criteria to define it have somewhat failed (Glock 2008; see Marconi 2014, sec. II). According to Glock, some of the features of a typical analytic philosopher are the willingness to answer substantive questions rather than historical ones following “universally applicable standards of rationality”; the clarity and rigour of the argumentation (Beckermann 2004, p. 12); adhesion to the linguistic turn; rejection of speculative metaphysics¹⁰; just to name a few.

¹⁰ It must be said, however, that since the second half of the 20th century, analytic philosophers have expanded their area of interest into other branches of philosophy, including metaphysics. Simons (2013, p. 709) states that the analytic

Defining the pure essence of analytic philosophy is clearly too vast a task for the present scope, if possible at all.¹¹ However, even if we restrict the area under examination, the analytic tradition shows some heterogeneity: different opinions coexist within the same philosophical area, of course. In fact, analytic philosophy is perhaps best defined by appealing to methodological features rather than to some sort of list of common beliefs. It is here argued that among the whole analytic area there is a line of externalist approaches to language and mind that is relevant in LR studies.

Returning to the relation with LR, there is a rich tradition of externalist approaches to meaning and mind in analytic philosophy that must be mentioned as an interesting source of inspiration for the empirical study of how languages affect cognition.

In his later philosophy Wittgenstein (2009) was concerned about the consequences of an internalist approach to thought. For example, in §52 of the *Big Typescript* Wittgenstein (2005) branded as “most dangerous” the idea of “thinking as a process in the head, in that completely closed-off space”; such a sentiment was confirmed by his well-known arguments against, respectively, private language and rule-following.¹² Putnam’s renowned Twin Earth mental experiment maintained that in some cases (namely, natural kind terms, indexicals, and proper names) in order to determine the meaning and the reference of such terms definite descriptions or appeals to the subject’s internal states are not sufficient, thus postulating the causal role of external factors. Burge took Putnam’s intuition even further, claiming that the (at least partial) external determination of the semantic content applies to virtually every other part of language, i.e. not only to natural kind terms etc. In fact, in Burge’s account, the relevant

anti-metaphysicism was not even the case at the beginnings of this tradition: “Among those with an outdated or partial conception of analytic philosophy, the whole movement is associated with the rejection of metaphysics. But such rejection, however motivated and justified, was never the sole prerogative of analytic philosophy, nor was it ever the majority view within that movement”. In fact, “it was only during the “middle period” of the 1930s–1950s that, under the influence of logical positivism and ordinary language philosophy, metaphysics was first rejected and later marginalized.”

¹¹ In Pietarinen’s words, “Such a task will invariably be frustrating” (Pietarinen 2009).

¹² See Wittgenstein (2009) §258–271 and §143–155.

factors in determining the semantic content of certain intentional states are to be retrieved in the linguistic conventions, norms or rules of the given linguistic community.¹³ Moreover, Davidson had defended a peculiar form of externalism of the mind, while rejecting Wittgenstein's, Putnam's and Burge's, even though he swung between a physicalist and a social version of externalism (De Caro 2011, p. 181 ff.).

Finally, Quine's *ontological relativity* thesis, based on the famous radical translation argument, bears a clear resonance with LR. Nonetheless, Quine has never explicitly confronted himself with Whorf's work, except for a very brief mention¹⁴ by which we understand that – as was common at the time – he gave a strictly determinist interpretation of the linguistic relativity principle. Indeed, his thesis that linguistic reference or meaning cannot be determined outside the context of a given language (ontological relativity), thus leaving us with the unresolved question of what even the words of our language ultimately refer to,¹⁵ can be related to a form of linguistic determinism. However, it is difficult to say if Quine would have fully endorsed Whorf's view that every culture “carries with it an implicit metaphysics, a model of the universe, composed of notions and assumptions organized into a harmonious system” (Whorf 2012, p. 361), as he argued for an “implicit metaphysics”, nestled “in the very structure and grammar” of a given language, “as well as being observable in [...] culture and behavior” (*ibid.*, p. 75). There are linguists – more precisely, semanticians – who have tried to escape the burden of ontological commitment by analysing crosslinguistic structural differences dropping any claim whatsoever about the “metaphysical reality” embedded in different natural languages. Bach¹⁶, for example, developed his Natural

¹³ Putnam 1975 and Burge 1979. See also Amoretti (2013, p. 247–263) for an overview.

¹⁴ Quine 2003, p. 61.

¹⁵ It seems that the reference of the word ‘rabbit’ remains indeterminate, following Quine (1990, p. 50) where he comments that “‘rabbit’ refers to rabbits, whatever *they* are”, which follows from the assumption that there is no naturalistic “matter of fact” as to what either “*gavagai*” or “rabbit” refer to. Davidson (1989) replied to this kind of *aporiai* deconstructing the “myth of the subjective”: according to him, the (somehow quinean) idea that conceptual schemas are immanent to different natural languages or scientific theories is wrong. See Pavan, Sgaravatti (2015) for an overview.

¹⁶ Bach 1986, Bach, Chao 2012. See also Pelletier 2011.

Language Metaphysics as a programme which wanted to answer the question “What do people talk *as if* there is?”, as opposed to the “fundamental question of metaphysics ‘What is there?’” (Bach, Chao 2012, p. 175). Bach professed modesty:

Is there a natural language metaphysics? How could there not be? One of our main resources for coming to understand the world is, after all, language, a sort of tool box for doing whatever it is we want to do. Do the fundamental distinctions that are reflected in the overt and covert categories of natural language correspond in any way to the structure of the world? How could they not? But this is where linguistics stops. (Bach 1986, p. 597)

Further, he stated that it was “immoral” of a linguist to make claims whether grammatical objects corresponded to “real things in the world, perceptual or conceptual categories that are independent of language, or to nothing at all” (*ibid.*, p. 592). Is this too pretentious an endeavour for philosophers as well? One way or another, empirical studies on LR will hopefully help address the dilemma. Please note that, in this fundamental respect, empirical *cognitive* research is crucially different from Wierzbicka and Goddard’s Natural Semantic Metalanguage proposal. The authors, representing a vast number of field linguists, held that it is possible to empirically compile a metalanguage out of the “semantic primitives”, i.e. “undecomposable meanings” which were eventually shared by a high number of diverse natural languages. They also maintained that “the simple propositions which can be expressed through the NSMs based on different languages will be fundamentally isomorphic.”¹⁷ In other words, according to the Natural Semantic Metalanguage programme, virtually all human languages (therefore all human cultures, and therefore all human beings) share a core set of semantic primitives, forming the common conceptual foundation of all cultures. However, this universalistic programme does not accept Bach’s admonition about the danger lurking in inferring too much from merely linguistic data.

Still, the role of *past* philosophical contributions in assessing whether different languages affect the cognitive life of speakers remains uncertain. Humboldt and the other German romantic philosophers’ interest in linguistics was linked to the idea that the “inner

¹⁷ Goddard 1994, p. 10. See Goddard, Wierzbicka 1995; Pelletier 2011, p. 4–8.

form” of language of a community was an expression of a people’s “national mind and unfolding, in line with the Romantic concept of history” (Koerner 2000, p. 1). So, perhaps, a (broadly construed) philosophical approach to LR is not helpful in terms of avoiding unsubstantiated exaggerations, but on the other hand even linguists are not exempt from such a temptation, from time to time. Let us consider, for example, this quotation from Goddard: “the comparatively muted quality of the English [emotion] words (except for joy, which is the least common of them) is consistent with the traditional Anglo-Saxon dislike of extreme emotions” (Goddard 1998, p. 94). Even if the latter came from a strongly universalist point of view, while the former expressed a clear relativistic attitude, the direction the third wave in LR studies is taking – and, most importantly, how the conceptual and methodological tools of analytic philosophy might be valuable – should be clearer.

3.3 A PHILOSOPHICAL STANCE ON A FEW PROBLEMS

Among the notions named so far, some are of obvious philosophical interest, e.g. ‘cognitive artefact’, which according to Heersmink (2016), needs to be better understood from a metaphysical point of view, integrating the existing literature in analytic philosophy of technology. Obviously, this notion is embedded in the Extended Mind (EM) paradigm, which has started one of the most interesting recent discussions in analytic philosophy of mind. However, without necessarily committing to the EM theory, the idea that language is a tool which shapes thoughts instead of merely communicating them has wide resonance in psychology (Lupyan 2012, 2016, Borghi et al. 2013, Gentner 2016), artificial intelligence (Mirolli, Parisi 2009) and, of course, philosophy of mind (Dennett 1993, Clark 1998). One argument of Vygotskian descent is central to this view:¹⁸ the private speech of children (which later in development becomes internalized) is a symptom of the child experimenting with its capability of re-shaping the tasks and actions that it wants or is required to perform. Categories that language brings along help the speaker in finding commonalities between distinct objects and by such means simplifies and

¹⁸ See Mirolli and Parisi 2009, p. 519–520 and Clark 1998.

accelerates the (cognitive) action. Thus, language is used as a scaffold in augmenting our cognitive skills – in fact self-referred speech represent “a significant portion of the child’s linguistic production” (Mirolli, Parisi 2009, p. 523). It must be said that existing work on this matter concentrates mostly on the role of language in general and not on particular languages, i.e. in a crosslinguistic perspective. Nevertheless, here it is argued that such a line of research should be started. After all, once it is demonstrated that language influences at least some aspects of human cognitive life, the next natural step is to verify whether, other things being equal, different languages have peculiar features in the process of enhancing cognition.

Sidnell and Enfield (2012) considered social interaction as a new “locus” for LR (see *supra*). Within this framework, they note that the concept of “action” has received philosophical attention since Aristotle, although the most influential contribution in recent times is Austin’s (1962), along with its followers, starting with Searle (1969). However, this notion needed further revision, at least in the opinion of the authors: the Austinian notion of illocutionary act has been judged insufficient to properly explain how interaction works, as in such a situation, “a person’s primary task is to decide how to respond, not to label what someone just did” (Enfield, Sidnell 2017, *ii*). That this kind of philosophical-linguistic analysis may be labelled as “analytic” is argued, among others, by Glock (2008, p. 54), also considering Searle’s and Grice’s work. It is interesting to consider the authors’ challenge to the classical philosophical approach to action:

We suggest that philosophers and others have created a spurious (though both convenient and intuitive) category of things called actions that are distinct from, and causally related to, the specific practices of conduct and modes of inference through which these ‘actions’ are realized in interaction. (Enfield, Sidnell 2017, xii)

They criticize the standard account of the notion of “action”, questioning the fictitious ontology assumed by scholars (also in conversation analysis and linguistic anthropology) who have argued that “a list or inventory of possible action types” is achievable, in principle, and that, therefore, if an individual wants to perform one of them, “they merely need to provide adequate cues as to which one of these possible actions they mean to be doing” (*ibid.*). So, further philosophical elaboration is needed if we are to understand how social interaction works,

complying with detailed ethnolinguistic data. Thereafter, crosslinguistic differences in social interaction could be better investigated.

Another philosophically relevant notion in analytic ontology is “social reality”. According to Searle (2007), social reality is only created through language and it can be approached by linguistic means alone. In a crosslinguistic perspective, it should be investigated if different languages create different socio-institutional realities. As Enfield (2015, p. 216) puts it, “whenever language is used to create social reality [...] it is never just language but always *a* language”. Notions sensible to crosslinguistic variation would be – among many others, including money, property or corporate identity – that of “social self” and that of “accountability” (see also Sidnell 2017). For instance, public signs that verbally prohibit such and such behaviours may perform this illocutionary act with different nuances depending on the language used, generating correspondently different degrees of accountability for those who do not obey the prescription (in this perspective, multilingual situations would be of great interest).

More generally, the problem of individuality *versus* collectivity is being considered with increasing attention in analytic philosophy, from various perspectives. For example, the linguistic component in the *distribution of agency*, considered as an instance of social interaction, turned out to be crucial, according to Rossi and Zinken (2017). The authors analysed the ways in which Italian and Polish treat impersonal deontic declarative statements (such as the English “it is necessary to”) and the relation between the grammatical means of bringing about a request for cooperation and the interactional negotiation of agency (namely, who has to do the required action). Rossi and Zinken concluded that “what may at first glance appear only subtle, differences of expression [...] put constraints on what people can or should do in a given situation. Moreover, given the great diversity among languages, grammatical variation will be consequential also for social interaction across cultures” (*ibid.*, p. 85). To conclude, the possibility that the fact that “the conceptual distinctions made available by different languages can differ radically [...] implies diversity in the kinds of reality that language can create” (Enfield 2015, p. 216) must be taken seriously.

4. CONCLUSION

More than 15 years ago, Michael wrote:

the long-standing controversy over linguistic relativity has been only modestly impacted by two significant developments in our modern understandings of language and cognition – namely, the now commonplace position that both language and cognition are fundamentally interactional and socially-situated practices that cannot be reduced to isolated, abstract knowledge structures. (Michael 2002, p. 107)

Unfortunately, little has been done since, either in terms of the amount of empirical research following this recent “theoretical shift”, or in terms of the number of particular languages taken into consideration (Everett 2013, p. 267). Whatever the reasons, both linguistics and philosophy of language have limited themselves to regarding the referential function of language as its core function giving a biased view of the actual use of language and directing LR research only onto specific trails. This trend has been recently inverted, but another factor that can positively contribute to this change is a philosophical analysis of the notions involved in this paradigm shift. Thus, it will be possible to give an increasingly more accurate account of how language works in real-life contexts. An interdisciplinary approach is certainly needed, and analytic philosophy appears to be the most appropriate companion – perhaps not by referring to the arguments discussed in the past as much as by appealing to its conceptual tools and more recent debates on relevant topics.

In conclusion, let me return to the initial defining issue, and try to update the initial definition (1) with an even more lengthy but complete modified version:

(2) Linguistic relativity is the idea in accordance to which speakers of different specific varieties of natural languages, which differ in a number of respects studied by linguistics (such as phonetics, syntax, semantics, and pragmatics), could experience the same objects and activities of the world (such as, but not limited to, physical objects perception, colour perception, space relationships, calculus, shaping of categories, decision making) in different ways, interacting with the environment (including external artefacts or other agents), on grounds of that very linguistic diversity – and not because of other factors such as explicit cultural elaboration, or cognitive deficiencies or deviations. Moreover, some forms of linguistic relativity involve domains that exceed individual experience, such as patterns of language-mediated social interaction, or the by-products of social reality, which is created and accessible only through language.

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