

## **Relativism Versus Absolutism in Linguistics**

András Kertész<sup>1</sup>🕩

Accepted: 4 March 2023 © The Author(s) 2023

#### Abstract

Whether truth is absolute or relative has been a widely discussed topic for over two thousand years in epistemology and the philosophy of science. However, this issue has not yet been discussed systematically with respect to linguistics. The present paper attempts to make the first step toward filling this gap. It raises the following question in Sect. 1: What kind of relationship is there between the pluralism of inquiry, the relativistic and the absolutistic approach to truth, and the tolerance of views differing from one's own in the practice of linguistic research? After Sect. 2 has clarified what is meant by 'relativism', 'absolutism', 'pluralism' and 'tolerance', Sects. 3–5 describe, analyse, and systematize the ways in which relativistic and absolutistic views are manifested in linguistic theorizing. Finally, Sect. 6 summarizes the findings and gives a sophisticated answer to the main question of the paper.

Keywords Scientific pluralism · Alethic relativism · Scientific tolerance · Linguistic theory

"We are building a *dictatorship of relativism* that does not recognize anything as definitive and whose ultimate goal consists solely of one's own ego and desires." (Ratzinger 2005; emphasis added)

"It is the *dictatorship of absolutism*, and the war of absolute against absolute, that is to be feared." (Bloor 2008: 279; emphasis added)

## 1 Introduction

After Chomsky and his followers'<sup>1</sup> 'war' against the Neo-Bloomfieldian linguists in the late 1950s and the early 1960s, and another 'war' against the Generative Semanticists in the late 1960s and early 1970s,<sup>2</sup> in her memoir the linguist Robin Lakoff assessed the state of the art as follows:<sup>3</sup>

András Kertész kertesz.andras@arts.unideb.hu

<sup>&</sup>lt;sup>1</sup> I am grateful to two anonymous reviewers for their helpful comments on an earlier draft.

<sup>&</sup>lt;sup>2</sup> For overviews of the linguistics 'wars' see Harris (1993, 2021).

<sup>&</sup>lt;sup>3</sup> In order to make later references to the quotations easier, I will divide them into numbered units that need not correspond to the paragraphs of the original text.

<sup>&</sup>lt;sup>1</sup> Institute of German Studies, University of Debrecen, Egyetem Tér 1, Debrecen 4032, Hungary

- (1) (a) "We have tried for most of this century to force language into the Procrustean bed of 'science', and the chaos and dissension that we have experienced in the field are the result. If we are a science, we must assume that only one paradigm has access to the truth, and it had better be our own.<sup>4</sup>
  - (b) But the impossibility of getting everyone in the field to accept a single paradigm, to settle down to Kuhnian 'normal science', demonstrates that we have been seeing things incorrectly. [...] each linguist, or each theoretical perspective, captures a *different* vision of the linguistic reality, and *all*, though *incompatible* as scientific theories, have something to add to our knowledge. But we can no longer require that perspectives be combinable into one single theory: *We must settle for different, but equally valid, viewpoints.*" (Lakoff, 1989: 985–986, emphasis added)<sup>5</sup>

#### About a decade later the philosopher Peter Lynch wrote:

(2) "The notion of pluralism *shines brightly* within academia and throughout the culture at large. In its most general form, pluralism is the idea that there can be *more than one true* story of the world: there can be incompatible, but equally acceptable, accounts of some subject matter. There are *no absolute facts* but a *diversity of truths*, all of which *equally* clamor for our attention." (Lynch, 2001: 1; emphasis added)

These two quotations appeared in very different contexts and were motivated very differently. Lakoff, as a working linguist, reflects on her everyday experiences in order to tell the history of Generative Semantics from her own point of view. In contrast, Lynch's book is devoted to general epistemological questions that have been discussed intensely since they were raised in Plato's (1973) *Theaetetus*. Nevertheless, however great the distance between the working linguist's and the philosopher's world appears to be, the two quotations seem to be analogous in that both plead for the *relativism* of truth: Lakoff with respect to linguistics, and Lynch in a general philosophical context.

Moreover, the passage which I have quoted from Robin Lakoff's memoir not only summarizes the central idea of the relativism of truth in (1)(b), but in (1)(a) it also confronts it with its opposite, namely, *absolutism*. In this way, the quotation reminds us of the fact that the conflict between the relativistic and the absolutistic approach to truth—besides presenting one of the most serious and most widely discussed challenges to epistemologists—creates a context in which all those linguists who strive to find their way in the labyrinth of linguistic theories, methods, and categories, get in touch with the deep *foundational problems* which exist in their discipline. Although relativism has been one of the most challenging topics in epistemology and the philosophy of science, to my knowledge in linguistics it has not been discussed systematically. Accordingly, *the aim* of the present paper is to fill this gap by raising the issue of *the relativism of truth in linguistics*. Nevertheless, this task is burdened with difficulties. Let me highlight one of them.

(1) and (2) seem to associate the relativity of truth with further categories, namely, 'pluralism' and 'tolerance'. In both quotations the term 'equal' refers to the tolerance of ideas that are not identical with one's own. In (2) Lynch explicitly relates the relativism of truth to pluralism, although the nature of their relation is not clear from this short introductory passage.

<sup>&</sup>lt;sup>4</sup> With respect to linguistics, there is much confusion and misunderstanding in the reception of Kuhn's (1970) terms of 'paradigm' and 'scientific revolution'. In later passages I will touch on the application of Kuhn's terms to linguistics.

<sup>&</sup>lt;sup>5</sup> This quotation itself does not reveal to what extent it reflects Lakoff's personal view or that of a community.

The same applies to (1). Although Robin Lakoff does not use the term 'pluralism' in this quotation, the term 'all' in (1)(b) clearly suggests that she considers the pluralism of approaches as characteristic of linguistics.<sup>6</sup> Thus, both (1) and (2) refer

(3) (a) to the *pluralism* of scientific inquiry;

- (b) to the fact that scientific views may be *incompatible*, but that despite their incompatibility they may be equally valid, and, accordingly, they can be *tolerated*; and
- (c) to the *relativity* of truth.<sup>7</sup>

(3) seems to motivate the following question:

(Q) What kind of relationship is there between the pluralism of inquiry, the relativistic approach to truth and the tolerance of views differing from one's own in the practice of linguistic research?

With respect to linguistics, the straightforward answer seems to be:

(A1) In the practice of linguistic research, absolutism is associated with intolerance and relativism with tolerance while both these pairs of stances are motivated by the pluralism of inquiry.

The relationship between pluralism, relativism, absolutism and tolerance has been widely discussed in epistemology as well as in the general philosophy of science and *is still open*. In the philosophical literature there are views assuming their close relatedness and there are views that argue for their independence.<sup>8</sup> Therefore, we contrast (A1) with (A2):

(A2) In the practice of linguistic research, there are sophisticated relations between pluralism, absolutism, relativism, tolerance, and intolerance motivated by the pluralism of inquiry.

(Q) is the central question to be answered in the present paper. The paper attempts to answer it by choosing between (A1) and (A2) through the looking glass of *metatheoretical* reflection. Accordingly, the subject matter of the paper is *not language, but linguistics*, and its perspective is that of *the history and philosophy of linguistics*. Thereby, in principle, two different attitudes present themselves. On the one hand, the answer may *describe* the way working linguists *do* assess either relativistically or absolutiscically rival theories, methods, and theoretical terms of their discipline. On the other hand, the answer may motivate conclusions which, in a *normative* way, contribute to enhancing the effectiveness

<sup>&</sup>lt;sup>6</sup> Nevertheless, in the same paper she accuses early generativism of *the lack of pluralism*, which implies that she *pleads for pluralism*:

<sup>&</sup>quot;I remember well the times that non-transformationalists would speak at MIT, in those early years when the field still saw itself as fighting for survival in a hostile world. Rather than attempting to charm, conciliate, find points of connection, the circle at MIT regularly went for blood. Points were made by obvious public demolition; the question or counterexample that brought the offender to his knees were repeated for weeks or months afterwards with relish. TG did not win, then, by gradually persuading its opponents, but mostly by waiting until they retired or died. Since the field had been quite small, this djerricans not won over or gotten rid of were rendered ineffectual. *There was no place for pluralism*." (Lakoff 1989: 967–968, emphasis added).

<sup>&</sup>lt;sup>7</sup> In (1) there is no incompatibility between the term 'reality' and the relativist claim "We must settle for different, but equally valid, viewpoints". For example, one of the seminal approaches to alethic relativism says: "[...] we may inquire into an independent world but cannot state its nature as it is independently of our inquiries" (Margolis 2010: 105). See also Kuhn's (1970) *Postscript*.

<sup>&</sup>lt;sup>8</sup> I will introduce the terms 'scientific pluralism', 'alethic relativism' and 'tolerance' in (5)-(7).

of the perspective underlying the problem–solving activity in different fields of linguistics by deciding whether linguistic approaches *should* strive for absolutism or relativism. The paper will proceed *not* normatively, but *descriptively*. In Sect. 2 I will clarify some background assumptions which will be presupposed by the line of reasoning to be presented. Sections 3–5 will investigate in what way and in what contexts truth-relativism and truthabsolutism appear in linguistic research as reactions to its pluralism. From these analyses, in Sect. 6 the answer to (Q) will be inferred.

## 2 Background information

## 2.1 Introductory remarks

In order to point out the sophisticated nature of the relation between pluralism, relativism and tolerance in linguistics, and at the same time to find a suitable point of departure for my train of thought, I introduce the 'basic models' of the three categories.<sup>9</sup> However, admittedly, these 'basic models' are merely very simplified working definitions which I have abstracted from the rich literature, and which are indispensable for putting my line of reasoning forward as clearly as possible. Different approaches to scientific pluralism, relativism and tolerance can be seen as different explications of the properties which the 'basic models' include. I begin with a brief overview of the pluralism of scientific inquiry.

## 2.2 On scientific pluralism

The question of whether science is unified or pluralistic has been one of the central topics of the philosophy of science. With respect to this question, Ruphy (2016: xi; capitals as in the original) characterizes the current state of the art in epistemology and the philosophy of science as follows:

(4) "Although for a significant part of its professionalized existence the philosophy of science has waved the (motley) banner of the unity of science, few today would deny that the philosophical tide has clearly turned in favour of the plurality of science. The unity of science program of the Vienna Circle is dead as a linguistic program (and no resurrection is to be expected anytime soon). At least not yet dead but rather moribund is the philosophical search for THE scientific method (in the sense of a logic of justification), not to mention in the sense of a general methodology and, rightly or wrongly, the related demarcation problem has not maintained much topicality in current times. Theoretical unification, a long-standing quest and hallmark of scientific progress, is no longer seen as desirable across all disciplines, especially not in its reductive form."

The basic model that the standard literature seems to suggest distinguishes between three types of scientific pluralism (for their summary see Ruphy, 2016: xiv):<sup>10</sup>

 $<sup>^{9}</sup>$  The subject matter of the present paper is the relativism of *linguistics*, and *not* the relativism of *language* and thinking. I will not touch on linguistic relativity in the sense of the Sapir-Whorf hypothesis, because it does not belong to the domain of (Q) directly.

<sup>&</sup>lt;sup>10</sup> The basic literature on scientific pluralism includes Dupré (1983, 1993), Hacking (1996), Rescher (1993), Kellert et al. (eds.) (2006), Galison and Stump (eds.) (1996), Cartwright (1999), Ruphy (2016), Cat (2017), Tahko (2021). While (5)(a) and (c) refer to plurality within a discipline, (5)(b) may also refer to plurality across disciplines.

- (5) (a) Several theories, methods and the languages of science exist simultaneously.<sup>11</sup>
  - (b) Theories in a given discipline cannot be reduced to theories in another discipline.
  - (c) Several correct representations of a given phenomenon exist simultaneously.

With respect to linguistics, (5)(a) is taken for granted—that is, the *fact* that there is a plurality of the theories, the methods and the meanings of the theoretical terms which different theoretical frameworks make use of is *unquestionable*.<sup>12</sup> As regards (5)(b), one may ask whether during the history of linguistics there have been successful reductions of linguistic theories to another theories either within or outside the discipline in ways that meet the criteria of theory reduction as discussed in the philosophy of science. (5) (c) is *questionable*, too, for at the outset it is not clear at all whether different representations—obtained within different theoretical frameworks—that on the surface appear to refer to the same phenomenon indeed do so, or rather, different representations must necessarily refer to different phenomena.<sup>13</sup> In Sects. 3–5 of the present paper I will consider systematically the consequences of (5)(a)-(c) with respect to the question (Q).

#### 2.3 On relativism

Relativism, as we know, is not a unified view. Firstly, it consists of several more specific forms, which Haack's (1998: 149) widely cited classification interprets as different instantiations of the relation 'x is relative to y'. Table 1 mentions some examples (see also Kusch, 2020a: 2).

Secondly, the different views within each of these specific variants of relativism appear to constitute a complicated network in which they may contradict each other, or complement each other, or overlap. Thirdly, relativism may be, as we have already mentioned in the Introduction, descriptive or normative.

Nevertheless, it is *alethic relativism*—that is *the relativism of truth*—that the question (Q) concerns immediately. Therefore, in the present paper the term 'relativism' is used in the sense of 'alethic relativism'.<sup>14</sup>

Although alethic relativism is also manifested in many different variants, which may be incompatible with each other, and therefore it is not possible to define it by using necessary and sufficient conditions, I will summarize some of its properties in the 'basic model' proposed by Irlenborn (2016: 6, 71):

<sup>&</sup>lt;sup>11</sup> The definition of the terms 'theory', 'method' and 'language' as well as their relation has been in the centre of discussions in the philosophy of science for a century. Going into these issues would be beside the point in the present context. For our purposes it will be sufficient to use them according to their common sense meaning as they are defined in dictionaries.

<sup>&</sup>lt;sup>12</sup> But—in opposition to what has been cited in (4)—the *normative* desideratum that linguistic research should adapt a unified scientific method is still present. For example, Haider (2016: 7; emphasis added) asks the question: "What is *the* scientific method?" The author answers this question by encouraging linguists to apply the distinction between the context of discovery and the context of justification, which was introduced by Reichenbach and maintained by the Vienna Circle, and which has been out of date for decades.

<sup>&</sup>lt;sup>13</sup> For example, this question can be asked in a pointed way with respect to Kertész et al. (eds.) (2019). The volume compares 13 syntactic theories each of which analyses the same sentence with the formalism of its own framework.

<sup>&</sup>lt;sup>14</sup> Thereby, I will treat 'truth' as a property of statements. Nevertheless, some linguists whose views I will cite in the sequel use this term as a property of theories.

Table 1	Types of relativism
---------	---------------------

'x' stands for	Forms of relativism		
Objects, properties, facts	Ontological		
Truths	Alethic		
Concepts, meanings	Semantic		
Moral values, norms, commitments	Moral		
Knowledge epistemic justification	Epistemic		
Tastes	Gustatory		
'y' stands for	Forms of relativism		
Individuals	Protagorean		
Cultures	Cultural		
Scientific paradigms	Kuhnian		
Classes, religions	Standpoint		

- (6) (a) A statement is true or false only with respect to a certain parameter.
  - (b) A statement *X* can be simultaneously true with respect to a parameter *Z* and false with respect to another one *Y*, where *Z* and *Y* are different.
  - (c) There is no non-relative criterion according to which the adequacy of the parameter can be judged.

The parameter mentioned in (6)(a) may be any point of reference such as a condition, a context, a belief, a theory, a model, data etc.

By 'absolutism' I will mean the negation of the claims in (6).

#### 2.4 On Tolerance

I introduce the term 'tolerance' by referring to Forst's (2003: 32–41) seminal account that adapts King's (1976: 38–54) terminology. Forst divides the category of tolerance into three closely interwoven components:

- (7) (a) Objection component.<sup>15</sup> Tolerance can be reduced neither to indifference towards the views of others nor to their positive evaluation. The tolerated views are normatively judged to be false or wrong in whatever sense. The persons who tolerate a particular view of others have to motivate the reasons why they object to it and have to be capable of explaining these reasons by relying on norms of rationality and morality. Without this component one could not speak of the tolerance of those views which are not identical with one's own, but merely of indifference towards them or of their acceptance.
  - (b) Acceptance component.<sup>16</sup> The acceptance component includes views which one is ready to accept to different degrees. On the one hand, it includes those which one accepts without objection. But on the other hand, the acceptance component is closely related to the objection component in that it also includes views which one might accept to a certain extent but not without objection. Although the tolerated views are considered to be wrong or false in the sense of the objection component, it is also acknowledged that there are acceptable reasons which may support them.

<sup>&</sup>lt;sup>15</sup> 'Objection component' (King 1976: 44–51), 'Ablehnungs-Komponente' (Forst 2003: 32–34).

<sup>&</sup>lt;sup>16</sup> 'Acceptance component' (King 1976: 51–54), 'Akzeptanz-Komponente' (Forst 2003: 34–37).

Table 2 The domains of tolerance					
		One's own view	Tolerated view	Not tolerated view	
	Objection component		+	+	
	Acceptance component	+	+		
	Rejection component			+	

(c) *Rejection component.*<sup>17</sup> The rejection component indicates the limits of tolerance. It includes the reasons which exclude certain views from those which can be tolerated based on the acceptance component.<sup>18</sup>

According to Forst (2003: 38), there are two dividing lines across these components that delimit three domains. First, *one's own* view includes those elements (but not all) from the acceptance component (7)(b) with which one agrees without objection. Second, the views which are not one's own, but which one *tolerates* comprise elements of the objection component with which one does not agree (i. e., judges as 'false' or 'wrong' in some sense of the word) and which at the same time—according to the acceptance component—one may accept at least to a certain extent without rejecting them. The third domain comprises those views towards which one is *intolerant* because one both objects to them in the sense of (7) (a) and rejects them in the sense of (7)(c). I summarize these domains in Table 2.

In Sect. 3 we will discuss a series of cases which exemplify tolerance and intolerance in linguistics in the sense just explained.

#### 2.5 On the Relations Among Relativism, Absolutism, Tolerance, and Intolerance

At first sight, the relation between the components enumerated in (3) seems to be straightforward. If one accepts that in a certain field of science *there is* pluralism along the lines of (5), then the *relativity of truth* in the sense of (6) also seems to be acceptable: namely, the fact that there is no single, absolute truth, but rather, a statement is true or false with respect to a certain *parameter*. Furthermore, if in the sense of (7) one is ready to accept views to a certain extent—but not without objection—which differ from one's own, then relativism is associated with *tolerance* as well.<sup>19</sup> In turn, absolutism seems to be at the same time intolerant.

However, as it has already been touched on in Sect. 1, on closer inspection one has to realize that, against the background of the epistemological discussions as documented in the literature, this kind of reasoning is far from trivially acceptable.<sup>20</sup> Among others, the epistemological discussions focus on the question of whether the pluralism of inquiry does indeed suggest the relativity of truth as well as the tolerance of rival views: if so, in

<sup>&</sup>lt;sup>17</sup> 'Rejection' (King 1976: 38); 'Zurückweisungs-Komponente' (Forst 2003: 37-41).

<sup>&</sup>lt;sup>18</sup> Popper (1966: 265, footnote 4) characterizes what he calls 'the paradox of tolerance' as follows:

<sup>&</sup>quot;Unlimited tolerance must lead to the disappearance of tolerance. If we extend unlimited tolerance even to those who are intolerant [...] then the tolerant will be destroyed, and tolerance with them.".

<sup>&</sup>lt;sup>19</sup> Although 'tolerance' is primarily an ethical term, due to its close relationship to alethic relativism and pluralism, it may be treated on the same epistemological level as the latter.

<sup>&</sup>lt;sup>20</sup> See the following overviews of the discussions on relativism: Hollis and Lukes (1982), Krausz (ed.) (2010), Garcia-Carpentino & Kölbel (eds.) (2008), Hales (ed.) (2011), Baghramian (ed.) (2014). For concise summaries of the problems see, for example, Baghramian & Carter (2015), Boghossian (2006), Irlenborn (2016), Kush (ed.) (2020a), Baghramian & Colina (2020), Kusch (2020b).

what way does it do so, and if not, why not? Currently, in these discussions the arguments against these relations also seem to be substantial in the following respects.

Firstly, *pluralism may motivate both its relativist and absolutist reception.* One may argue normatively that the plurality of inquiry suggests the relativist acceptance of the simultaneous existence of different views and the truths they represent. But, in accordance with absolutism, one may also say that the plurality of views should be delimited, narrowed down, and restricted to only one valid standpoint and the only truth.

Secondly, at the outset, *relativism does not imply tolerance, and* vice versa, *tolerance does not imply relativism, either*.<sup>21</sup> With respect to (7), relativism cannot be tolerant, because it is compatible only with the acceptance component. But one might also argue that relativism may reject certain views, for example that of absolutism. Furthermore, relativism does not exclude the preference of one of the tolerated views (Irlenborn, 2016: 121; Rescher, 1993: 100 ff.). Accordingly, relativism in the sense of (6) and tolerance in the sense of (7) may be but are not necessarily compatible.

Thirdly, *absolutism does not necessarily imply an intolerant attitude, and intolerance does not imply absolutism, either.* At first sight (7) seems to suggest that absolutism is compatible with the objection component and the rejection component of tolerance, but not with the acceptance component. However, it cannot be excluded at the outset that even if an absolutist rejects a view differing from his or hers because it is considered to be false, he or she may acknowledge reasons which do not evaluate the rejected view as irrational and through this, accept its tolerability (Irlenborn, 2016: 121–122).

Thus, from an epistemological point of view, the relation between the categories of pluralism, relativism and tolerance is far more sophisticated than at first sight (3) might suggest. But, even if one accepts that against the background of *epistemological* considerations none of the three categories implies another, it must not be excluded at the outset that in the *practice* of linguistic inquiry the pluralistic nature of linguistics may be associated with the relativistic view of truth as well as with the tolerance of approaches, methods, and terms (as substantial parts of the language of science at issue) which differ from one's own. And it cannot be excluded either that in this practice absolutism may also be a possible reaction to pluralism and, in addition, it may be related to intolerance. These considerations indicate that *the question* (Q) is well motivated because it encourages the *unbiased* reflection on the relationship between pluralism, relativism/absolutism, and tolerance/intolerance *in the practice of linguistic inquiry*.

Turning to linguistics after these general epistemological considerations, as I have already mentioned in Sect. 1, in the next three sections I will choose a *descriptive* perspective. I will describe the views of those linguists who, starting from the fact that linguistics is pluralistic, evaluate their discipline either in a relativist or in an absolutist fashion. In accordance with the descriptivity of this and the next two sections, I will take sides neither for nor against relativism or absolutism. I will adopt an impartial attitude without the intention of criticizing, attacking, affirming, accepting, or rejecting the views to be exemplified.

I call the manifestations of these views in linguistics *naïve*. Namely, (Q) is a *metatheoretical* problem whose solution requires a metatheoretical model based on the perspective of epistemology or the philosophy of science. But neither the relativistic nor the absolutistic attitude—as they can be documented in the statements of linguists—make use of metatheoretical tools related to the epistemological context sketched above. Rather, both remain within the boundaries of object-scientific research restricted to the self-reflection of the working linguist on his or her everyday activity. Moreover, even if linguists take sides

<sup>&</sup>lt;sup>21</sup> For a concise discussion of the arguments see Ressler (2008).

for relativism or absolutism in this way, they do not relate their particular standpoint to the problems which have been discussed in epistemology and the philosophy of science with respect to these views; they do not touch on any of the different approaches to relativism and absolutism discussed explicitly in the epistemological literature; they do not assess the conclusions that might be drawn from their self-reflection along the criteria the epistemological literature presupposes; and they do not consider the seriousness of the challenges that the different variants of relativism and absolutism are exposed to. I intend to use the term 'naïve' in the above sense to be *value-free* insofar as I do not evaluate the naïve nature of views as good or bad. Although the examples I will mention in Sects. 3–5 seem to be randomly selected, a more systematic analysis of a large corpus of the linguistic literature would not yield significantly different insights than those which the following reasoning will reveal.<sup>22</sup>

## 3 Relativistic and Absolutistic Reactions to (5)(a)

#### 3.1 Introductory Remarks

With respect to (5)(a), the pluralism of linguistics manifests itself in different domains. There is a pluralism of linguistic theories, of the methods of linguistics, and of basic terms of the scientific language of linguistics such as 'data' and 'evidence' insofar as they are associated with different meanings. If epistemological considerations raise the question of how the pluralism of scientific inquiry is related to relativism and the toleration of views which differ from one's own, and if we project this problem onto linguistics, then in order to answer (Q), we have to analyse the relation between pluralism, relativism and tolerance with respect to the theories, the methods and the terms of linguistic inquiry just mentioned.

In each case, there seem to be two straightforward reactions to pluralism, as already mentioned in Sect. 2.5. One is the *absolutistic and intolerant* standpoint: if linguistics is a discipline consisting of a multitude of partially incompatible theories, methods, and terms, then one *may* (but does not necessarily) strive for the unification of the whole discipline by overcoming pluralism. That is, a single approach should be dominant. Its proponents strive to find *the only truth* and to exclude all other approaches which try to undermine the general acceptance of the dominant approach.

Another is the *relativistic and tolerant* conclusion drawn from pluralism: in accordance with the reasoning I have summarized in Sect. 2.5, from the pluralism of linguistics it *may* (but does not necessarily) follow that truth is relative and that linguistics should tolerate the co-existence of different theories, methods and terms, some of which are compatible with each other, while others are not.

Let us start from these two standard reactions to the pluralism of linguistics, and investigate whether besides them there are also more sophisticated views such as those I touched on in Sect. 2.5.

<sup>&</sup>lt;sup>22</sup> The literature to be cited does not ask the question of exactly what is meant by 'truth' and which theory of truth is to be applied to which linguistic theory under which conditions. I assume that the literature at issue presupposes the correspondence theory of truth.

#### 3.2 On the Pluralism of Linguistic Theories

A spectacular example of the *absolutistic* reaction to the pluralism of linguistic theories is the application of Kuhn's (1970) seminal ideas. From the 1970s on, both historians of linguistics and linguists themselves argued for the claim that the emergence of generative linguistics was the result of a 'scientific revolution' and that Chomsky's achievement established a 'paradigm' in Kuhn's sense.<sup>23</sup> This claim represents an extremely absolutistic view, for the application of Kuhn's approach suggests that the current version of generative linguistics is to be legitimatized as the *only* kind of linguistics that leads to the truth and that it should dominate the whole discipline (see e.g., Lakoff, 1989, and especially (1)(a)). In order to avoid misunderstandings, it is worth remarking that this state of affairs applies to *the application* of Kuhn's categories to linguistics, and not to Kuhn's approach itself; I do not claim the absolutism of Kuhn's approach. On the contrary: as is well known, over the decades, one of the constant charges against Kuhn's approach was its alleged relativism.

At the same time, the absolutistic application of Kuhn's approach to linguistics was also *naïve*, in the sense I have introduced this term in the previous section. The lack of historiographical, metatheoretical and epistemological reflection is witnessed by the fact that the proponents of generative linguistics judged four of its versions to be revolutionary in Kuhn's sense: Chomsky (1957, 1965, 1981, 1995) have been assumed to have triggered Kuhnian scientific revolutions in linguistics. Although numerous publications speak of the 'Chomskyan paradigm' and 'Chomsky's revolution' in these cases, *none of them* has carried out detailed and competent analyses proving that—provided that one accepts Kuhn's approach in general at all—generative linguistics meets the conditions according to which it may justifiably be evaluated as a paradigm that has come into being as the result of a scientific revolution.<sup>24</sup> However, neither the continuous revolutionary nature nor the uncertainty of the identification of the revolutionary work are in accordance with Kuhn's claims (Joseph, 1995).

There is a vast and well-known literature witnessing that the naïve absolutism of generative linguistics is associated with intolerance culminating in attacks on other approaches. For example, in Harris (1993, 2021) detailed overviews are given of the 'linguistics wars' which Chomsky's adherents conducted against Neo-Bloomfieldian linguists and later against the Generative Semanticists (see also Huck & Goldsmith, 1995). Or, according to Lakoff (1989: 967), it was Chomsky who introduced "the tradition of contentious and acrimonious adversarial argumentation" into linguistics.

Nevertheless, the absolutism of generative linguistics provoked similar reactions from its opponents: the result is *the fight of the absolute against the absolute*. By way of illustration, let us mention, for example, that in many contributions Sampson takes sides for corpus linguistics, rejecting the whole of generative linguistics. His perspective is naïvely absolutistic in the same way as that of generative linguistics: according to him, corpus linguistics is the only approach that can lead to true statements, although he does not support

<sup>&</sup>lt;sup>23</sup> Generative linguistics consists of a series of competing approaches (see e.g., Kertész et al., (eds.) 2019 for their comparative overview). In what follows, I will restrict 'generative linguistics' to the Chomskyan trend. For the debate on the question of whether generative linguistics triggered a Kuhnian revolution or not see Kertész (2010a).

<sup>&</sup>lt;sup>24</sup> The most enthusiastic attempt to defend the application of Kuhn's ideas to linguistics against counterarguments is ten Hacken (2007). However, ten Hacken's argumentation is seriously flawed because it is built on fallacies such as straw man, *argumentum ad verecundiam* (appeal to authority) and *contradictio in adiecto* (see Kertész 2010a, 2010b).

his claims by careful metatheoretical argumentation. Sampson's naïve absolutism is intolerant as well: "Linguistics will not move forward healthily until the generative approach is *bypassed as the pseudoscience it is*, with its remaining practitioners retiring from academic life and new recruits to the discipline ignoring its ethos, assumptions, and alleged results." (Sampson, 2007: 122., emphasis added; see also Sampson & Babarczy, 2014; and the controversy in Stefanowitsch & Gries, (eds.) 2007).

Similar statements can be quoted from many other subfields of linguistics. For example, there have been substantial differences between the way generativism, and Greenberg's approach investigate language universals and typology. Although the possibility of their cooperation must not be excluded at the outset (Baker, 2010), the naïve absolutism of views associated with the Greenberg tradition might be instructive. Haspelmath (2019; emphasis added) writes:

- (8) (a) "In grammatical research circles, the following is a typical narrative: Different 'approaches' have different strengths, but one has to choose one of them each framework gives us a set of assumptions and technical terms, and it also provides comfort and support (as well as a community of friendly reviewers). So, one needs a framework to do theoretical grammar research, and one has to make a choice among the existing ones. But this is not normal science.
  - (b) Normal science does not consist in continuing a tradition, but in finding *true facts and true explanations*."

In (8)(a) Haspelmath caricatures and rejects the relativistic attitude associated with the pluralism of linguistics, while (8)(b) puts forward his absolutistic and intolerant stance, which, except for his own view, rejects *all research frameworks* irrespective of which tradition they represent. (8) is the extreme denial of Lakoff's claims I have quoted in (1). The strikingly naïve nature of Haspelmath's view is highlighted by the fact that—after in his comment Östen Dahl remarked that Haspelmath's term 'normal science' "seems almost the opposite of the one proposed by Thomas Kuhn" (op. cit.) – Haspelmath responds: "I admit that *I haven't read Kuhn* [...]" (op. cit.; emphasis added).

However, the situation is more complex: absolutism, as already anticipated in Sect. 2–2.5, is not necessarily coupled with intolerance. For example, in (9)(a) Chomsky seems to be surprisingly more liberal with respect to sociolinguistics than one would expect if one is aware of his extreme absolutism. In this respect it is instructive how Chambers (2005) characterizes Chomsky's attitude toward sociolinguistics in (9)(b). (9) (b) witnesses that there may be cases in which an absolutist like Chomsky rejects a view differing from his because it is considered to be false, but he still does not evaluate the rejected view as irrational and through this, accepts its tolerability (see also Sect. 2.5).

- (9) (a) "There is undoubtedly *much to learn* about the social uses of language, for communication or for other purposes. But at present there is not much in the way of a theory of sociolinguistics, of social uses of languages, as far as I am aware" (Chomsky, 1984, online version; emphasis added).
  - (b) "For a linguist of my background and training, it was reassuring to see that Noam Chomsky, the most anti-social of theoreticians in his early writings, quietly revised his thinking later on, surely under the weight of evidence emerging from sociolinguistics (though he never said so). [...] Chomsky has never been inclined to state explicitly that he is revising his stance on any issue." (Chambers, 2005; emphasis added)

In the following paragraphs I will illustrate the naïvely relativistic and tolerant reaction to the pluralism of linguistic theories.

As the first instructive example, let me refer to the quotation in (1)(b) again. Robin Lakoff was one of Chomsky's disciples and turned later against him as an adherent of the Generative Semantics movement. It might be interesting to compare this example with the following one, which appeared at the time of the controversy between Generative and Interpretive Semanticists. Emmon Bach was the author of the first introduction to generative linguistics and, of course, he accepted its current version in the early 1960s. After comparing Chomsky's approach with that of the Neo-Bloomfieldians, Bach (1965: 119; emphasis added)—unexpectedly, in opposition to most followers of Chomsky, and in accordance with Lakoff (1989)—states that "theories about the world are *not absolute truths*". In the spirit of relativism, he concludes that "[...] controversy is the breath of science and when we all agree it will be only because our science is dead" (Bach, 1965: 128).

A further example from present-day literature is the introductory paper in a monumental three volume handbook whose aim is to give a detailed analysis of the nature and scope of syntactic research. The reason why I mention this example is that, due to the focus of this work, one might assume that the editors who authored the introductory article possess a thorough knowledge of the main issues of contemporary syntax and therefore their judgments might be well founded. After they have sketched the pluralism of syntactic theories and alluded to the heated debates among the representatives of in part antagonistic schools of syntax, they conclude:

- (10) (a) "[...] we would like to make clear that controversy in itself does not mean that a field is unripe or uninteresting, but to the contrary that *disagreement is an expression about the relative maturity of syntax*.
  - (b) [...] In fact, we take controversial issues in syntax to be an indicator of *scientific progress*. So, it is *good* that there is controversy." (Kiss & Alexiadou, 2015: 2; emphasis added)

According to Kuhn (1970: 11), pluralism indicates that the discipline at issue is *imma*ture<sup>25</sup>: if a discipline did not have a revolution and has no paradigm, then it does not meet the standards of 'mature science'.<sup>26</sup> However, according to (10)(a) —and in contradiction to Kuhn's claim—pluralism bears witness to scientific progress in syntax and the *maturity* of this discipline. Moreover, (10)(b) suggests the need for both relativism and tolerance in syntax, which is the opposite of what the naïve applications of Kuhn's approach to linguistics maintain.

What can also be documented is the rejection of tolerant relativism by intolerant absolutism. This means that the absolutist cannot revise her perspective in a way which would enable her to leave the battlefield on which the absolutists' fight takes place: the absolutist *does not understand* that a particular view is tolerant and relativistic, and assumes—falsely, of course—that the latter is also one of the absolutistic approaches that fights against his or her own absolutism. The reception of the comparative handbook of syntactic theories (Kertész et al. (eds.) 2019) may be an instructive example. On the one hand, some reviewers *realize and understand* that the handbook gives an unbiased

<sup>&</sup>lt;sup>25</sup> Kuhn writes:

<sup>&</sup>quot;[...] in the *early stages* of the development of *any science* different men confronting *the same* range of phenomena, but *not usually all the same* particular phenomena, describe and interpret them in *different* ways." (Kuhn 1970: 17; emphasis added).

<sup>&</sup>lt;sup>26</sup> Kuhn writes:

<sup>&</sup>quot;Acquisition of a paradigm and of the more esoteric type of research it permits is a sign of *maturity* in the development of *any given scientific field*." (Kuhn 1970: 11; emphasis added).

# and impartial overview of the plurality of syntactic theories in a clearly relativistic and tolerant fashion:

- (11) (a) "It is true that generative grammars form a major part of this selection, and Chomskyan generative grammar in particular is a central and recurrent point of reference in the metatheoretical chapters in Part II. But this attention to generative grammar(s) does reflect *fairly* on the current state of affairs if relative prominence of a theory or a paradigm is measured in terms of the number of its practitioners, or of the publications and conference talks that are couched in the framework. [...] *topic selection within the volume certainly shows no bias* in this weighted sense of prominence." (György Rákosi, 2020: 389)
  - (b) "As the editors indicate, it would enable practitioners of specific syntactic theories to gain knowledge about the work carried out *in different approaches*. This would undoubtedly facilitate *communication across frameworks and lead to better mutual understanding*. The volume encourages readers to open up to new possibilities and expand their horizons. The most prominent strength of the book is that *it promotes "metatheoretically reflected object theoretical research*". It illustrates the importance of metatheoretical reflection for grammarians very convincingly. The sort of self-reflection on both scientific methods and metatheories, which is suggested in this volume, *would certainly help improve research practices of individual syntacticians*." (Mercan, 2020; emphasis added)
  - (c) "[...] this volume, more than any other single publication, has helped me to appreciate not only how fundamentally different approaches to syntax make sense on their own terms but also how they all in their diversity contribute to the overall goal of understanding language." (Boyland, 2021: 425)

On the other hand, it is exactly the tolerant relativism of the handbook that the authors of two further reviews *do not understand*. One of them criticizes the volume because it does not give preference to usage-based construction grammar, the framework in which the author of the review works, and because it does not adapt his own absolutist rejection of generative syntax (see (12)(a)). It is worth comparing (11)(a) with (12)(a), which seem to be diametrically opposed. In contrast, but no less absolutistically, the authors of a further review approach the pluralistic, relativistic, and tolerant conception of the handbook as put forward in the introductory and the concluding chapter from the point of view of their bias toward generative syntax (see (12)(b):

- (12) (a) "My general remark with respect to the volume is that latently it treats the formalist-modularist approach to language as a starting point; and in connection with this, *it gives too much space to generative grammar and less to functional-cognitive linguistics (more precisely, to usage-based construction grammar) than the latter should have deserved.* [...] Each of the metatheoretical chapters deals with, either entirely, or in part, with generative linguistics by the way, in most cases examining its conception very critically while *only one* chapter discusses substantially construction grammar as the coherent alternative to the Chomskyan approach, a kind of rival paradigm [...]". (Imrényi, 2019: 480; emphasis added; translation by the present author)
  - (b) "This extensive and important volume of 21 chapters is reviewed by two *committed 'Chomsky-ans'*. [...] we are inadvertently somewhat *biased*, to the extent that we approach the volume *from the vantage point of our respective backgrounds*." (Pléh & Roszkowski, 2020: 383; emphasis added)

In sum, the prototypical examples discussed in this section revealed the *different* naïve ways in which the relativistic and absolutistic reactions to the plurality of linguistic *theories* may be related to tolerance and intolerance.

In the next section I will turn to the consequences of the plurality of methods.<sup>27</sup>

#### 3.3 On the Pluralism of Linguistic Methods

It was Chomsky who introduced the idea of the 'Galilean style of science' into linguistics. From the late 1970s on, citing Weinberg (1976), Chomsky put forward this idea in a series of publications (see e.g., Chomsky, 1980: 2, 2002: 98–102 etc.). The Galilean style of linguistics, as Chomsky interprets it, is built on three pillars (see e.g., Botha, 1983; Kertész, 2012; Kertész & Rákosi, 2022). One of them is 'the principle of epistemological tolerance', which says that "[a]pparent counterexamples and unexplained phenomena should be carefully noted, but it is often rational to put them aside pending further study when principles of a certain degree of explanatory power are at stake" (Chomsky, 1980: 2). Another pillar is the conviction that nature is mathematically structured, and it must be described using mathematical methods. Finally, one should seek for 'deep' explanations by abstracting from the immediately observable surface phenomena.

Propagating the Galilean style of science in linguistics is a clear case of methodological absolutism. For example, Chomsky (2002: 101–102; emphasis added) illustrates this method by examples from the history of mathematics and then states that "what's true of mathematics is going to be *true of everything*". The methodology of the Galilean style of science should be integrated into the everyday practice of linguistic research and it should become *the only* method that will eventually lead to truths. This kind of absolutism is, therefore, associated with methodological intolerance.

The other extreme assumes that the pluralism of linguistic methods is a merit that should be preserved and used in order to gain more adequate findings. For example, the editors of *Methods in pragmatics* (Jucker et al. 2018: ix; emphasis added) "strongly believe that this diversity, which some might perhaps see as a lack of unity and coherence, is, in fact, *enriching and empowering*. It is the *opposite of a dogmatic adherence to one single methodology*, one *single* theoretical approach or one *single* type of data of analysis."

The diversity of methods can be handled by the integration of different methods. This view has been highlighted primarily in the debate on linguistic data and evidence, which I will touch on in the next section. In the present section I illustrate it by the quotation in (13), which represents a well-known standpoint in this debate<sup>28</sup>:

- (13) (a) "From an empirical perspective, there cannot be 'one perfect method' for the investigation of linguistic knowledge.
  - (b) Rather, it is important to recognize the limitations of individual methods and to capitalize upon the insights that can be gained by their combination." (Bornkessel-Schlesewsky & Schlesewsky, 2007: 331)

(13)(a) indicates the rejection of absolutism with respect to methods, and (13)(b) implies both relativism and the tolerance of the diversity of methods.

Nevertheless, within the rich inventory of reactions to the pluralism of methods, there are also views that, because of their eclectic nature, highlight the naïvety of reflection. Special attention is merited if standpoints of this kind appear in works whose aim is to evaluate current trends and to pave the way for the possible perspectives expected to govern future

<sup>&</sup>lt;sup>27</sup> In this context it may be useful to remark again that the categories 'absolutuistc and intolerant' vs. 'relativistic and tolerant' are not value judgments but neutral descriptions of positions that linguists assume.

<sup>&</sup>lt;sup>28</sup> In the quotation 'method' is to be understood as 'data processing method'.

research. As an example of the eclecticism of such a work I again refer to the three-volume handbook of syntax edited by Kiss and Alexiadou. In one of the introductory chapters the authors conclude that it is useful to raise problems from different points of view and to consider the diverging views of different camps. This suggests the *relativistic and tolerant* view. As opposed to this, they also maintain that "[i]f the results gained are similar, they are so not because they are 'notational variants', but perhaps because they represent the limit of current expertise in the worst case, *the true nature* of the object under investigation in the best" (Kiss & Alexiadou, 2015: 14; emphasis added). The latter conclusion bears witness to the authors' belief in the existence of a *unique truth*.

#### 3.4 On the Pluralism of the Terms 'Linguistic Data' and 'Linguistic Evidence'

#### 3.4.1 The Standard View of Linguistic Data and Evidence

As I have already noted, the third domain of (5)(a) is the language of scientific inquiry. It includes the theoretical terms applied by theories.<sup>29</sup> I will use the example of the terms 'data' and 'evidence' in linguistics to illustrate the plurality of this type and its consequences for relativism/absolutism and tolerance/intolerance.<sup>30</sup>

The history of linguistics has been accompanied by a series of discussions rooted in problems of the philosophy of science. Although these discussions manifested themselves in many specific sub-problems and in the diversity of the possible solutions proposed for them, their common core has been the question of whether or not linguistics is an empirical discipline: if so, in what sense is it an empirical discipline, and if not, should its practitioners strive to turn it into one?<sup>31</sup> The current version of this series of debates focuses on the structure of the theoretical terms 'linguistic data' and 'linguistic evidence' as well as their role in linguistic theorizing.

This discussion can be traced back to the 1970s when the emergence of computational methods laid down the technical foundations of electronical data bases rooted in rich corpora. Corpus linguists did not consider data that were based on the linguist's native speaker intuition to be empirical. For example, Sampson, who is one of the outstanding personalities of corpus linguistics, already noted in the 1970s: "If linguistics is indeed based on intuition, then it is *not a science*. Science relies exclusively on the *empirical*" (Sampson, 1975: 60; emphasis added). However, in opposition to the development of corpus linguistics, generative linguists still held the view that collecting and processing vast amounts of corpus data stemming from language use was uninteresting and trivial. As an example, let us mention that Chomsky—almost three decades after Sampson's verdict quoted above—characterized corpus linguistics as follows:

(14) (a) "Corpus linguistics doesn't mean anything. It's like saying suppose a physicist decides, suppose physics and chemistry decide that instead of relying on experiments, what they're going to do is take videotapes of things happening in the world and they'll collect huge videotapes of everything that's happening and from that maybe they'll come up with some generalizations or insights. Well, you know, sciences don't do this.

<sup>&</sup>lt;sup>29</sup> Kertész (2004) discusses the problem of theoretical terms in linguistics from the point of view of the sociology of knowledge.

<sup>&</sup>lt;sup>30</sup> In order to avoid unwanted ontological connotations, I will avoid the use of 'concept' and 'notion', which are ontological entities, and will speak of 'terms' as elements of the metalanguage.

<sup>&</sup>lt;sup>31</sup> See Kertész and Rákosi (2019, 2022) for an analysis of these discussions.

(b) [...] An experiment is called work with an *informant*, in which you design questions that you ask to the informant to elicit data that will bear on the questions that you're investigating and will seek to provide evidence that will help you answer these questions that are arising within a theoretical framework. Well, that's the same kind of thing they do in the physics department or the chemistry department or the biology department. To say that it's *not empirical* is to use the word 'empirical' in an extremely odd way." (Andor, 2004: 96–97; emphasis added)

The last sentence of (14)(a) is the exact opposite of Sampson's claim quoted in the paragraph that precedes it: Sampson and Chomsky question the 'scientific' nature of each other's term 'data'. Furthermore, (14)(b) shows that they interpret the term 'empiricalness' very differently, too.<sup>32</sup>

But, however great the difference between the meaning of the corpus linguists' and the generative linguists' term of 'data' and 'evidence' was, both camps seemed to maintain a few *common assumptions*, which for the sake of later references, I summarize in (15) as the Standard View of Linguistic Data and Evidence (see Kertész & Rákosi, 2019: 13 ff for a detailed discussion)<sup>33</sup>:

- (15) (a) Not all linguistic theories can be classified as empirical, relevant, and legitimate, but only those which make use of data considered to be *appropriate*. For the generativists, these are *grammaticality judgments* stemming from the intuition of native speakers. For corpus linguists, these data are processed from *corpora*. At the same time, both camps reject the data type preferred by the other camp.
  - (b) It is *the source* of the data that decides which data count as appropriate.
  - (c) Neither of the camps considered its own data processing methodology problematic. In their opinion it is sufficient to control the reliability of data by following a few methodological rules.
  - (d) The relation between the data and the hypotheses is considered in both cases to be governed by general methodological rules, although the rules assumed to be general were different.<sup>34</sup>
  - (e) *Evidence* is considered to be an empirical datum which plays a specific role in inquiry. In particular, it is assumed to be *reliable and directly given* (i.e., without the reference to theoretical frameworks). Therefore, it can be treated as an empirical fact which constitutes the basis of the justification of hypotheses.

It is easy to see that both camps within the Standard View of Linguistic Data and Evidence evaluate data and evidence in an absolutistic and intolerant sense. However, from the turn of the millennium on, the Standard View gradually became untenable, accompanied by the emergence of a wide discussion.<sup>35</sup>

 $<sup>\</sup>overline{^{32}}$  For the classical characterization of these two camps, see Fillmore (1992).

<sup>&</sup>lt;sup>33</sup> In that period of the history of generative linguistics which reflects the Standard View of Linguistic Data and Evidence it was the linguist's own native speaker intuition that counted as the main data source. But even in the 'experiments' mentioned in (14)(b) it was the intuition of native speakers which the data—i.e., grammaticality judgments—came from. The literature in footnote—35 including criticism within generative linguistics—questions the reliability of data based on the intuition of informants and does not accept their 'experimentary' nature. See also Kertész & Rákosi (2019, 2022) on these issues.

 $<sup>^{34}</sup>$  In the case of corpus linguistics and the first two decades of generative linguistics, the relation of data and hypotheses was primarily unidirectional: either as induction leading from data to hypotheses or as deduction leading from hypotheses to data. From the 1980s on Chomsky has advocated the principle of 'epistemological tolerance', which facilitates the revision of the data in the light of later stages of theory formation. This development of generative linguistics contributed to the 'new view' as mentioned in (16)(d) in Sect. 3.4.2.

<sup>&</sup>lt;sup>35</sup> See, for example, Schütze (1996), Lehmann (2004), Kepser and Reis (eds.) (2005), Penke and Rosenbach (eds.) (2007), Featherson and Winkler (eds.) (2009), Sternefeld (ed.) (2007), Stefanowitsch and Gries (eds.) (2007). See Kertész and Rákosi (2019) for the detailed analysis of the discussion.

#### 3.4.2 The 'New View' as Exemplified by Lehmann (2004)

The novel insights gained in the first decade of the new millennium cannot be generalized mechanically for at least two reasons. Firstly, because it is not the case that all participants in the discussion share them, and because different authors interpret and evaluate the new ideas differently. The absolutistic view is still present. For example, even today Sampson sticks to the absolutistic interpretation of corpus data and to the intolerant rejection of grammaticality judgments rooted in the intuition of native speakers (Sampson & Babarczy, 2014; Sampson, 2007). Others, while preferring corpus data, admit that the electronic gathering and processing of data that are based on corpora and that apply statistical methods cannot dispense with the linguist's grammatical intuition (see the papers in Stefanovitsch & Gries, (eds.) 2007). For the time being, the new view seems to be represented predominantly in highly abstract considerations and declarations, rather than in the practice of research. For example, the contributors to the comparative handbook of syntactic theories declare the legitimacy of the integration of several data types, but in practice they restrict their analyses in most cases to only one data type, namely, grammaticality judgments (Kertész et al., (eds.) 2019).

Secondly, even the views of one author on the nature of linguistic data may include both remnants of the standard view and ideas characteristic of the new view. In order to illustrate this, I mention Lehmann's (2004) account, which is one of the most ingenious and most important contributions to the topic (see also Kertész & Rákosi, 2019 Chapter 5 for discussion). Lehmann analyses the diversity of linguistic data based on a rich set of criteria and does not question the legitimacy of this diversity.

In his opinion, data are not given at the outset. Rather, they are construed by the researcher. Accordingly, he treats data as 'semiotic representations' of certain aspects of speech events. The identification of even the simplest linguistic data requires a method that makes use of abstraction and semiotic processes, although they refer to entities that are independent of the researcher.

Lehmann calls representations of speech events with spatiotemporal coordinates 'primary data'. 'Secondary data' are more abstract because they cannot be linked to a certain place and time and thus do not have historical identity. Primary data are regarded as tokens while secondary data include types of primary data. Another group of secondary data includes metalinguistic statements such as, for example, sentences preceded by an asterisk, thus marking ungrammaticality, or 'negative data' which state the non-existence of some construction. Such data combine object- and metalanguage and constitute higher order semiotic objects.

In addition, 'raw data'—which are non-symbolic representations—should be distinguished from 'processed data' i.e., symbolic representations. Raw data are iconic representations of speech events. For example, tape recordings count as raw data. However, normally it is not raw data that linguists work with. Rather, linguists produce 'processed data' insofar as they convert raw data into symbolic representations which focus on specific properties of speech events while ignoring those which seem to be irrelevant from the point of view of the research at issue. Processed data are constructs that narrow down speech events to those properties deemed relevant and by doing so they may even distort them. Transcripts of utterances in conversation analysis or tree diagrams representing the syntactic structure of sentences are examples of processed data.

Lehmann also distinguishes between 'original recordings' and 'derived representations'. Whereas the former rest directly on speech events, the latter are rooted in other representations, which are data as well. For example, for the linguist XY, who conducts acoustic phonetics, it is the recording of utterances that counts as data. The linguist ZQ, who is a segmental phonologist, will consider the transcription of the recording based on the symbols of the International Phonetic Alphabet as data. The post-generative phonologist PR can complement this symbolic representation by further symbols marking suprasegmental relations. If UV is a German conversation analyst, then he or she uses the transcription system GAT ('Gesprächsanalytisches Transkriptionssystem') with the help of which certain properties of the record—such as 'turn taking' or 'repair' or the thematic relevance of certain structural units—can be represented, and these symbolic representations will be treated as data. LM, as a grammarian, can use these representations for elaborating the grammar of the spoken version of the Saxonian dialect.

Lehmann's sophisticated analyses of the structure of data along the above lines may motivate the insight that linguistic data work merely as points of departure and may turn out to be unreliable, insufficient, or even useless (see e.g., Lehmann, 2004: 207). Lehmann's typology seems to illustrate the relativity of data. What one linguist treats as 'data' may be the result of data analysis for another. Deciding what counts as data does not depend on the inherent properties of the information at issue. Rather, it is influenced by the purpose, the tools, the interest, the conceptual framework, and the problems of the investigations conducted.<sup>36</sup>

Lehmann's instructive contribution exemplifies how intricate the treatment of the terms linguistic 'data' and 'evidence' is. While on the one hand Lehmann's typology reveals their *relativity*, on the other hand, he seems to assume that—by making use of the methodological principles borrowed from the Standard View of the Analytical Philosophy of Science<sup>37</sup>—certain data can still be treated as firm 'facts' (Lehmann, 2004: 184 f.), which suggest an *absolutist* view. These principles not only prescribe normatively the search for and the processing of data that correspond to 'facts', assumed to be absolute 'givens', but they also postulate that it is possible to gain 'perceptible' data that may lead to *true* hypotheses.

The controversy on the nature of linguistic data and evidence as it has been conducted during the past two decades has highlighted novel insights which pave the way for a significant turn to be contrasted with the Standard View of Linguistic Data and Evidence. These progressive insights are, however, not acknowledged by all authors; and, as I have already mentioned, even if they are accepted by several of them, they cannot be generalized. The following ideas appear in one or more contributions (see also Kertész & Rákosi, 2019: 41 ff):

(16) (a) The *pluralism* of linguistic data and evidence has to be acknowledged instead of preferring only one type of data.

<sup>&</sup>lt;sup>36</sup> The theory dependency of data is one of the most powerful arguments that can be put forward in favour of the relativism of scientific theorizing. It was raised in the works of Pierre Duhem, Paul Feyerabend, Norwood Russell Hanson, Willard Van Orman Quine and Thomas S. Kuhn.

<sup>&</sup>lt;sup>37</sup> For example, a recent textbook characterizes the Standard View of the Analytical Philosophy of Science as follows:

<sup>&</sup>quot;The two philosophies, logical positivism and Popper's falsificationism, are usually taken together as forming what is known as the classical tradition. Sometimes the term 'positivism' is used. At other times, it is called the *standard* or the orthodox *view*. These latter expressions are apt." (Hung, 2014: 311; emphasis added).

Kertész & Rákosi, (2019) discuss the relation between the Standard View of the Philosophy of Science and the Standard View of Linguistic Data and Evidence.

- (b) The source of the data is *not decisive*. Rather, it is only one factor among others, such as the structure, the complexity, the directness, or the abstractness of data.
- (c) *All* data types are problematic. Therefore, it is necessary to clarify their structure and function precisely.
- (d) The relation between the data and the theory is not linear, but *cyclic*.
- (e) Linguistic data are theory and problem dependent. Those data which are treated as evidence do *not* support or refute the hypotheses unanimously. They are not true with certainty, and they may generate contradictions.

Interestingly, even outstanding personalites of generative linguistics—see e.g. Haider (2016, 2009, 2018), Sternefeld (ed.) (2007), Kepser and Reis (2004) and Sternefeld and Richter (2012) etc.—furthered the tendency toward (16). However, the camp of generative linguistics is diverse in this respect, for the tendency toward the relativist view related to data and evidence does not characterize generative linguistics uniquel. For example, some of its renowned proponents still advocate grammaticality judgments as the only data type leading to *truths* in an extremely absolutistic and intolerant manner:

(17) "More than five decades of research in generative linguistics have shown that the standard generative methodology of hypothesis formation and empirical *verification* via *judgement elicitation* can lead to a *veritable* goldmine of linguistic discovery and explanation." (Dikken et al., 2007: 336; emphasis added)

The 'new view' in (16) seems to speak for a relativistic treatment and evaluation of data and evidence. Nonetheless, in the last decade the controversy has been further enriched by the fact that besides data stemming from intuition and corpora, experimental data have also been focused on.<sup>38</sup> Some proponents of experimental linguistics seem to be inclined to associate the increasing success of research based on experimental data to the progress of linguistics, thus rejecting other data types in an absolutistic manner (see e.g. Noveck, 2018; Noveck & Sperber, 2007 etc.).

With respect to the question (Q), the upshot of the current controversy on linguistic data and evidence is that the 'new view' as summarized in (16) is gradually gaining relevance, although the absolutism of the Standard View of Linguistic Data and Evidence is still present. The new insights do not undermine the Standard View unanimously. Nevertheless, they seem to converge towards a vague tendency to prefer a relativistic, pluralistic, and more tolerant treatment of data and evidence in linguistic research.

#### 4 Relativistic and Absolutistic Reactions to (5)(b)

The reduction of a theory to another is one of the central topics of the philosophy of science that had already been discussed in the Vienna Circle and that is still in the focus of discussions. The classical model of theory reduction was put forward in Oppenheim and Putnam (1958) and Nagel (1961). The central idea is that a theory A is reduced to a theory B if every law of A can be inferred from the laws of B. One of the current definitions says:

<sup>&</sup>lt;sup>38</sup> See Sprouse and Schütze (2020) for a survey of novel data types used in grammar. For example, among experimental data they discuss 'self-paced reading', 'eye tracking', 'electroencephalography data', 'magnetoencephalography data'. For syntheses of the state of the art of current experimental linguistics see e.g. handbooks such as Goodall (ed.) (2021) and Jucker et al. (eds.) (2018).

(18) "Theory A is reducible to theory B if theory B explains the phenomena previously the province of theory A." (Garfinkel, 1981: 52; emphasis added)<sup>39</sup>

Theory reduction can take place within a given discipline but also across disciplines.<sup>40</sup> Below I will exemplify both cases.

In one of the programmatic contributions to Lexical-Functional Grammar Joan Bresnan concludes her line of reasoning as follows:

- (19) (a) "[...] the lexical theory of passivization provides more convincing and revealing explanations of these phenomena than transformational theories. Moreover, [...] the major results of the lexical theory are unexplained by transformational theories of passivization.
  - (b) First, in the lexical theory passivization has a universal characterization which reveals its invariant form across languages. This result follows because the rule of Passivization changes the lexical assignments of grammatical functions to predicate argument structures and because grammatical functions are independent of language particular realizations in terms of syntactic structure and morphological case. Second, passivized verbs undergo lexical processes of word formation (such as Adjective Conversion and compounding), which means that these verbs must be represented as passives in the lexicon. This result follows because only lexical structures can be analyzed by word formation rules, given the lexicalist hypothesis and the near-decomposition of grammars into lexical, syntactic, and other components.
  - (c) Transformational theories cannot account for these facts without abandoning the attempt to define the intransitivity of passives in structuralist terms. But even if this were done, the lexical theory remains the more explanatory account, for in the lexical theory Passivization could not be *other* than a lexical rule. [...]
  - (d) Through its greater restrictiveness, the lexical theory advances us further toward our ultimate goal of explaining how the rich and intricate representational structures of language can possibly be acquired and used by our species with such facility. This is so because, unlike transformational grammars, lexical grammars have proved to be recursive [...], learnable [...], realistically parsable [...], and 'producible'. They therefore provide a stronger basis than ever before for a psychologically realistic theory of grammar." (Bresnan, 1982: 80–81; italics as in the original, bold emphasis added)

The quotation compares the capability of two different theoretical frameworks within generative grammar to analyse English passive constructions, and it draws the conclusions the comparison yields. (19)(a), (c) and (d) say that with respect to these constructions, Lexical-Functional Grammar can explain everything that Chomsky's transformational grammar can, but, in addition, it provides explanations for phenomena for which transformational grammar cannot. (19)(b) summarizes the arguments that support this claim. Thus, the quotation mirrors the definition of theory reduction along the lines of (18). According to Bresnan, since the transformational theory can be reduced to the lexical-functional, the latter should be preferred to the former. Bresnan's argumentation is a prototypical example of the naïvely absolutistic and intolerant way of handling theory reduction *within* linguistics.

There has been a tradition of the—philosophically unreflected, naïve—attempt to transgress the boundaries of linguistics by reducing *it* (that is, not a particular theory but the discipline itself) to some discipline *outside* linguistics. Inspired by Darwinism, historicalcomparative linguistics, as its terminology witnesses even today, approached Darwinist biology. The methodology of Bloomfieldism and Neo-Bloomfieldism was based on the

<sup>&</sup>lt;sup>39</sup> See also Oppenheim and Putnam (1958: 5).

<sup>&</sup>lt;sup>40</sup> The programme of Unified Science is an extreme example of the latter case because it intended to reduce the empirical theories of all disciplines to a single all-embracing and unified theory.

intention to follow the inductivist methodology of the natural sciences.<sup>41</sup> As is well-known, from the beginning of his career on Chomsky has treated generative linguistics as a natural science—moreover, in accordance with his absolutism, by identifying generative linguistics with the whole discipline, he believes that linguistics itself should belong to the natural sciences.<sup>42</sup> However, the answer to the question to which discipline linguistics is to be reduced has changed continuously over the decades. In Syntactic Structures Chomsky advocates the deductive-nomological model of theories whose prototypical manifestation is Newton's mechanics. Then, in his Skinner-review (Chomsky, 1959) as well as in Aspects (Chomsky, 1965) he propagated the reduction of his theory to cognitive psychology, which he contrasted with behaviourist psychology. In accordance with the rise of cognitive psychology, in the Theory of Government and Binding (Chomsky, 1981) and in many further works he intended to reduce his theory to cognitive science. Today, he and his followers try to reduce the current version of generative linguistics-i.e., the Minimalist Programmeto biology (Chomsky, 1995, 2002; Boeckx & Grohmann; 2007; Boeckx & Grohmann eds., 2013 etc.). However, in these cases it is not clear to which theory within the chosen discipline the very versions of generative linguistics at issue are to be reduced.

The opposite case—namely, the rejection of theory reduction across disciplines—can be illustrated, among others, by Ludwig Jäger's reasoning, which triggered a heated debate in the early 1990s in the German journal *Zeitschrift für Sprachwissenschaft* between him and the advocates of reductionism. Jäger (1993) interprets the history of linguistics as a process of the rigid adjustment of linguistics to the methodology of the natural sciences, which he calls the 'aggressor'. In his view, the history of linguistics is the history of the *erosion* of the object of linguistics, namely, 'language'. This erosion culminated in Chomsky's cognitivism (Jäger, 1993: 79). Thus, the result is the *decline* of linguistics because it was not able to defend its disciplinary identity. According to Jäger, the real object of linguistics should be human beings to be investigated with respect to the complex interplay of their social, historical, and cultural environment. It is *only* the hermeneutic-functional tradition that is capable of conducting such investigations.

Jäger's claim that linguistics lost its disciplinary identity is the prototypical manifestation of the antireductionist stance. Although in principle "antireductionism could be read as a form of representational pluralism" (Ruphy, 2016: 80), in Jäger's view pluralism implies neither relativism nor tolerance. Jäger's attitude is absolutistic and intolerant in that it fiercely rejects current cognitivism and seems to consider hermeneutic-functional linguistics the only approach yielding *the truth* about language.

The next example of antireductionism is Katz' questioning the 'Chomskyan revolution'. By arguing against Chomsky's scientistic reductionism, Katz (1996: 292) concludes:

<sup>&</sup>lt;sup>41</sup> The closing paragraph of Bloomfield's ground-breaking work says:

<sup>&</sup>quot;The methods and results of linguistics, in spite of their modest scope, resemble those of *natural science*, the domain in which science has been most successful. It is only a prospect, but not hopelessly remote, that the study of language may help us toward the understanding and *control* of human events." (Bloomfield 1933: 509; emphasis added).

<sup>42</sup> See e.g.:

<sup>&</sup>quot;The Chomskyan revolution in linguistics in the 1950s in essence turned *linguistics* into a branch of cognitive science (and *ultimately biology*) by both changing the linguistic landscape and forcing a radical change in cognitive science to *accommodate linguistics* as many of us conceive of it today" (Boeckx & Piatelli-Palmarini 2005: 447; emphasis added).

It is not a single linguistic theory, but the whole discipline of linguistics that is claimed to have been reduced to biology, one of the natural sciences. All other linguistic theories seem to have been completely ignored as if they did not exist.

"Linguistics is not psychology or biology or anything else to which someone might wish to reduce it. Linguistics is linguistics." Katz' antireductionism seems to be relativistic. It is more tolerant than Jäger's because it does not force his own theory on the whole discipline.

The third example of antireductionism in linguistics is the controversy triggered by Lappin and his co-authors, who fiercely attacked the methodological foundations of the Minimalist Programme. Among others, the controversy focused on reductionism. Lappin et al. (2000: 667–668) maintain that the Minimalist Programme "does *not* manage to specify *even a remotely credible* connection between the concepts and methodology of the MP [the Minimalist Program] and those of the natural sciences". The authors believe that Minimalism does not meet the characteristics of 'Galilean-style science' and that "this *groundless aura of scientism* is used to promote the view that minimalist theory has brought the study of syntax to a level of precision and empirical coverage comparable to that of chemistry and physics" (Lappin et al., 2000a: 667; emphasis added).

The final example to be mentioned is Simone's (2004) interpretation of Saussure's *Cours de linguistique générale*. According to Simone, "Saussure's dream" was to "provide linguistics with an appropriate *method*, one **not borrowed** more or less mechanically from other sciences but designed to be peculiarly and strictly of its *own*." (Simone, 2004: 238; italics as in the original; bold emphasis added). Simone contrasts Saussure's antireduction-ist stance with reductionism: "[...] two different types of *reduction* have taken place: (a) the reduction of linguistics to *some other science*, and (b) the reduction of language data to *some other entity*." (Simone, 2004: 247; emphasis added).

Simone also touched on the relation between linguistic research and its foundational issues. She complains that most linguists think that dealing with them is a weakness. Therefore, they consider the ignorance of foundational problems "a good sign, a sign of health and happiness" (Simone, 2004: 236). Simone believes that

(20) "[...] this attitude of candid trust is very dangerous, particularly when one is aware of an unconscious habit, very widespread among linguists and in linguistics: Historically speaking, ours is a strongly generalizing science, one in which the propensity to state broad, all-encompassing theories seems compelling, irresistible (and this latter phenomenon is certainly worth further detailed investigation), somehow even pathetic. Accordingly, the risk of going astray, of losing sight of accuracy and of facts, is highly significant." (Simone, 2004: 216–217)

(20) seems to differ from the previous examples insofar as it highlights the necessity of raising the foundational problems of linguistics in connection with reductionism. Despite this, her reasoning does not go beyond naïve meta-reflexion because she does not relate the foundational problems of linguistics to the central topics and methods of the philosophy of science or epistemology.

### 5 Relativistic and Absolutistic Reactions to (5)(c)

The third kind of scientific pluralism says that several correct representations of a given phenomenon exist simultaneously. In this section I will discuss the consequences of this claim with respect to absolutism, relativism and tolerance in linguistics.<sup>43</sup> Basically, the

<sup>&</sup>lt;sup>43</sup> In this section I use the term 'phenomenon' along the lines of the literature on scientific pluralism (see e.g., Ruphy, 2016). It is meant to be a neutral term and must not be associated with the philosophical issues labelled as 'phenomenology'. We will come back to clarifying this term at the end of the present section. As a first approximation, examples of linguistic phenomena are syntactic constructions, morphemes, speech

two strategies are analogous to those we have already seen with respect to (5)(a) and (5) (b). Absolutism strives to overcome pluralism by arguing that there is only one correct representation of a certain phenomenon, and it excludes alternative representations at the outset. Relativism also starts from pluralism but accepts that the phenomenon at issue may be represented in several alternative ways in linguistics.<sup>44</sup>

From a general epistemological point of view, the denial of pluralism aims at subsuming the whole of our knowledge under a single theory or even under one single formula representing every detail and strives for the complete representation of the world (Kellert et al., 2006: x). Ruphy (2016: 81–82) points out that this extreme view can be easily rejected by proponents of pluralism, and that therefore it has hardly any serious advocates. The main argument is that developing one adequate all-embracing theory and finding the only correct representation of a phenomenon presupposes a finite number of questions, whereas there is no doubt that restricting the number of questions about a phenomenon is not possible.

Still, in linguistics, adherents of Chomsky's Minimalist Programme seem to propagate this extreme form of absolutism. For example, Norbert Hornstein attacks the rivals of Minimalism not only outside, but also *within* generativism sarcastically. He obviously believes that the reason why the Minimalist Programme could not achieve the status of an all-embracing linguistic theory yielding the only true representations of linguistic phenomena, which it would deserve, is that its rivals are ignorant and malignant:

(21) "So, not only does MP serve to clarify the aims of generative inquiry thereby conceptually separating it from the kind of language centered descriptive philological inquiry practiced by most of the field, it favors a form of investigation that is far more abstract and removed from language specific details than has been the case before. MP, in other words, sharpens divisions that have been latent in the discipline for 60 years and prizes the kind of work that is *less knee deep in linguistic detail* than is most work in GG. And (*surprise, surprise*) some don't like this. And *this malignity* has prevented many from evaluating MP in its own terms. [...] On its own terms, MP has been very productive. Unfortunately, *many have missed this. The fault does not lie with MP*." (Hornstein, 2019: 212; emphasis added)

In this absolutistic world there is no place for tolerance.

However, the state of the art of generative linguistics is currently much more differentiated than it might appear if one reads the above quotation. One reason is that besides extreme absolutists, among the leading personalities of generative linguistics there are renowned scholars who question the correctness of representations obtained within the minimalist framework. This suggests that, if their harsh criticism is justified, then absolutistic claims such as quoted above, which try to undermine the existence of alternative representations of the same phenomenon, must be discarded. For example, Haider (2016, 2018)—who, as one of the most renowned generative linguists in Europe, enriched generative linguistics with many important insights over the decades—refutes minimalist representations of a series of syntactic constructions by claiming that they dispense with elementary scientific merits. He highlights three kinds of problems responsible for the flaws. According to the first, the Minimalist Programme does not meet even the most basic methodological requirements (see (22) (a)). The second emphasizes that it is not justified to stick to one representation of a given

Footnote 43 (continued)

acts etc., to which representations refer. (See also the overview of Lehmann's approach to linguistic data in Sect. 3.4.2).

<sup>&</sup>lt;sup>44</sup> Provided that the alternative representations refer to the same 'phenomenon'. I will touch on the uncertainty of the term 'phenomenon' at the end of this section.

phenomenon (see (22)(b)), and calls attention to the fact that defending one single representation is merely a rhetorical tool (see (22)(d)). The third source of flawed representations is the fallacy of 'appeal to authority', although he does not use this term (see (22)(c)). Thus, as a result, Minimalism yields false statements about the 'phenomena' tackled (see (22)(e), (f)).

- (22) (a) "The *Minimalist Program* (henceforth MP) [...] is a picture-perfect model of a border-line candidate right on and beyond the demarcation line between science and "*just a kind of play-acting at science*" (Chomsky, 1959: 39)." (Haider, 2016: 4; emphasis as in the original)
  - (b) "The probability for our *theoretical* hypotheses to be *fully correct* is virtually zero." (Haider, 2016: 5; emphasis as in the original)
  - (c) "The designer of MP has introduced a style of argumentation that might serve a logician or a mathematician, but not an empirical scientist. On the one hand, he adduced the 'argument from perfection', and on the other hand, the argument from 'virtual conceptual necessity'. These arguments are familiar from *theology* on the one hand (viz. *proofs of the existence of God*), and from logics on the other. Logicians devise and judge calculi in terms of necessity, perfection, and economy. In empirical domains, however, this kind of argumentation does not have any utility, *except as a rhetoric figure*." (Haider, 2016: 10; emphasis added)
  - (d) "MP inmates unflinchingly stick to their *preconceived ideas* and invent intricate ways of *immunizing* them against counterevidence. For them, a core premise of the MP is much like a *dogma*. It is not exposed to falsification." (Haider, 2016: 11; emphasis added)
  - (e) "Core areas of Generative grammar are based on ill-assessed data. As a consequence, *central claims are wrong*." (Haider, 2016: 29; emphasis as in the original)
  - (f) "As long as theoretical predilections receive unquestioned priority over consequent empirical analyses, the MP will remain nothing more than *an amusing narrative full of apparently bizarre exceptions and excuses.*" (Haider, 2016:11; emphasis added)

From these arguments it follows that there must be more than one representation of the phenomena Minimalism investigates. But it is not clear to what extent different representations can be tolerated, if the claims in (22) are given.

Another factor suggesting that in the era of the Minimalist Programme the absolutism of generative linguistics has been shattered is that some of its prominent advocates seem to be uncertain and to hesitate how to argue. For example, Boeckx (2006: 110–151) says that the Theory of Principles and Parameters—whose methodological basis is the 'Galilean-style science' and which is presupposed by the Minimalist Programme—'is the only serious bet we have [...]" (Boeckx, 2006: 3; emphasis added). A few pages later in the same book Boeckx contradicts himself:

(23) "The main goal of this book is *not* to convince anyone that the minimalist program is *the one and only correct* scientific way of studying language and mind, but rather to show that the program has unique insights to offer [...]. Minimalism is *not more important, worthwhile, or interesting than other approaches to language*, but it is unique, distinct, and equally important, worthwhile, and interesting." (Boeckx, 2006: 12; emphasis added)

According to (23) and in contrast to Boeckx' previous absolutistic statement it must be possible to assign different representations to given syntactic phenomena. Here again the degree of tolerance that may be permitted is unclear.

Nevertheless, there are controversies in linguistics that reflect the clash between different absolutistic approaches each of which rejects the possibility of 'different representations of a given phenomenon': the default situation is the "the war of absolute against absolute" (Bloor, 2008: 279). For example, I have already mentioned Chomsky's and Sampson's antagonism with respect to the evaluation of corpus linguistics and grammaticality judgments. The antagonism of their standpoints affects not only the alleged incompatibility of basing data on corpus linguistics and on grammaticality judgments (see Sect. 3.4), but it also applies to the differences between representations of phenomena obtained by these methods. While Sampson defines these representations as the results of statistical analyses, Chomsky determines them as the outcome of analyses rooted in the technical machinery of current developmental stages of generative linguistics. The list of similar examples could be continued.

The clearly tolerant and relativistic reaction to the plurality of representations of a certain phenomenon rarely happens. Therefore, it is worth mentioning three instructive examples in this respect.

Hagemann and Staffeldt (eds.) (2014) present 11 alternative syntactic analyses of the sentences of a short newspaper article. In this way the alternative representations of the same sentence can be directly compared. However, the editors take for granted their coexistence and do not ask the question of which is the best, that is the only correct representation. This is a clearly relativistic and tolerant standpoint. The naïve nature of the volume's conception is witnessed by the fact that the editors have not put forward a system of criteria which the comparison of the 11 representations could be based on. Furthermore, they do not take into consideration aspects of the philosophy of science.

The second example is Stewart (2016). The author overviews alternative representations of three phenomena—the initial consonant mutations in Scottish Gaelic nouns, agreement marker disjunctivity in Georgian verbs, and prefix-suffix interactions in Sanskrit gerunds—without conscious metatheoretical reflexion.

Unlike these two examples, Moravcsik (2019) elaborates a sophisticated system of criteria within an explicit metatheoretical context that facilitates the comparison of 13 syntactic theories. Each of them presents an analysis of the same sentence within its own framework thus yielding 13 alternative representations.

After this overview let me turn to the basic terms this section has focused on. In the previous section we have discussed reductionist and antireductionist accounts of linguistic theorizing. Antireductionism is a form of pluralism while reductionism assumes that a theory to which another theory has been reduced is the sole representation of the phenomenon it tackles. Ruphy (2016: 80) stresses that besides theories there are many kinds of representations of the phenomena that constitute the object of scientific research. In linguistics, they include models, hypotheses, figures, trees, diagrams, computer simulations, taxonomic systems, statements etc. Which of them is an appropriate representation cannot be decided generally but only with respect to specific cases. In the present section by 'representation' I mean *hypotheses* expressed as *statements*.

Ruphy (2016: 91 f.) concludes that basically the term 'phenomenon' affects categories rather than individual objects. Therefore, a phenomenon can be subdivided into subcategories. Thus, the impression that one has to do with a single 'phenomenon' represented in different alternative ways' is a category mistake, and, consequently, each representation refers to a different subcategory, that is a separate 'phenomenon'.<sup>45</sup> Ruphy does not continue her

<sup>&</sup>lt;sup>45</sup> Ruphy writes:

<sup>&</sup>quot;[...] in science 'phenomenon' often refers to a *category* of individual processes and not to an individual process. [...] Consequently, a phenomenon might 'split' into distinct **new subcategories** when our knowledge of the individual process evolves. [...] In certain cases, acknowledging the existence of a plurality of representations of a phenomenon X might appear as **mere artefact**, **resulting from an improper grouping of distinct processes under a common category X.** [...] Naturally, scientific models are sometimes models of individual objects or processes [...], but most scientific models are models of a *category* of individual processes or objects. [...] My point is simply to note that in the case of scientific modeling [...] overcoming plurality of incompatible representations does **not necessarily mean** 

argumentation. However, in the light of the current literature on relativism, it seems to be well motivated to supplement it by the following insights.

The examples mentioned above illustrate that the rejection of rival representations of a certain phenomenon reflects an absolutistic stance: it implies that there is a one-one correspondence between the representation and the phenomenon, consequently, the representation must be *absolutely true* because there is no place for rival representations. Nevertheless, what counts as a 'phenomenon' is *relative* to a parameter in a similar way as what counts as a true statement is relative to a parameter in the sense of (6). So, there are two distinct and equally relevant relations simultaneously present. With respect to the relation between a representation and the phenomenon it refers to, the representation—expressed as a statement—is absolutely true. And what counts as such a phenomenon is relative to a certain parameter, where the parameter is, as a rule, a particular theory, a context of argumentation, a framework and the like. While truth relativism in the sense of (6) presupposes that the rival representations refer to the *same phenomenon* and, consequently, the rival representations *contradict* each other, in the present case the representations refer to *different phenomena*, and therefore, there is *no contradiction* between rival representations. Thus, analogously to (6), we obtain:

- (24) (a) What counts as a phenomenon is relative to a certain parameter.
  - (b) A statement *X* and a statement *not-X* can be simultaneously true without contradiction if *X* refers to a phenomenon *P* and *not-X* refers to a phenomenon *Q* where *P* and *Q* are different.
  - (c) There is no non-relative criterion according to which the adequacy of the parameter can be judged.

If one has to do with the representations of different phenomena, then in all cases the truth of the statements at hand can be acknowledged and it is not necessary to choose between them. Consequently, their mutual *tolerance* is given at the outset.

(24) has no generally accepted label in the epistemological discussion on the relativism of truth. The discussion started with Plato's (1973) *Theaetetus* in which Protagoras defends relativism while Socrates argues that Protagorean relativism is self-refuting.<sup>46</sup> Among current attempts to reconstruct the arguments for and against Protagorean relativism, for example, Burnyeat (1976) calls 'the basic model' in (24) 'subjectivism'. Waterlow (1977)

Footnote 45 (continued)

**resolution by choosing one**: it can sometimes also be achieved by **revising our categorization** of individual objects and processes (i.e., revising our kinds of processes and entities)." (Ruphy 2016: 91–92; italics as in the original, bold emphasis added).

<sup>&</sup>lt;sup>46</sup> This argument goes back to Plato's (1973) *Theaetetus* 171 (a)–(c), which discusses Protagoras' *homo mensura* doctrine. This doctrine says that 'man is the measure of all things' and has been assumed to represent the view that truth is relative. Then, one way of reconstructing Plato's famous self-refutation argument (*peritrope*) directed against Protagoras' *homo mensura* doctrine runs as follows:

Protagoras believes that every judgment is true. However, Protagoras' opponents believe that this belief of Protagoras is false. But since Protagoras believes that every judgment is true, he must also accept the truth of his opponents' judgment that Protagoras' judgment is false. Therefore, Protagoras must accept both the truth and the falsity of his judgment. Accordingly, since his argument results in a contradiction, he refutes his own doctrine.

There has been a very rich and sophisticated discussion on the proper reconstruction and evaluation of this argument, which we cannot even indicate here. As a first orientation, see e.g., Baghramian and Carter's (2015) concise summary.

speaks of 'the relativism of facts'. Fine (1996) defines the term 'infallibilism' in the same way as Burnyeat defines 'subjectivism' and Waterlow 'infallibilism'. Instead of these terms I would prefer, in analogy to 'the relativism of truth', the expression 'relativism of phenomena', to label the view in (24). Namely, 'subjectivism' is, because of its negative connotations, misleading; no doubt, it is not the case that all situations to which (24) applies are 'subjective' in the sense of assigning arbitrary interpretations to the phenomena at issue.<sup>47</sup> The 'relativism of facts', in contrast, suggests that the things we call 'facts' are independent of our theories, models, contexts of argumentation, which is certainly not the case because it is not compatible with the theory-dependency of data and further arguments for relativism in scientific inquiry. Finally, 'infallibilism' expresses the relation between the representation and the phenomenon precisely but blurs the parallelism with the 'relativism of truth'. The term 'relativism of phenomena' does not suggest strong ontological commitments, moreover, it indicates the uncertainty related to the relativity of the linguistic objects which the statements of linguistic theories refer to—for example, syntactic constructions, morpheme classes, sequences of phonological segments, types of speech acts etc.

## 6 Conclusions: the Answer to (Q)

The analyses in Sects. 3-5 support (A2) as the answer to the main question (Q) of this paper. Below I summarize the arguments for (A2).

Starting from (5)(a), with respect to the pluralism of theories, methods, and theoretical terms in linguistics, we have obtained the following insights:

- a. As could be expected, the default case is that *relativism is associated with tolerance and absolutism with intolerance*.
- b. In spite of this, the default case is not exclusively valid. Neither naïve absolutism associated with intolerance nor naïve relativism connected to tolerance can be derived from the pluralism of inquiry in general. On the contrary, we have found cases in which *absolutism was associated with tolerance and relativism with intolerance*.
- c. In general, besides the antagonism between absolutistic and relativistic views of linguistics, the dominant conflict seems to be triggered between two or more incompatible absolutisms: the fight of *the absolute against the absolute*.
- d. As regards the pluralism of theories and methods, there is *no tendency* which would indicate the dominance of either absolutism and intolerance, or relativism and tolerance. Both views are present, and the decision between them does not mean that one chooses either a dominant or a peripheral standpoint. Choosing between them is obviously not a matter of purely rational decision, but rather, of individual preferences and group membership.
- e. As for the reaction to the pluralism of the theoretical language—which I exemplified by the diverse interpretations of the terms 'data' and 'evidence'—instead of the rigid confrontation of relativism/tolerance and absolutism/intolerance, the picture seems to differ from the last-mentioned observation concerning the treatments of linguistic theories and methods. Namely, the controversy on linguistic data and evidence delineates *a tendency toward the relativist and tolerant view*, which is nevertheless not yet dominant.

<sup>&</sup>lt;sup>47</sup> See the first motto of this paper quoted from Ratzinger (2005).

- f. We have also seen examples of *eclecticism*. Due to the naïve and unreflected nature of the view at issue, in such cases the authors make statements clearly witnessing their absolutism, and at the same time they also seem to maintain their adherence to relativism.
- g. As we have seen in Sects. 3.2 and 3.3, with respect to the consequences of the pluralism of theories and methods, it is generative linguistics that seems to be the paradigm example of absolutism and intolerance.<sup>48</sup> But the picture is even in this case *more sophisticated*. Namely, as I have exemplified, certain generative linguists played a decisive role in relativizing the terms 'data' and 'evidence', and in some cases they expressed harsh criticism of generativism, that is their own framework.

With respect to the kind of pluralism introduced in (5)(b), our overview served to illustrate that the examples discussed in Sect. 4 draw a differentiated picture of relations among pluralism, relativism, absolutism, and tolerance regarding theory-reduction. At the outset, it seems to be straightforward that the reductionist standpoints are at the same time absolutistic and intolerant in the sense of (7). But anti-reductionist views—although, as a rule, they may be relativistic—must not be associated in all cases mechanically with relativism and tolerance. As we have seen, Jäger's and Lappin et al.'s anti-reductionism attacks the reductionism of generative linguistics absolutistically and intolerantly, while Katz' position seems to be relativistic and more tolerant. Simone attributes an anti-reductionist standpoint to Saussure, but she does not clarify whether in her opinion what she calls "Saussure's dream"—which remained unfulfilled—besides the idea of elaborating the specific method of linguistics, excludes the adaptation of some method or some data processing technique or the terminology of another discipline. In sum, in the practice of linguistic research, antireductionism is associated with pluralism, but it does *not* necessarily imply relativism and tolerance.

As for (5)(c), it is not the case that several correct representations refer to the same phenomenon in linguistics, but rather, they refer to different phenomena. Consequently, with respect to the plurality of representations, 'relativism' has meant 'relativism of phenomena', and not 'relativism of truth'. Acceptance of the relativism of phenomena *implies tolerance* toward rival representations. Absolutistic claims are rhetorical tools whose authors behave in this case in the same way as in relation to (5)(a): they strive to overcome the plurality of representations in order to unify the discipline.

Finally, it is instructive to remark that the Chomskyan trend of generative linguistics is not only dominantly absolutistic (with the exceptions mentioned), but it reacts absolutistically and intolerantly to all three versions of pluralism. This also illustrates that (5)(a)-(c) are not three separate issues, but three overlapping perspectives on scientific pluralism.

What is the main message of our having given the above answer to (Q)? The findings our *descriptive* approach to the complex relations among pluralism, relativism, absolutism, tolerance, and intolerance in linguistics has yielded would be of restricted relevance

<sup>&</sup>lt;sup>48</sup> The present paper uses generative linguistics as the paradigm example of the intolerant and absolutistic reaction to pluralism. However, this reaction is not restricted to generative linguistics, but may be also characteristic of certain approaches that define themselves as not compatible with generativism such as corpus linguistics, cognitive linguists, language typology and universals research and many others. In order to indicate this, I have also cited some of these latter groups. An interesting example of absolutism in linguistics is the commitment to the basic terms of the Western grammatical tradition and the pre-theoretical terms it uses ('word', 'sentence', etc.). In this respect, a comparison of the history of Western linguistics e.g., in Seuren (1998) and the Eastern tradition e.g., in Itkonen (1991) might be instructive.

if we did not relate them to the *normative* question of which of the overviewed perspectives may contribute to the *improvement* of linguistic research more fruitfully. Should linguists adopt a relativistic or an absolutistic stance so as to solve the problems which they have to deal with in their everyday research practice? The answer to this question would go far beyond the limits of the present paper. Despite this, our train of thought still provides an important insight: the *naïve* reflection of linguists is insufficient, and what is needed is systematic metatheoretical considerations using the explicit toolkit of epistemology and the philosophy of science. Thus our findings may have paved the way for making the next step: the elaboration of a metatheoretical framework for the treatment of relativism and absolutism in linguistics that, by ruling out destructive views and selecting constructive ones, is not confined to merely describing how linguists see their own discipline. Rather, such a metatheoretical framework is expected to decide which kind of relativism or absolutism may serve best the problem-solving activity of linguistics, namely, our understanding of 'language' as an abstract system, 'language' as knowledge to be acquired by native and non-native speakers, and 'language' as social action.

**Funding** Open access funding provided by University of Debrecen. Work on the present paper was supported by the Subprogramme for Linguistic Identification of Fake News and Pseudo-scientific Views, part of the Science for the Hungarian Language National Programme of the Hungarian Academy of Sciences (MTA).

## Declarations

Conflict of interest The author declares that there are no conflicts of interests/competing interests.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

## References

Andor, J. (2004). The master and his performance: An interview with Noam Chomsky. Intercultural Pragmatics, 1, 93–111.

Bach, E. (1965). Structural linguistics and the philosophy of science. Diogenes, 51, 111-128.

Baghramian, M., & Carter, A. J. (2015). Relativism. Stanford Encyclopedia of Philosophy. Retrieved Feb 20, 2020, from https://plato.stanford.edu/entries/relativism/.

Baghramian, M. (Ed.). (2014). The many faces of relativism. Routledge.

Baghramian, M., & Colina, A. (2020). Relativism. Routledge.

Baker, M. C. (2010). Formal generative typology. In B. Heine & H. Narrog (Eds.), The Oxford handbook of linguistic analysis (pp. 285–312). Oxford University Press.

Bloomfield, L. (1933). Language. Allen & Unwin.

Bloor, D. (2008). Epistemic grace. Antirelativism as theology in disguise. Common Knowledge, 13, 250–280.

Boeckx, C., (2006). Linguistic minimalism. Origins, concepts, methods, and aims. Oxford University Press.

Boeckx, C., & Grohmann, K. K. (2007). The biolinguistics manifesto. *Biolinguistics* 1: 1–8. https://bioling. psychopen.eu/index.php/bioling/article/view/8583/7775

Boeckx, C., & Grohmann, K. K. (Eds.). (2013). The Cambridge handbook of biolinguistics. Cambridge University Press.

- Boeckx, C., & Piatelli-Palmarini, M. (2005). Language as a natural object—linguistics as a natural science. *The Linguistic Review*, 22, 447–466.
- Boghossian, P. (2006). What is relativism? In P. Greenough & M. P. Lynch (Eds.), *Truth and realism* (pp. 13–37). Oxford University Press.
- Bornkessel-Schlesewsky, I., & Schlesewsky, M. (2007). The wolf in sheep's clothing: Against a new judgment-driven imperialism. *Theoretical Linguistics*, 33, 319–334.
- Botha, R. P. (1983). On the 'Galilean style' of linguistic inquiry. Lingua, 58, 1-50.
- Boyland, J. T. (2021). Review of A. Kertész, E. Moravcsik, Cs. Rákosi, (Eds.), Current approaches to syntax: A comparative handbook. *Language*, 97, 419–425.
- Bresnan, J. (1982). The passive in lexical theory. In J. Bresnan (Ed.), The mental representation of grammatical relations (pp. 3–86). The MIT Press.
- Burnyeat, M. (1976). Protagoras and self-refutation in Plato's Theaetetus. *The Philosophical Review*, 8, 172–195.
- Cartwright, N. (1999). The dappled world. Cambridge University Press.
- Cat, J. (2017). The unity of science. In: E. Zalta Edward N. (Ed.): The Stanford encycopedia of philosophy. https://plato.stanford.edu/entries/scientificunity/
- Chambers, J. K. (2005). Sociolinguistics and the language faculty. In: R.M. Déchaine (Ed.): Language know-how: Canadian perspectives in contemporary linguistics. Canadian Journal of Linguistics 50, 215–39. https://chambers.artsci.utoronto.ca/socio.html
- Chomsky, N. (1984). On language and culture. Noam Chomsky interviewed by Wiktor Osiatynski. In W. Osiatynski (Ed.), *Contrasts: Soviet and American thinkers discuss the future* (pp. 95–101). Retrieved Jan 06, 2021, from https://chomsky.info/1984
- Chomsky, N. (1957). Syntactic structures. Mouton.
- Chomsky, N. (1959). Review of B. F. Skinner's verbal behavior. Language, 35, 26-58.
- Chomsky, N. (1965). Aspects of the theory of syntax. Mouton.
- Chomsky, N. (1980). On binding. Linguistic Inquiry, 11, 1-46.
- Chomsky, N. (1981). Lectures on government and binding. Foris.
- Chomsky, N. (1995). The minimalist program. The MIT Press.
- Chomsky, N. (2002). On nature and language. Cambridge University Press.
- den Dikken, M., Bernstein, J. B., Tortora, C., & Zanuttini, R. (2007). Data and grammar: Means and individuals. *Theoretical Linguistics*, 33, 335–352.
- Dupré, J. (1983). The disunity of science. Mind, 92, 321-346.
- Dupré, J. (1993). The disorder of things. Harvard University Press.
- Featherston, S., & Winkler, S. (eds.) (2009). The fruits of empirical linguistics. vol. 1, Process. De Gruyter.
- Fillmore, C. J. (1992). 'Corpus linguistics' vs. 'computer-aided armchair linguistics'. In Directions in corpus linguistics. Proceedings from the 1992 Nobel Symposium on Corpus Linguistics, Stockholm. (pp. 35–60) De Gruyter.
- Fine, G. (1996). Protagorean relativisms. In Proceedings of the Boston Area Colloquium in Ancient Philosophy, vol. 19, pp. 211–243
- Forst, R. (2003). Toleranz im Konflikt. Geschichte, Gehalt und Gegenwart eines umstrittenen Begriffs. Suhrkamp.
- Galison, P., & Stump, D. J. (Eds.). (1996). The disunity of science. Stanford University Press.
- Garcia-Carpintero, M., & Kölbel, M. (Eds.). (2008). Relative truth. Oxford University Press.
- Garfinkel, A. (1981). Forms of explanation. Yale University Press.
- Goodall, G. (Ed.). (2021). The Cambridge handbook of experimental syntax. Cambridge University Press.
- Stefanowitsch, A., & Gries, S. Th. (Eds.), (2007). Grammar without grammaticality. De Gruyter [= Special issue of Corpus Linguistics and Linguistic Theory 3].
- Haack, S. (1998). Manifesto of a passionate moderate: Unfashionable essays. University of Chicago Press.
- Hacking, I. (1996). The disunities of science. In P. Galison & D. J. Stump (Eds.), *The disunity of science* (pp. 37–74). Stanford University Press.
- Hagemann, J., & Staffeldt, S. (eds.) (2014). Syntaxtheorien. Analysen im Vergleich. Stauffenburg.
- Haider, H. (2009). The thin line between facts and fiction. In Featherston & Winkler (eds.), pp. 75–102.
- Haider, H. (2016). The chapter of incredible neglects. Keep calm and use the scientific method. Department of Linguistics & Center for Cognitive Neuroscience, University of Salzburg, September 2016. Retrieved Feb 22, 2020, from https://www.academia.edu/27787403/THE\_CHAPTER\_OF\_INCREDIBLE\_NEGLECTS.

- Haider, H. (2018): On minimalist theorizing and scientific ideology in grammar theory. Retrieved Feb 22, 2020, from https://www.researchgate.net/publication/327601284\_On\_Minimalist\_theorizing\_ and\_scientific\_ideology\_in\_grammar\_theory.
- Hales, S. D. (Ed.). (2011). A companion to relativism. Wiley-Blackwell.
- Harris, R. A. (1993). The linguistics wars. Oxford University Press.
- Harris, R. A. (2021). The linguistics wars. Chomsky, Lakoff, and the battle over deep structure. Oxford University Press.
- Haspelmath, M. (2019). Against traditional grammar—and for normal science in linguistics. Retrieved Feb 20, 2020, from https://dlc.hypotheses.org/1741.
- Hollis, M., & Lukes, S. (Eds.). (1982). Rationality and relativism. Basil Blackwell.
- Hornstein, N. (2019). The stupendous success of the Minimalist program. In Kertész et al. (Eds.), Current approaches to syntax: A comparative handbook (pp. 187–214). De Gruyter Mouton
- Huck, G. J., & Goldsmith, J. A. (1995). *Ideology and linguistic theory: Noam Chomsky and the deep* structure debates. Routledge.
- Hung, E. (2014). *Philosophy of science complete: A text on traditional problems and schools of thought.* Cengage Learning.
- Imrényi, A. (2019). Review of A. Kertész, Moravcsik Edit, & C. Rákosi (Eds.), Current approaches to syntax. A comparative handbook. *Magyar Nyelv* (pp. 115, 479–485) (In Hungarian).
- Irlenborn, B. (2016). Relativismus. De Gruyter.
- Itkonen, E. (1991). Universal history of linguistics: India, China, Arabia, Europe. Benjamins.
- Jäger, L. (1993). "Language, what ever that may be". Die Geschichte der Sprachwissenschaft als Erosionsgeschichte ihres Gegenstandes. Zeitschrift Für Sprachwissenschaft, 12, 77–106.
- Joseph, J. E. (1995). The structure of linguistic revolutions. Historiographia Linguistica, 22, 379-399.
- Jucker, A. H., Schneider, K. P., & Bublitz, W. (Eds.) (2018). Methods in pragmatics. De Gruyter Mouton.
- Katz, J. J. (1996). The unfinished Chomskyan revolution. Mind & Language, 11, 270–294.
- Kellert, S. H., Longino, H., & Waters, C. K. (Eds.). (2006). Scientific pluralism. University of Minnesota Press.
- Kepser, S., & Reis, M. (Eds.) (2005). Linguistic evidence. Empirical, theoretical and computational perspectives. De Gruyter.
- Kertész, A. (2004). Cognitive semantics and scientific knowledge. Case studies in the cognitive science of science. Benjamins.
- Kertész, A. (2010a). From 'scientific revolution' to 'unscientific revolution'. An analysis of approaches to the history of generative linguistics. *Language Sciences*, 32, 507–527.
- Kertész, A. (2010b). Two notions of 'research program' and the historiography of generative linguistics. *Historiographia Linguistica*, 37, 165–191.
- Kertész, A. (2012). The 'Galilean style in science' and the inconsistency of linguistic theorizing. Foundations of Science, 17, 91–108.
- Kertész, A., & Rákosi, Cs. (2019). [2012]: Data and evidence in linguistics: A plausible argumentation model. Cambridge University Press.
- Kertész, A., & Rákosi, Cs. (2022). Inconsistency in linguistic theorising. Cambridge University Press.
- Kertész, A., & Moravcsik, E., & Rákosi, C. (Eds.) (2019). Current approaches to syntax: A comparative handbook. De Gruyter Mouton.
- King, P. (1976). Toleration. St. Martin's Press.
- Kiss, T., & Alexiadou, A. (2015). Syntax—the state of a controversial art. In T. Kiss, & A. Alexiadou (Eds.), Syntax—Theory and analysis. An international handbook, (vol. 1, pp. 1–14). De Gruyter Mouton.
- Krausz, M. (Ed.). (2010). Relativism. A contemporary anthology. Columbia University Press.
- Kuhn, T. S. (1970). [1962]: The structure of scientific revolutions. Chicago University Press.
- Kusch, M. (2020a). Introduction. In: M. Kusch (Ed.) (pp. 1-7).
- Kusch, M. (2020a). Relativism in the philosophy of science. Cambridge University Press.
- Kusch, M. (Ed.). (2020b). The Routeldge handbook of philosophy of relativism. Routledge.
- Lakoff, R. (1989). The way we were; or; the real truth about generative semantics: A memoir. Journal of Pragmatics, 13, 939–988.
- Lappin, S., Levine, R. D., & Johnson, D. D. (2000). The structure of unscientific revolutions. Natural Language and Linguistic Theory, 18, 665–671.
- Lehmann, Ch. (2004). Data in Linguistics. The Linguistic Review, 21, 175-210.
- Lynch, M. P. (2001). Truth in context. An essay on pluralism and objectivity. MIT Press.
- Margolis, J. (2010). The truth about relativism. In: M. Krausz, (Ed.), *Relativism. A contemporary anthology* (pp. 100–123). Columbia University Press.
- Mercan, G. (2020). Review of A. Kertész, E. Moravcsik, & Cs. Rákosi, (Eds.), Current approaches to syntax: A comparative handbook. LINGUIST List 31.903, Wed Mar 04 2020. Retrieved Apr 25, 2020, from https://linguistlist.org/issues/31/31-903/.

- Moravcsik, E. (2019). Introduction. In Kertész et al. (Eds.), *Current approaches to syntax: A comparative handbook* (pp. 1–20). De Gruyter Mouton.
- Nagel, E. (1961). The structure of science: Problems in the logic of explanation. Hackett.
- Noveck, I. (2018). *Experimental pragmatics. The making of a cognitive science*. Cambridge University Press.
- Noveck, I. A., & Sperber, D. (2007). The why and how of experimental pragmatics. In N. Burton-Roberts (Ed.), *Pragmatics* (pp. 184–212). Palgrave Macmillan.
- Oppenheim, P., & Putnam, H. (1958). The unity of science as a working hypothesis. In H. Feigl, M. Scriven, & G. Maxwell (Eds.), *Minnesota studies on the philosophy of science* (Vol. 2, pp. 3–36). University of Minnesota Press.

Penke, M., & Rosenbach, A. (Eds.) (2007). What counts as evidence in linguistics? Benjamins.

- Plato (1973). Theaetetus. Translated with notes by John McDowell. Clarendon Press.
- Pléh, C., & Roszkowsky, M. (2020). Review of A. Kertész, E. Moravcsik, & Cs. Rákosi (Eds.), Current approaches to syntax: A comparative handbook. *Acta Linguistica Academica*, 67, 383–397.
- Popper, K. R. (1966). The open society and its enemies. Routledge & Kegan Paul.
- Rákosi, Gy. (2020). Review of A. Kertész, E. Moravcsik, & Cs. Rákosi, (Eds.), Current approaches to syntax: A comparative handbook. Acta Linguistica Academica, 67, 388–393.
- Ratzinger, J. (2005). Homily of his eminence card. Joseph Ratzinger Dean of the College of Cardinals. Vatican Basilica Retrieved Apr 18, 2005, from https://www.vatican.va/gpII/documents/homily-pro-elige ndo-pontifice\_20050418\_en.html
- Rescher, N. (1993): Pluralism. Against the demand for consensus. Oxford University Press.
- Ressler, M. (2008). Relativism and tolerance revisited. Retrieved Feb 20, 2020, from https://pdfs.semanticsc holar.org/bcd6/3c0c8f85e74cb56bb50c4763c5ce15792ec2.pdf.
- Ruphy, S. (2016). Scientific pluralism reconsidered. A new approach to the (dis)unity of science. Pittsburgh University Press.
- Sampson, G. R. & Babarczy, A. (2014). Grammar without grammaticality. Growth and limits of grammatical precision. De Gruyter.
- Sampson, G. R. (1975). The form of language. Weidenfeld & Nicholson.
- Sampson, G. R. (2007). Grammar without grammaticality. *Corpus Linguistics and Linguistic Theory*, 3, 1–32.
- Schütze, C. T. (1996). The empirical base of linguistics. Grammaticality judgments and linguistic methodology. The University of Chicago Press.
- Seuren, P. A. M. (1998). Western linguistics: An historical introduction. Blackwell.
- Simone, R. (2004). The object, the method, and the ghosts. Remarks on a terra incognita. The Linguistic Review, 21, 235–256.
- Sprouse, J., & Schütze, C. T. (2020). Grammar and the use of data. In B. Aarts, J. Bowie, & G. Popova (Eds.), *The Oxford handbook of English grammar* (pp. 40–58). Oxford University Press.
- Sternefeld, W. (Ed.) (2007). Data in generative grammar. De Gruyter [special issue of Theoretical Linguistics 33(3)].
- Sternefeld, W., & Richter, F. (2012). Wo stehen wir in der Grammatiktheorie? Bemerkungen anlässlich eines Buchs von Stefan Müller. Zeitschrift Für Sprachwissenschaft, 31, 263–290.
- Stewart, T. W. (2016). Contemporary morphological theories. A user's guide. Edinburgh University Press.
- Tahko, T. E. (2021). Unity of science. Cambridge University Press.
- ten Hacken, P. (2007). Chomskyan linguistics and its competitors. Equinox.
- Waterlow, S. (1977). Protagoras and inconsistency: Theaetetus 171a6–c7. Archiv Für Geschichte der Philosophie, 59, 19–36.
- Weinberg, S. (1976). The forces of nature. Bulletin of the American Academy of Arts and Sciences, 29, 13–29.

András Kertész is Professor of German Linguistics at the University of Debrecen (Hungary). In 2001 he was elected as a Member of the Hungarian Academy of Sciences and in 2014 of Academia Europaea (London). His main fields of research are the philosophy of linguistics and theoretical linguistics. He published 13 monographs, 9 collections of papers and about 150 articles. His monographs include *Cognitive Semantics and Scientific Knowledge* (Amsterdam: Benjamins, 2004), *Philosophie der Linguistik* (Tübingen: Narr, 2004), *Data and Evidence in Linguistics* (Cambridge University Press, 2019; with Csilla Rákosi), and *Inconsistency in Linguistic Theorising* (Cambridge University Press, 2022; with Csilla Rákosi). He is coeditor of *Contemporary Approaches to Syntax: A comparative handbook* (Berlin and Boston: De Gruyter, 2019; with Edith Moravcsik and Csilla Rákosi).