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VOLUME SECONDO

Filosofie

Subjecthood in Pāṇini's Grammatical Tradition[1]

Artemij Keidan

According to the *communis opinio*, there is no place for the grammatical category of subject in Pāṇini's grammar of Sanskrit. This is due to the fact that, according to many scholars of Pāṇini, Sanskrit lacks this category in its grammar. However, if we take into consideration a wider view of what Pāṇini's grammar is and what language it presupposes, we can conclude that speaking of subject becomes more sensible, especially if we take into account some features of subjecthood that so far have not been used in this respect. I conclude that, if not Pāṇini himself, some later commentators could have had a notion very similar to subject in their linguistic background, which induced them to interpret Pāṇini's theories so that the idea of subjecthood eventually surfaced.

1. *Setting the Problem*

Many scholars of the Ancient Indian grammatical tradition, more specifically of Pāṇini's *Aṣṭādhyāyī* (ca. 5th cent. BC), including those who disagree on several other aspects of this field, converge in supporting the following claim:

1)
    There is no notion of subject in Pāṇini's grammar of Sanskrit.

This claim has been variously argued, in line with the gradual evolution of the Western theory of language and grammar in general and, especially, that of the notion of "subject". To quote just two preeminent authorities in this respect: «Vernacular grammar has no term to name the subject of the sentence or grammatical subject» (Speijer 1886, 1, n. 1). And, almost a century later: «Pāṇini's grammar is characterized by an important absence: the notion of grammatical subject is ab-

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sent» (Cardona 1974, 244).[2] In the present paper, I will question the claim (1), and will suggest an alternative approach to subjecthood in Indo-Aryan in a broader sense, i.e. beyond Classical Sanskrit. Though not totally refuting the common opinion, I still attempt to show that there is much more to say on this topic, besides a mere observation that something is lacking in some description of some language.

In my opinion, every component of (1) needs a critical revision. To begin with, we have to better define our understanding of the notion of subjecthood in order to be able to decide whether it is absent or present in Pāṇini's theory. Next, we have to start distinguishing between Pāṇinian tradition as a whole – known as *pāṇinīya* – and what is effectively stated in the *Aṣṭādhyāyī* strictly speaking. Not only do post-Pāṇinian commentaries present some remarkable innovations (including, as we will see, a tendency towards the individuation of subjecthood), but different theoretical levels can be seen even within the *Aṣṭādhyāyī* itself. Furthermore, while in Vedic and Classical Sanskrit there is apparently almost no real need for postulating a privileged sentential argument similar to our subject, the situation can change if we take into account the so-called "grammarians' Sanskrit", which I interpret as the mother-tongue of the speakers who constituted the grammar's core audience. The main source of evidence for such language would be the linguistic examples made by the grammarians, rather than the grammar itself.

2. *What Subject?*

A curious, and often silent, axiom has been traditionally assumed on subject, namely the idea that it is something that every language necessarily has.[3] When we are faced with a grammatical sentence in an Indo-European (classical) language, we always manage to somehow find its subject, partly thanks to some — rather vague and informal — presuppositions we were provided with even back at primary school. As for some well-known resistant cases (i.e., languages without subject), linguists either consider it necessary to find it there at any cost or, at least, to provide an explanation for its absence.

It is not clear to me, though, why the notion of subject should have such logical priority only on the apparent ground of the Eurocentrism of Western linguistics (see also Dryer 1997). Indeed, typologists have long observed a number of languages

2. The history of the investigations on this topic up to the 1950s is summed up by Al-George (1958). In the present paper, I will be mostly dealing with authors of the second half of the 20th cent. To name but a few: Rocher (1964), Cardona (1974; 1976b), Hook (1980; 1991).

3. This presupposition was not subject to any serious criticism until such recent functionalist frameworks as Role and Reference Grammar (see Foley–Van Valin 1984).

where subject, in its "Standard Average European" flavour, seems so evanescent as to be considered non-existent. Schooling background provides no intuition for solving such cases.

Moreover, there is no commonly accepted definition of the notion of subject. Linguists use this term with reference to completely different phenomena, belonging to different levels of linguistic – and possibly even extra-linguistic – analysis (see Bakker–Siewierska 2007). Actually, new definitions have often been formulated with the precise intention of supporting this category in resistant languages, as if having a subject, however defined, was an absolute necessity.⁴ Clearly, without a common definition, any debate on subject in general, and on subject in Pāṇini's grammar in particular, would be futile. Let us then start with a brief survey of the various definitions of subjecthood that have been proposed so far.

Historically, and even etymologically, this notion originated in Aristotelian logic: Greek ὑποκείμενον 'the underlying' was used in order to indicate the subject of a predication, i.e. the individual entity to which some property is ascribed or predicated. It was translated into Latin by Boethius (6th cent. AD) as *subiectum* (lit. 'thrown under'; English *subject* is derived from this); it originally had some degree of overlap with other terms, among which we can mention *substantia*, lit. 'the standing under, the purport', whence English *substance*.⁵ While intended to be used in philosophy and logic, the Aristotelian subject eventually also came to be interpreted as a grammatical term, for obvious reasons: in a philosophical discourse, the substantial element of the sentence to which a property is ascribed, usually does also correspond to the grammatical subject of that sentence. Today, we could use the term *topic* to refer to a similar notion, which however belongs to the communicative level of the sentence, rather than to the grammatical one. Another term that has been used and ultimately abandoned for this notion is "psychological subject". In his discussion of subject in Sanskrit, Cardona (1976b) uses the phrase *subject of predication* in order to refer to this philosophical subject.

Increasingly misconceived Aristotelian ideas survived in medieval "speculative grammar" and Port-Royal "philosophical grammar", and ended up with what has been termed the "traditional subject", i.e. the one that was taught in grammar schools, at least up to the beginning of the XX cent. Here we can observe a proliferation of definitions: their intuitiveness and informality concealed the fact that subject is not always easily detectable. Usually, a misconceived idea of topicality (the so-called "psychological subject") was combined here with a morphological definition (through the nominative case marking and verbal agreement), alongside

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4. Note that the never-solved problem of defining reliable cross-linguistic categories does not affect only subject, but rather the whole discipline of linguistics, see Haspelmath (2010).

5. On the conceptual and terminological history of *subject* and *substance* refer to Alfieri (2006).

the postulation of agentivity (the subject is that which accomplishes the action) and some insights into linear ordering for languages with a fixed constituent order (the subject usually comes first in the sentence in English). It soon became quite evident that these different definitions were inconsistent with each other, in the sense that they did not apply to the same elements and their boundaries were too indeterminate. In a critical revision of what he considered outdated and naïve traditional views, Otto Jespersen himself arrived at a definition which, however, is far from acceptable today (see Jespersen 1924, Ch. XI).

A first great innovation in this respect came out of Chomsky's Transformational Grammar, whose subsequent variants have all been consistent in excluding any kind of "grammatical relations", including subject, from the basic inventory of concepts. TG aimed at being a purely formal theory, which, at least ideally, makes no use of semantic constraints in order to describe the functioning of grammar. Semantics is only considered an interpretation of the syntactic form. Thus, instead of using the term *subject*, Chomsky simply observes that, among the arguments of the predicate, there is one which, in the tree structure, is syntactically immediately dominated by S (Sentence, or, in later terms, is a specifier of the IP, Inflectional Phrase), see Farrell (2005, Ch. 5). Because it is outside the VP (Verb Phrase) the subject is often called the "external argument". This term is still purely formal in nature, since it does not involve any semantic or pragmatic judgment. But it presupposes that we are always able to construct the constituency tree on the ground of the combinatorial features alone (i.e. constituency tests), which suddenly become less certain as soon as we go beyond English and, even worse, outside the "Standard Average European". Here, Chomsky's anti-semantic attitude becomes less consistent: the constituency of such languages as, for example, Chinese is often decided apparently on the only ground of the constituency structure of the English translational equivalents of the sentences under consideration. And this is clearly a semantic, rather than a formal, criterion.[6]

On the functionalist side, the seminal paper by Keenan (1976) represented a second paradigm-changing turn in the study of subjecthood after Chomsky's rejection of this category. Keenan recognises that no simple, yet universally valid, definition of subject is possible and suggests a different approach. He proposes quite a long list of features that characterise subject, and then checks all the verbal arguments against such features. If the evidence shows that the features converge on one and

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6. Thus, in their discussion of the controversial VP in Chinese, Huang *et alii* (2009, 78) include the following admission: «That non-head components inside the VP are divided into objects and modifiers is long-held wisdom with its basis in intuition». The Generativist notion of "silent movements" is also a good illustration of this attitude: «[...] Chinese question words front to the beginning of the sentence as they do in English, but [...] this fronting is not pronounced» (Boeckx 2006, 44).

only one argument of the verb in the basic sentence in a certain language, then such argument can be considered the subject in the language under consideration. Note that, if this does not happen, we have to recognise that the language has no subject at all, i.e. there is no privileged argument in the basic sentence here. This explains how the subject can be a contingent statistical category, instead of being a linguistic universal.

Keenan's approach is often still considered valid today, even if with many emendations and additions to the feature list upon which subjecthood is tested. In particular, in today's variants of this method (see, for example, Van Valin–LaPolla 1997, Ch. 6), it seems that Keenan's semantic features – such as independence, indispensability, autonomy, definiteness, topicality, agentivity, etc. – play a less important role in comparison to coding and behavioural features (such as nominative marking, triggering of verbal agreement, conjunction reduction, equi-deletion, etc.).[7] A merit of Keenan's approach has been to provide the grounds for a clear distinction between form and content in relation to the category of subject. Thus, subject corresponds to a set of linguistic formal features, which can vary from language to language, but it also conveys some important semantic and pragmatic content, which, apparently, does not vary too much. A good summary of this content is provided by Bhat (1991), who states that the category of subject results from the coalescence of topic and agent in one and the same morphological or syntactic coding. For example, in English the preverbal position is reserved for topical noun phrases, but *also* marks the agent, in order to distinguish it from the patient (in case the verbal arguments are ambiguous in such respect). Therefore, postulating an intermediary category helps with the grammatical description in case «[…] the representations of two distinct types of sentential relations, namely semantic and pragmatic, have been mixed together and "grammaticalised" in these languages» (Bhat 1991, 2). As a consequence, there is no meaningful way to define subject in those languages where agent and topic are explicitly coded with two separate coding procedures. Thus, there is actually no need for postulating an independent subject in either Japanese or Kannada.[8] In Japanese, topic and agent are distinguished morphologically (by two different "particles", respectively *wa* and *ga*); in Kannada – on which Bhat focused his analysis – the topical constituent is marked syntactically by the sentence-initial position, while the agent is marked by the nominative case (regardless its position in the sentence).

7. Some linguists prefer coding properties (see Mel'čuk 2014; Croft 1994), but usually behavioural syntactic properties are believed to be the most relevant in this respect.

8. While Bhat (1991, 88) considers Kannada a language without subject, others do not share the same opinion; thus, Dryer (1982), whose understanding of subjecthood is, however, quite different from the one suggested by Bhat, considers subject a necessary category in Kannada, at least in some contexts.

In the present paper I will base my analysis on a few properties usually attributed to the subject that so far have not been taken into consideration in the debate on subjecthood in Pāṇini's grammar. They are the following.

- Obligatoriness: if a language has one or more obligatory arguments, subject will be among them.
- Semantic unrestrictedness: subjects tend to be role-unbound, rather than being restricted to one specific semantic role (as happens with other grammatical relations). Subjects not only express the agent, but very likely subsume also other roles, such as the experiencer, the possessor, etc.
- Centrality in transformations: if a language has voices (such as active, passive etc.) or valency derivation phenomena (such as causative, decausative, etc.), the highest position to which lower arguments can be raised, for the purposes of topicalization, is that of subject.

The following discussion aims at demonstrating that all these features are somehow taken into consideration, even if not mentioned directly, in Pāṇini's grammatical tradition.

3. *What Language?*

Rather than an "eternal" Sanskrit (as believed by the late Indian grammatical tradition, see Houben 1996), the Sanskrit language depicted in the *Aṣṭādhyāyī* must be considered a somewhat artificial medium used by a community of learned speakers. Already around Pāṇini's time (possibly from 600 BC onwards, see Kulikov 2013, 65), and more so at the time of Pāṇini's most authoritative commentators Kātyāyana and Patañjali, Sanskrit was replaced by some Middle Indo-Aryan vernaculars in the oral usage. That it was a dead language, i.e. the L1 of no speaker, is proven by the fact that it was taught in a grammar. It is hardly conceivable that in an ancient society an entire tradition of grammatical studies could have arisen just for the sake of pure science and the pursuit of truth (even if, centuries later, it could have become such a speculative discipline), see Houben (2001, 32). On the contrary, we know several examples of indigenous grammatical traditions (e.g. the Arabic or the Icelandic ones), that arose precisely in order to preserve a dying or a dead language from oblivion.

Many scholars have called attention to the fact that, when speaking about Pāṇini's grammar, there are not one but two languages which need to be analysed: the object-language of the grammar (i.e., Sanskrit) and the meta-language of the grammatical description (a set of highly conventional and almost algebraic

markers, highly dissimilar from the "natural" Sanskrit). But we should also consider a third language here, namely the native language of the primary audience of the grammar or, in Houben's (2001, 35) terms, its public. Indeed, for a long time after its exit from oral usage, Sanskrit was still actively used in ritual practice, so the knowledge of grammar served primarily to adapt the rituals to the contextual needs of a worshipper. This learned usage was clearly subject to the influence of the mother-tongue of the imperfect speakers, not all of whom were well-versed in classical grammar. The influence of the spoken vernaculars must have kept growing as time passed, thus causing Sanskrit to go through an apparent, i.e. not a natural, linguistic evolution.[9]

This influence is of utmost relevance for the study of the *Aṣṭādhyāyī*, since the description of a language is always targeted at speakers of some language, either the same one as the described language, or a different one. In other words, any descriptive grammar is also necessarily a contrastive one, to some degree.[10] Before the *pāṇinīya* grammatical tradition became a purely speculative science in its own right, it must have been used for explaining Sanskrit to speakers who did not speak this language as their mother tongue. Therefore, every statement of the *Aṣṭādhyāyī* should be viewed not from an absolute point of view, but as a contrastive stance: it explained the *difference* between Sanskrit and some other language, be it a form of Middle Indo-Aryan or even a non-Aryan vernacular.

We do not know much about this audience language and can only formulate some conjectures. However, this hypothetical language can become an attractive explanation for all those cases where Pāṇini's description of Sanskrit looks particularly odd and unnatural, from the point of view of a classical Indo-European language. At least some of these oddities can therefore be interpreted as calques into Sanskrit grammar from some unascertained substrate vernacular. One such famous case is the description of the interface between semantic roles and argument case marking, as explained further, Section 5.1.

9. This process eventually led to the formation of "mixed" languages, such as Buddhist Hybrid Sanskrit. But already the innovations introduced by Patañjali with respect to what was taught in the *Aṣṭādhyāyī* appear as a drift towards Prakritisation of the classical language. This is the impression one gets while reading such surveys as Laddu (1974).

10. Think of two grammars of Chinese, one for English speakers and the other for speakers of Vietnamese. The English grammar will explain the Chinese tonal system from scratch, describing it phonetically and functionally. The Vietnamese one will simply explain how Chinese tones differ from the Vietnamese tones.

4. *What Grammar?*

In accordance with the idea that I have defended previously in Keidan (2015), and with similar proposals by Joshi–Roodbergen (1983), I reject the view of the *Aṣṭādhyāyī* as a monolithic system authored by one brilliant grammarian. While the evolution of the grammar from Pāṇini to his earliest commentators has been largely recognised by Pāṇinian scholars (see e.g. Deshpande 1980), a theoretical stratification must be recognised, in my opinion, also *within* the *Aṣṭādhyāyī* itself. Thus, some apparent theoretical inconsistencies observable in the way syntax is treated in the *Aṣṭādhyāyī* cannot be resolved by simply adding some Pāṇinian trickery – as traditionalist scholars would do, cf. Cardona (1976a, 158) – but are to be seen as evidence for the compositional history of the grammar (see the discussion in Keidan 2015). *Aṣṭādhyāyī* could therefore be considered a text with multiple authorship that has just been collected, but not completely authored, by someone conventionally identified with the great grammarian Pāṇini.

As we go outside the text of the *Aṣṭādhyāyī*, the grammatical theory could have evolved even further. Apparently, the *pāṇinīya* scholastics maintains all the terminology and methodology used by Pāṇini, but sometimes the resemblance is only superficial. The grammatical meaning that is attributed to Pāṇini's terminology can quite differ from the original theory. Sometimes new meanings and interpretations are explicitly stated by the commentators. At other times commentators only provide indirect insights into the possible grammatical debate of that time through the linguistic examples they use in the discussion. Many of the examples are not quoted as a confirmation of a theory, but as a challenge to it; i.e. not as answers, but as questions for the grammarian. Pāṇini's grammar was already a "frozen", unamendable, sacred text at that time. Therefore, the only way to present linguistic novelties was to submit unpāṇinian sentences to the discussion. The reason for this was the evolution of the audience's language: the linguistic feeling of the speakers forced them to search for explanations in Pāṇini's theory of some linguistic phenomena that Pāṇini's Sanskrit simply did not possess. Consequently, the grammar in the whole became more and more contrastive as time passed.

The language of the grammatical examples has often been criticised by contemporary scholars for being "unnatural" Sanskrit, unattested in any classical text, see Bhate (1996). This might also be justified in relation to the latest historical stages of the grammar. But, at least as far as the oldest commentaries are concerned, i.e. the *vārttika*s 'glosses' of Kātyāyana and Patañjali's *bhāṣya*s 'comments', it is more informative, and also challenging for the scholars, to consider the apparently unnatural Sanskrit sentences quoted by the grammarians as calques from their – or their public's – native language, and not a weird and artificial "grammarians' Sanskrit", as Bhate and others term it (as already pointed out by Kulikov 2013).

5. *Subject and* kartṛ

5.1 Kartṛ *as the Best Candidate for Subject*

Pāṇini's category of *kartṛ* has always attracted the scholars' attention as the likeliest candidate to become the equivalent of our notion of subject. For space reasons, here I only give a brief overview of how Pāṇini's syntax-semantics interface works.[11] On the semantics side, he distinguishes six categories, named *kāraka*s, which are quite similar to our semantic roles. On the syntactic side, he surveys all the nominal case categories, named *vibhakti*s, and assigns a few different functions to each of them, among which there is also that of coding the *kāraka* roles. The latter can be expressed also by other morphological means, such as derivative suffixes and, surprisingly, verbal endings (personal agreement markers). Moreover, the nominal coding of *kāraka*s comes as the last option, after it is ascertained that the other possibilities have not been used (therefore, only one expression per *kāraka* is admitted). It is also to be noted that the nominative case is not assigned to any *kāraka*. The *kāraka* role that resembles our semantic role of agent is called *kartṛ*. Its canonical realisation through *vibhakti* is *tṛtīyā* 'third case', i.e. the instrumental (rather than the nominative, as we would expect); optionally it can also be expressed by the genitive. Alternatively, *kartṛ* is expressed by the active verbal endings or by some agentive suffixes. See the following analysis of a couple of typical Sanskrit sentences; grammatical glosses are provided, with the indication of the *kāraka* roles "expressed" by each word, if any.[12] Besides *kartṛ*, *karman* is also mentioned, which corresponds to the undergoer or patient semantic (macro)role in the modern system.

2)

a.
pacaty	*odanaṃ*	*Devadattaḥ*
(*kartṛ*)	(*karman*)	
cook:3SG.ACT	rice:ACC	Devadatta:NOM

'Devadatta is cooking rice'

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11. A few detailed descriptions of this system exist. A classical introduction to Pāṇini's syntax is, e.g., Cardona (1974), which follows the Indian traditionalist approach. A modernised linguistic analysis of the same theory is provided in Kiparsky (2002). For a critical review of some interesting aspects of this system see also Keidan (2007).

12. Note that this is meant in the Indian sense of "expressing": either the nominal case termination or the verbal endings can express the *kāraka*s. This explains the unusual placement of the *kāraka* labels in examples (2) to (4).

b.   *odanaḥ*   *pacyate*   *Devadattena*
                          (*karman*)   (*kartṛ*)
     rice:NOM   cook:PASS:3SG.MID   Devadatta:INSTR
     'Rice is being cooked by Devadatta'

Clearly, the *karaka/vibhakti* device accounts very well for both active and passive sentences. As we can see from the functional labelling, while the semantic roles remain unchanged, their morphological encoding changes. Three descriptive oddities can be highlighted here. 1) Only single exponence is admitted: Pāṇini «[...] adopts the one-to-one correspondence between morphological elements and morphosyntactic features» (Kiparsky 2002, 45), i.e. there appears to be no idea of anaphora or agreement; 2) one of the morphological means of expressing the arguments' semantic roles is the verbal endings, which is quite unusual – not to say inconsistent – with how we normally describe the morphology of the ancient Indo-European languages; 3) no precedence is reserved for the active voice over the passive: both are just two equiprobable distributions of *kartṛ* and *karman* within sentence morphology, not "derived" from each other in any way, see Cardona (1974, 286, n. 36). These descriptive devices of Pāṇini's appear too strange not to be seen as a possible adaptation of Sanskrit grammar to the linguistic habits of speakers speaking some completely different language, therefore an instance of the difference between object language and the native language of the grammar's audience. The exact nature of this audience language is hard to ascertain. However, as a hypothesis, we can imagine a language with poor morphology, verbal coding of arguments, and a different type of alignment as opposed to the nominative-accusative alignment seen in Sanskrit.

The main reason for treating the *kartṛ* role as the most likely Pāṇinian equivalent of our subject is the fact that it closely translates our semantic role of agent, which, in its turn, usually corresponds to the subject. However, the equipollency of subject and *kartṛ* has so far generally been rejected by scholars, even though they could have had very different ideas of subject in mind. Let us review the main reasons for this rejection.

First of all, some scholars supported a poorly substantiated view according to which Pāṇini's *kartṛ* is equivalent to the nominative and, consequently, corresponds to the modern subject. This is apparently inferable from Renou's dictionary: «Le [*kartṛ*] est noté en principe par le nominatif comme il résulte indirectement de iii 1 68 joint à ii 3 1 [...]» (Renou 1957, 121). Renou's explanation is not genuinely Pāṇinian: the nominative does *not* express *kartṛ*, nor any other *kāraka* (as explicitly stated in *Aṣṭādhyāyī* 2.3.46 *prātipadikārthaliṅgaparimāṇavacanamātre prathamā* 'Nominative indicates the meaning of the nominal base, the gender

and the number only').[13] The ambiguity of the notion of subject caused even Joshi–Roodbergen (1975, IX), two of the most famous Pāṇini specialists, to make a similar claim, equating it to Pāṇini's *prātipadikārtha* 'nominal stem meaning' of the nominative.[14] This wrong equation had already been rejected by Al-George (1958, 45-46): «[...] le *kartṛ* ne se réfère pas à un élément formel, tel que serait le mot au nominatif, qui puisse l'exprimer en exclusivité, mais à l'idée générale d'agent».

Next, Cardona (1974, 244) correctly rejects the applicability of the generativist notion of "external argument" to Pāṇini's theory, since Sanskrit «[...] has no absolutely required word order which would render useful the adoption of a grammatical subject associated with some positioning». He is also right in criticizing (Cardona 1974, 287, n. 41) the generative-inspired but unsubstantiated interpretation of *kartṛ* as subject by Kiparsky–Staal (1969, 36-97).

On the functionalist side, some scholars have tested Sanskrit syntax, together with Pāṇini's description thereof, for subjecthood, with a special regard to the behavioural features. Sanskrit clearly does not tie many of Keenan's features to any precise argument, particularly not to the nominative-marked one, as proven in Hook (1980; 1991) and mentioned already in Speijer (1886, 200). What really triggers such phenomena as many kinds of deletions (e.g. with the infinitives), or reflexivization, is the semantic role of agent, rather than subject.

5.2 *Subject and* kartṛ *Reconsidered*

However, there are some other features of subjecthood that could be envisaged in Pāṇini's grammatical tradition but have escaped scholars' attention so far. If we take them into consideration, we arrive at the conclusion that, at least in the post-Pāṇinian period of the *pāṇinīya* school, the term *kartṛ* drifted more and more from the semantic to the syntactic domain.

I. The logic of the *kāraka/vibhakti* device entails the obligatoriness of the *kartṛ*. It can be expressed either by the verbal termination or by the nominal case, so in practice it cannot remain unexpressed. Pāṇini does not state this anywhere and probably did not mean it to be understood that way, but Pāṇini's commentators and later grammarians, particularly Bhartṛhari (5th c. AD), made much effort to

13. Renou is probably referring to an ancient idea that the nominative case ending is to be somehow considered *samānādhikaraṇa* 'co-referent' with the verbal ending expressing the agent. This idea was suggested as a solution to what already appeared paradoxical to the oldest commentators of Pāṇini, i.e. that the nominative could be the expression of no semantic role, see Cardona (1974, 249).

14. At a purely terminological level similar confusion is found in many other authors who use the term *subject* as simply an equivalent of *agent*, see for example Subrahmanyam (1975).

distinguish a *kartṛ* in every type of sentence as if, in their mind, it was necessarily required. Such a goal is easily achieved if we remember that verbal endings are said to express the *kartṛ*, and that a finite verb is present in almost all sentences.[15] We know that, if in a language there is one argument that is necessarily present in every sentence, it must be the subject. Therefore, this attitude of Pāṇini's commentators reveals a subject-oriented language feeling, probably modelled on the native language of the grammarians or of their audience.

II. In many – even if not in all – languages that have subject, it is characterised by a high degree of semantic eclecticism (see Mel'čuk 2014, 210). It usually corresponds to the agent, but will very likely also include the experiencer, the possessor, and some other semantic roles; plus, in the passive voice, it will be the patient. Therefore, the subject is, among all the grammatical relations, the one that is least bound to a specific semantic role, unlike others which are more selective (e.g., the indirect object is usually a recipient, etc.). Now, if we consider the evolution of the idea of *kartṛ* within the *Aṣṭādhyāyī* and after, we easily observe a clear drift from semanticism to an increasingly syntactic approach to the definition of the *kartṛ* role (as well as of the other *kāraka*s). Pāṇini departs from pre-existing terms which were invented in order to be understood "etymologically", without further explanation or a formal definition. For instance, the word *kartṛ* means 'doer' in Sanskrit; similarly, the word *karman* means 'what is done' or a 'deed', etc. Pāṇini introduced formal definitions, making a first step from naïve linguistics to a more sophisticated theory.[16] In the case of *kartṛ*, Pāṇini's new formal definition is particularly abstract and distant from the etymological meaning of the term. He defines it as *svatantra* 'independent', literally 'self-bound, self-depending'. The true sense of such a qualification was debated within Pāṇini's school. Probably, the intended meaning was that the *kartṛ* is the only *kāraka* whose definition does not refer to any other *kāraka*.[17] In any case, the term *svatantra* 'independent' resembles the

15.   The only apparent exception would be the agentless sentences with stative or "middle" verbs, such as *śete* '[s/he] lies down'. Usually the middle termination expresses the *karman* 'patient', and no nominal expression of the *kartṛ* can be envisaged here. However, Bhartṛhari solves this issue by claiming that the middle verbal endings express *kartṛ* in such sentences, too; see Cardona (1974, 285, n. 27). Similar cases are already dealt with in Pāṇini's own rule 3.1.87 on the so-called *karmavat kartṛ* 'patient-like agent'.

16.   In Keidan (2015) further evolutionary steps are suggested and discussed: (i) the system where *vibhakti*s 'case categories' are more pivotal than *kāraka*s; (ii) the system without *kāraka*s but retaining the *vibhakti*s; and (iii) the stage where neither *kāraka*s nor *vibhakti*s appear to be taken into account.

17.   All the other *kāraka* definitions either explicitly refer to the *kartṛ* or reference is made to it by the commentaries. For example, the definition of *karman* 'patient' is *kartur īpsitatamam* 'the most desired by the *kartṛ*'. Another possible interpretation puts the rule defining the *kartṛ* in comparison with the next one, where *hetu* 'causative agent' is introduced, on which the main agent is, in some way, "dependent", see Freschi–Pontillo (2014, 47).

modern phrase "privileged argument": subject is the only argument capable of being qualified as independent, whatever idea of "independence" we may have.[18] The defense of *kartṛ*'s independence is made explicitly by Bhartṛhari, who lists a few qualities that characterise it, see Cardona's (1974, 239) summary. But this definition in particular is highly abstract, i.e. detached from the semantics of concrete verbs, which fits quite well with our understanding of subjecthood. Sanskrit certainly lacked a strong notion of subjecthood, but the grammarians' mother tongue possibly did have one. So, again, this definition could have been an attempt to reconcile the official grammar with the linguistic feeling of the audience.

III. The last, and most important, feature to mention is the fact that *kartṛ* is the target of a set of transformations corresponding to what modern linguistics calls actancy derivation and voice. These phenomena are not mentioned directly by Pāṇini and are only known from the commentators, starting from Patañjali, who introduce them as a problem: there are some sentences that are perceived as a challenge for Pāṇini's definition of the *kartṛ*, and then a solution is suggested. Let us start from analyzing the sentences in question:

3)
    a.   *asinā*   *chinatti*   *devadattaḥ*
          (*karaṇa*)   (*kartṛ*)
          axe:INSTR   cut:3SG.ACT   Devadatta:NOM
          'Devadatta cuts [whatever objec] with an axe'

    b.   *asiś*   *chinatti*
                             (*kartṛ*)
          axe:NOM   cut:3SG.ACT
          'The axe cuts [by itself]'

4)
    a.   *devadattaḥ*   *sthālyāṃ*   *pacati*
                          (*adhikaraṇa*)   (*kartṛ*)
          Devadatta:NOM   pot:LOC   cook:3SG.ACT
          'Devadatta is cooking in a pot'

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18. Interestingly, medieval European philosophers and grammarians also mentioned a very similar phrase *per se stans* 'standing on its own' while defining such notions as subject, substantive and the like, see Alfieri (2014). It almost literally translates Sanskrit *svatantra*.

b.   *sthālī*   *pacati*
                       (*kartṛ*)
     pot:NOM   cook:3SG.ACT
     'The pot cooks'

In example (3) the two sentences mean, respectively, 'Devadatta is cutting stuff with an axe' and 'The axe cuts by itself'. In today's terminology we would say that the relation between the two sentences is that of an agent-deleting actancy derivation, while the instrument (called *karaṇa* by Pāṇini) is promoted to the position of subject.[19] In example (4) a similar transformation involves the locus (called *adhikaraṇa* by Pāṇini) which is being promoted to the subject position: 'Devadatta is cooking in a pot' vs. 'The pot cooks'. As Patañjali explains, the difference between the two members of this transformation is in the so-called *vivakṣā* 'communicative intention'. The *vivakṣā* is used increasingly by Pāṇini's commentators whenever the text of the *Aṣṭādhyāyī* is indeterminate or vague with reference to some grammatical rule, see van Nooten (1983), Radicchi (1993). Thus, first of all, the *vivakṣā* is invoked as the guiding principle for the speaker to decide between the verbal and the nominal expression of the *kartṛ*: Pāṇini just mentions these two possibilities, without saying which has precedence. In fact, according to Patañjali, it is the speaker's communicative intention that makes him/her choose between the active and the passive voice. Therefore, in modern terms, we would locate it in the domain of information structure. *Vivakṣā* looks like a way to denote topicality: while the former is the intention to speak, the latter is defined as 'what is spoken about'.[20] Indeed, the choice of the verbal voice is the choice of what element is topicalised, the agent (as in the active voice), or the patient (as in the passive voice). Either the former or the latter, accordingly, becomes the subject of the sentence.

The sentences quoted in (3) and (4) are also explained by the commentators through the *vivakṣā*. They present a tricky theory where multiple actions build up to the main action denoted by the verb. Each argument of the verb, we are told, can be the *kartṛ* of a "sub-action": the axe, originally the instrument of cutting, can become the *kartṛ* of a derived sentence (ex. 3b); similarly, the pot, normally the locus of the main action of cooking, can become the *kartṛ* of the derived sentence (ex. 4b). Note that this view presupposes the assignment of the *kāraka* roles

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19. Note that, since the verb does not change its morphological form, the actancy derivation is only visible from the semantics of the arguments, and is therefore of the "labile" type, see Keidan (2014).

20. This is not the interpretation that *vivakṣā* is usually given by traditionalist scholars. Thus, Cardona (1974, 52, n. 14) seems to be diminishing its significance: «Pāṇinīyas speak of *vivakṣā* ('desire to speak, say'); when they do this they are of course simply saying that the grammar accounts for what people say».

to the arguments themselves, while verbal endings are said to just "express" them "co-referentially"; this idea was introduced by Bhartṛhari and represents another step away from Pāṇinian orthodoxy.

The *kartṛ* of a derived sentence is, from our point of view, also its topic. Indeed, actancy derivation serves the goal of topicalization similarly to verbal voice. And, according to Pāṇini's commentators, here the *vivakṣā* principle intervenes in order to allow the speaker to choose among different *kartṛ*s. Chronologically, this mechanism is described in later strata of the commentaries than the choice between passive and active, so that some scholars speak about *vivakṣā$_2$* here as opposed to *vivakṣā$_1$* in the preceding context (see Deshpande 1990). But in any case, both etymologically (because communicative intention amounts to the selection of a discourse topic) and functionally (because it produces sentences where different semantic arguments are raised to the subject position) the term *vivakṣā* closely recalls the notion of topicalization, which is relevant in the present context since it is among those features that better define subjecthood. Indeed, if we remember that subject can be synthesised as a coalescence of topic and agent, the Indian notion of *kartṛ* in its late, post-Pāṇinian interpretation appears very close to this definition.

6. *Conclusion*

From the discussion above we can conclude that the statement in (1) should be reformulated. The loose definition of subject that was taken into consideration earlier should be substituted with an explicit multifactor functionalist approach. Rather than considering the literal wording of Pāṇini's *Aṣṭādhyāyī* I have dealt with linguistic examples provided by the *pāṇinīya* tradition, since they reveal more grammatical complexity than was admitted by Pāṇini. And, finally, instead of considering only Classical Sanskrit, I propose to consider the native language of those speakers who were the primary audience of the grammar and for whom the grammar was intended as a source of subjecthood. The statement now runs as follows:

5)
> There are more subjecthood features in the Old Indian grammatical tradition than we used to think, provided that the discussions by Pāṇini's commentators of some Sanskrit sentences hypothetically calqued from their mother tongue are taken as our evidence.

With this proviso we can conclude that, contrary to common opinion, the *kartṛ* role of the Indian grammar, at least in its late interpretation, can be considered a good equivalent of the European notion of subject for a good number of reasons, the main one being its relatedness to the notion of topicality.

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