

## On adjectives and adverbs expressing ‘nakedness’ and ‘barefootedness’ in Polish and Russian: a study on morphosyntactic variation

Прилагательные и наречия со значением ‘нагой’ и ‘босой’: случаи морфосинтаксической вариативности

Martin Renz · Gerd Hentschel

Published online: 17 December 2010  
© Springer Science+Business Media B.V. 2010

**Abstract** In Polish and Russian, adjectives and adverbs occur in several syntactic functions, among others as adjuncts (i.e. as ‘secondary predicates’ and as adverbials) and, in copula clauses, as (primary) predicates. The choice between adjective and adverb is governed by certain syntacto-semantic factors: adjectives in these syntactic positions usually occur with orientation towards a noun phrase that denotes a first-order entity (i.e. an ‘object’ or a person), whereas adverbs usually exhibit orientation towards a higher-order entity (i.e. an event or a proposition). Adverbs denoting a lack of clothing, however, seem to be—at least to a certain degree—an exception to this rule, since they occur with semantic orientation towards personal referents in—seemingly free—variation with corresponding adjectival forms. This paper investigates these cases of morphosyntactic variation, examining to what extent they are indeed instances of free variation and how far semiotic factors like transparency and indexicality influence the choice of either adjective or adverb.

**Аннотация** В русском и польском языках прилагательные и наречия могут занимать различные синтаксические позиции, в том числе позицию адъюнктов (т.е. ‘вторичных предикатов’ и обстоятельств), а в предложениях со связкой—позицию первичных предикатов (сказуемых). Выбор между прилагательным и наречием зависит от определенных синтактико-семантических факторов: прилагательные в этих позициях относятся, как правило, к именной группе, обозначающей сущность первого порядка (т.е. ‘вещь’ или лицо), в то время как наречия обычно демонстрируют отнесенность к сущностям высшего порядка (т.е. к событиям или пропозициям). Своего рода исключение, как нам представляется, составляют наречия, обозначающие отсутствие одежды. Такие наречия, семантически ориентированные на личных референтов, допускают свободную вариативность с соответствующими

---

M. Renz (✉) · G. Hentschel  
Department of Slavonic Studies, University of Oldenburg, Oldenburg, Germany  
e-mail: [martin.renz@uni-oldenburg.de](mailto:martin.renz@uni-oldenburg.de)

G. Hentschel  
e-mail: [gerd\\_hentschel@web.de](mailto:gerd_hentschel@web.de)

формами прилагательных. В настоящей статье анализируются эти случаи морфосинтаксической вариативности и выясняется, какова роль таких семиотических факторов, как транспарентность и индексность, в выборе между наречием и прилагательным.

## 1 Adjectives and adverbs as predicates in copula clauses

Polish and Russian are languages that by morphological means distinguish between adjectives on the one hand, and adverbs derived from them on the other.<sup>1</sup> Both adjectives and adverbs can function as predicates (in a syntactic sense) in these two languages. In copula clauses, an adjective can typically be used as predicate when the subject is conceptualised as designating a first-order entity (cf. Lyons 1977), i.e. usually when the subject signifies a physical object that exists in space and time like ‘Peter’, ‘a letter’ or ‘the library’.<sup>2</sup> In Polish, such an adjectival predicate agrees in case, number and gender with its subject, for example, *mokry* ‘wet’ in (1), which is marked for nominative case, singular, and masculine:<sup>3</sup>

- (1) Piotr<sub>nom.sg.masc</sub> był mokry<sub>nom.sg.masc</sub>.  
‘Peter was wet.’

In Russian, there are several possibilities for the same context. Either the adjective takes its long-form and (just like an adjectival predicate in Polish) agrees in case, number and gender with the subject, cf. *мокрый* ‘wet’ in (2a), or the adjective agrees only in number and gender and is marked for instrumental case, like *мокрым* ‘wet’ in (2b), or, as a third possibility, the adjective takes its short-form, see *мокр* ‘wet’ in (2c):<sup>4</sup>

- (2) a. Петр<sub>nom.sg.masc</sub> был мокрый<sub>LF(nom.sg.masc)</sub>.  
b. Петр<sub>nom.sg.masc</sub> был мокрым<sub>LF(instr.sg.masc)</sub>.  
c. Петр<sub>nom.sg.masc</sub> был мокр<sub>SF(sg.masc)</sub>.  
‘Peter was wet.’

Whereas ‘full’ agreement is thus the central coding strategy in Polish, in Russian there are two additional forms that in some way overtly signalise the predicative function of

<sup>1</sup>In this respect these two languages are similar to English. Polish and Russian, though, can be considered as in some sense more ‘rigorous’ than English, as in these two languages it is possible to derive formally unambiguous adverbs from most adjectives, whereas in English, as pointed out by Quirk et al. (1989, 438f.), there are several semantic and formal restrictions on the derivation of adverbs using the suffix *-ly*.

<sup>2</sup>For the outline of a typology of entities see Lyons (1977, 442–446). In addition to first-order entities, he distinguishes events and states of affairs as second-order entities, and third-order entities, for example, propositions.

<sup>3</sup>The following abbreviations are used in this article: acc—accusative case; adj—adjective; adv—adverb; agr—agreement case; inf—infinitive; instr—instrumental case; intrans—intransitive clause; LF—long-form; masc—masculine; N—noun; nom—nominative case; NP—noun phrase; ptcp—participle; SF—short-form; sg—singular; trans—transitive clause; VP—verbal phrase.

<sup>4</sup>Of course, by far not all Russian adjectives have a short-form, as e.g. Corbett (1979, 29) remarks. In Polish, nowadays only a few historical short-forms have survived, e.g. in constructions like *jestem pewien* ‘I am sure’.

the adjective: the instrumental and the short-form.<sup>5</sup> Short-forms in contemporary Russian standard language are not case-marked, they occur exclusively in their historical nominative variants, marked for either masculine, feminine, neuter (in singular) or plural (where Russian, unlike Polish, does not have a gender distinction). Russian long-forms, just like Polish adjectives, can be used as fully agreeing NP-internal adjectival attributes as well (*mokry chłopiec / мокрый мальчик* ‘wet boy’), whereas short-forms are restricted to predicative usage, apart from some idiomatic relicts.<sup>6</sup>

Adverbs, too, can function as predicates in copula clauses in Polish and Russian. They are common, for example, in so-called ‘subjectless sentences’ like the ones in (3). Other typical instances of predicative adverbs are found in sentences whose subject designates a higher than first-order entity and is headed by the infinitive of a verb. See for example the constructions in (4), where the adverb *trudno / трудно* ‘lit. difficultly’ predicates on the proposition of working under bad conditions. Of course, adverbs can also be used with pronominal terms that anaphorically or deictically refer to such propositions, cf. (5):

- (3) a. Tu jest mokro<sub>adv</sub>.  
 b. Здесь мокро<sub>adv</sub>.  
 ‘It is wet here.’ (Grzegorzycykowa 1975, 79)<sup>7</sup>
- (4) a. Pracować w złych warunkach jest trudno<sub>adv</sub>.  
 b. Работать в плохих условиях—трудно<sub>adv</sub>.  
 ‘It is difficult to work under bad conditions.’ (Grzegorzycykowa 1975, 35)
- (5) a. To jest trudno<sub>adv</sub>.  
 b. Это трудно<sub>adv</sub>.  
 ‘That is hard.’

As a rule, adverbs are not acceptable as predicates of first-order entities in copula clauses. As mentioned above, typical predicates of first-order entities in Polish are adjectives that agree with their subject in case, number and gender. Short-form adjectives are one of three potential options in Russian. Examples are given in (6):

- (6) a. Jej mąż<sub>nom</sub> był dobry<sub>nom</sub> i młody<sub>nom</sub>, ale brzydki<sub>nom</sub>.  
 b. Ей муж<sub>nom</sub> был хорош<sub>SF</sub> и молод<sub>SF</sub>, но некрасив<sub>SF</sub>.  
 ‘Her husband was good and young, but ugly.’

<sup>5</sup>Instrumental coding of adjectival predicates occurs in contemporary Polish, too, but, as Chachulska (2008) points out, almost exclusively with non-finite forms of the copula: *to jest możliwe, być głupim*<sub>instr</sub>, *a jednak szczęśliwym*<sub>instr</sub> ‘it is possible: to be stupid, but still happy’.

<sup>6</sup>There has been a lot of research and extensive discussion on which kinds of semantic distinctions are expressed by these different coding possibilities. A widespread opinion is that the long-form in such sentences expresses a rather stable feature and insofar serves to characterise the subject of the copula clause, whereas the short-form of the adjective and the instrumental marking express a rather momentary state. In some respects, this traditional explanation resembles the distinction between ‘stage-level’ and ‘individual-level’ predicates (cf., e.g., Kratzer 1995 and also Carlson 1977; see below). Still, there are good reasons to assume that it is not primarily semantic notions like temporal stability that determine the choice between these three forms, cf. Hentschel (2009).

<sup>7</sup>Examples (3a) and (4a) were taken from Grzegorzycykowa (1975, 35 and 79), (3b) and (4b) are the authors’.

Replacing such adjectives with adverbs usually renders unacceptable sentences, cf. (7):<sup>8</sup>

- (7) a. \*Piotr<sub>nom</sub> był dobrze<sub>adv</sub> i m'łodo<sub>adv</sub>, ale brzydko<sub>adv</sub>.  
 b. \*Петр<sub>nom</sub> был хорошо<sub>adv</sub> и молодо<sub>adv</sub>, но некрасиво<sub>adv</sub>.  
 'Peter was good and young, but ugly.'

However, especially in Polish, there are instances that allow for variation between adjective and adverb. For example, *nago* 'naked' and *boso* 'barefoot' are deadjectival adverbs that sometimes occur as predicates of first-order entities in copula clauses in variation with the agreeing adjectival forms, cf. (8):

- (8) a. Piotr<sub>nom</sub> był nagi<sub>nom</sub> i boso<sub>nom</sub>.  
 b. Piotr<sub>nom</sub> był nago<sub>adv</sub> i boso<sub>adv</sub>.  
 'Peter was naked and barefoot.'

At present, it is not possible to ultimately determine which factors influence the choice between adjective and adverb. Informal consultations of native speakers suggest that the adjectival and adverbial variants in (8) are synonymous. In other cases of 'variation' between adverb and adjective this may be different. In sentence pairs like (9a) and (9b) the adjective is often interpreted as expressing a rather time-stable characterisation of the subject and so can be classified as 'individual-level predicate', whereas the adverb is rather understood as carrying a momentary meaning, thus being an instance of a 'stage-level predicate'.<sup>9</sup>

- (9) a. Jesteśmy punktualni<sub>adj</sub>.  
 b. Jesteśmy punktualnie<sub>adv</sub>.  
 'We are punctual.'

On the basis of these examples it might be assumed that the synonymy of constructions such as (8a, b) follows from the lexical meaning of the respective predicates that makes a potential conceptualisation as a time-stable individual-level predicate less probable: at least in the Western culture, it is unlikely that the nakedness of human beings is conceptualised as an individual-level predicate instead of a rather transient or incidental stage-level predicate, so the adjective in (8a) and the adverb in (8b) are interpreted synonymously. On the other hand, it is unproblematic to imagine 'punctuality' as one of a person's rather stable traits of character as well as an accidental feature, hence speakers try to ascribe this conceptual distinction to the formal difference between the adjectival and adverbial predicate. Nevertheless, the hypothesis of a semantic difference that is expressed by either the adjective or the adverb is restricted, for instance, by the observation that the adverb, when it is otherwise overtly marked, can code a steady feature (*zawsze jesteśmy punktualnie<sub>adv</sub>* 'we are always on time'—which, of course can be read with an iterative meaning) and the adjective can be used to express a singular, incidental feature (*No, tym razem to jesteśmy punktualni<sub>nom</sub>!* 'Well, this time we are on time!').

In Russian, unlike Polish, the de-adjectival adverbs *nago* 'naked' and *boso* 'barefoot' are not acceptable as predicates in constructions analogous to (8). The coding of the predicate

<sup>8</sup>Sentences like *его тело было мокро* 'his body was wet' do not contain an adverb, but a homonymous neuter short-form adjective that agrees with the subject.

<sup>9</sup>On the distinction between stage-level and individual-level predicates see Kratzer (1995) and Carlson (1977).

as an adjective, for example in its short-form, seems to be the only option, see (10a, b). In the case of expressions with the meaning ‘naked’ and ‘barefoot’, however, Russian offers the possibility to use the forms *нагишом* ‘naked’ and *босиком* ‘barefoot’ in this position, see (10c):

- (10) a. Петр<sub>ном</sub> был наг<sub>сф</sub> и бос<sub>сф</sub>.  
 b. \*Петр<sub>ном</sub> был наго<sub>adv</sub> и босо<sub>adv</sub>.  
 c. Петр<sub>ном</sub> был нагишом<sub>adv</sub> и босиком<sub>adv</sub>.  
 ‘Peter was naked and barefoot.’

Superficially, *нагишом* ‘naked’ and *босиком* ‘barefoot’ look like inflected forms of nouns in the instrumental case, but corresponding nouns \**нагиш* and \**босик* are not attested. Syntactically, however, these forms must be considered adverbs.<sup>10</sup> The fact that they resemble instrumental forms of masculine or neuter nouns may support the acceptance of these adverbs, since nouns (like adjectives) in the instrumental case are common in the function of the predicate in Russian copula clauses.

Consulting larger corpora, however, it turns out that the frequency of adjectival forms predicating ‘nakedness’ in copula clauses with the copula *быć/быть* ‘to be’ in both Polish and Russian by far outweighs the frequency of the respective adverbial variant.<sup>11</sup> In the IPI PAN corpus of Polish, for instance, 102 copula clauses with an agreeing adjectival form of *nagi* ‘naked’ were found and only two examples where the adverb *nago* ‘naked’ functions as predicate of a first-order entity.<sup>12</sup> The *Национальный корпус русского языка* contains 84 examples with an adjectival form of *нагой* ‘naked’ (65 short-forms, 15 long-forms with full agreement, 4 long-forms with predicative instrumental),<sup>13</sup> and only one sentence where the adverb *нагишом* is used. Although in principle acceptable, in reality these adverbs only very rarely occur as predicates of first-order entities in copula clauses. Interestingly, they are by far more common in the context of secondary predication, which will be discussed below.

<sup>10</sup>This is what Efreмова (2006) and the Academy of Science’s dictionary (Akademija 1950) do. Both dictionaries also label the form *нагишом* as *разговорное* ‘colloquial’. On the etymology of these forms, note that Akademija (1950) lists a noun *босьяк* that is labelled ‘prerevolutionary’ and whose meaning is defined as ‘a representative of the declassified layers of a town or village; ragamuffin’. It cannot be ruled out that the current *босиком* ‘barefoot’ originated from an instrumental form of this noun, since due to iканье /a/ would have been reduced to [i] in speech. A similar derivational relation can be assumed for the noun *голыш*, a colloquial expression for a ‘naked (or, in a figurative sense, poor) person’, and the expression *голышом*, which can well be interpreted as the instrumental form of this noun. For this reason, we restrict ourselves to a discussion of the adverbs *нагишом* ‘naked’ and *босиком* ‘barefoot’ in this paper, and do not take the form *голышом* into consideration.

<sup>11</sup>Clauses with other verbs that can be considered copulae (expressing meanings like ‘to become’ or ‘to remain’, or especially Russian *являться* ‘to be, to appear’) were not considered.

<sup>12</sup>Apart from these 102 examples with an adjectival form, there are some 41 occurrences of the proverbial idiomatic expression *król jest nagi*<sub>adj</sub> ‘the king is naked’, used to proclaim the obviousness that something which has commonly been considered as working well actually fails to do so (in reference to H. C. Andersen’s *The Emperor’s New Clothes*).

<sup>13</sup>The relatively low frequency of the instrumental case might depend on the fact that instrumental coding is uncommon where no form of *быть* ‘to be’ is realised on the sentence surface, as is the rule in the present tense.

## 2 Adjectives and adverbs as adjuncts: participant-orientation vs. event-orientation

In Polish and Russian, adjectives and adverbs can occur in a further structural position; that of (facultative) adjuncts, i.e. as adverbials in a broad sense in otherwise fully saturated clauses. In recent linguistic discourse a distinction is made between participant-oriented adjuncts, on the one hand, and event-oriented adjuncts, on the other (cf. Schultze-Berndt and Himmelmann 2004; Himmelmann and Schultze-Berndt 2005a), as exemplified in (11a–c):

- (11) a. Peter<sub>i</sub> drank his coffee happy<sub>i</sub>.  
 b. Peter drank his coffee<sub>i</sub> black<sub>i</sub>.  
 c. Peter drank<sub>i</sub> his coffee quickly<sub>i</sub>.

The adjuncts *happy* and *black* in (11a, b) carry information about the state of an entity involved in the event presented here. In (11a) *happy* expresses a state of the agent and *black* in (11b) provides information about a state of the patient involved in the event. A common term for such participant-oriented adjuncts is secondary predicate. In the examples above, *happy* and *black* represent the arguably central subtype of depictive secondary predicates, which is also the one that will be relevant below. Depictives, like other secondary predicates, semantically imply a sort of ‘copular’ predication on one of the participants in the event; this participant is usually called the controller of the secondary predicate.<sup>14</sup> It has often been asserted that the secondary predication of a depictive holds true only within the temporal (and modal) truth limitation of the primary predication, but this should not be understood as a statement about the ontological level. In a Russian sentence like *Петр ел яйцо сырым* ‘Peter ate the egg<sub>i</sub> raw<sub>i</sub>’, it is of course not predicated that the egg was raw only in the moment of Peter’s eating of the egg. As Hentschel (2008) argues, it is the (informational) relevance of the depictive secondary predication that is restricted by temporal (and modal) values of the primary predication.<sup>15</sup>

The adjunct *quickly* in (11c), on the other hand, is semantically oriented towards the event rather than towards one of its participants, since it specifies the speed of the action of drinking. Such event-oriented adjuncts can be termed adverbials (in a narrow sense), as will be done below.<sup>16</sup> Here, the difference between adverbials and secondary predicates is understood primarily as a semantic one, namely in terms of their orientation.

<sup>14</sup>Most typically, the controller of a secondary predicate is one of the central participants in the event, like agent or patient as in (11a, b). However, Schultze-Berndt and Himmelmann (2004) demonstrate in their typological study that secondary predicates are not principally restricted to such controllers, although there might be restrictions as to the syntacto-semantic status of the controller in a particular language. See e.g. Anders-Marnowsky (2008) on prepositional phrases.

<sup>15</sup>Other types of secondary predicates differ in this respect. Resultative secondary predicates, for instance *green* in *they painted the house green*, serve to express a state that, as a result, holds true after the completion of the event denoted by the primary predicate. Circumstantial secondary predicates, on the other hand, themselves restrict the validity of the primary predication, cf. the conditional circumstantial *drunk* in *drunk, you shouldn’t drive* (i.e. *if you are drunk, you shouldn’t drive*). The concept ‘circumstantial secondary predicate’ can be traced back to Nichols (1981), who also distinguishes several subtypes of circumstantials. For a modification of Nichols’ classification, see Hentschel (2008).

<sup>16</sup>A broader and common use of the term adverbial includes both participant-oriented secondary predicates as well as event-oriented adjuncts, but we do not follow this terminological tradition.

Syntactically, adverbials and secondary predicates seem to behave to a great extent identically (see e.g. Plank 1985), which explains why traditional grammar does not distinguish between them. But at least in many Slavonic languages, in contrast to German for example (see Hentschel 2008), the difference between participant-orientation and event-orientation of adjuncts, i.e. the difference between secondary predicates and adverbials, plays an important role in the morphosyntax of these adjuncts, which is at issue in this paper (see below).

It is not always easy to distinguish between event-orientation and participant-orientation on purely semantic grounds. This holds especially for adverbials of manner and depictives which are controlled by the subject, since even adverbials can imply a certain degree of participant-orientation: (11c), for example, in a way implies a copular predication like *Peter was quick (in drinking his coffee)*.<sup>17</sup> Some sort of operational device is thus required for a distinction. There are several tests that can help to distinguish event-oriented adverbials from participant-oriented secondary predicates, one of which is presented in (12). This test is based on making the adjunct in question the attribute of an action noun derived from the verb of the original sentence. While positive results as in (12c) indicate event-orientation of the adjunct in question, participant-orientation of the respective adjunct yields unacceptable or at least disputable results of this test, see (12a, b):

- (12) a. ??happy drinking of coffee  
 b. \*black drinking of coffee  
 c. quick drinking of coffee

Event-orientation on the one hand and participant-orientation on the other are not to be considered two perfectly distinct semantic spheres with clear-cut boundaries that mutually exclude each other. In fact, they can be modelled as the extrema of a semantic continuum with a progressive junction that allows for vagueness in between, see e.g. Schultze-Berndt and Himmelmann (2004, 120) and Schroeder (forthcoming).<sup>18</sup> Consider, for example, the adjunct *nervously* in (13) that exhibits orientation towards the event in so far as it modifies the manner in which the action takes place. At the same time, however, this adjunct is participant-oriented in that it informs about a psychological state of the agent.<sup>19</sup>

- (13) Peter is nervously running up and down the corridor.

At the level of morphosyntax, languages may choose to cut this semantic continuum in two by employing distinct coding strategies to signalise the event-orientation or, respectively, the participant-orientation of particular adjuncts. Similarly to English, Polish and Russian exploit the morphological distinction between adjectives and adverbs and (usually) signalise

<sup>17</sup>This can be understood as a metonymic shift of the quality ‘quick’ from the event to its agent, cf. Boeder (2005).

<sup>18</sup>See also Himmelmann and Schultze-Berndt (2005b), where the conceptualisation of a one-dimensional semantic continuum put forward in Schultze-Berndt and Himmelmann (2004) is replaced by the image of a three-dimensional ‘semantic map’ with a centre and a periphery.

<sup>19</sup>In example (13), it can in fact be supposed that the agent’s nervousness is the reason for the depicted event of running up and down, so *nervously* here might be considered a ‘transparent oriented adverb’ to use Geuder’s term (2002). On the category ‘transparent adverb’ in Polish and Russian see Renz and Hentschel (2008). Cf. also the discussion of example (29) below.

event-orientation using the adverb, and participant-orientation by an adjectival form.<sup>20</sup> Thus, the semantic orientation of the speed modifying adverbials *szybko* and *быстро* ‘quickly’ towards the event in (14), for instance, is formally reflected in the fact that these adjuncts are expressed by means of adverbs, not adjectives.

- (14) a. Piotr szybko<sub>adv</sub> jedzie do pracy.  
 b. Петр быстро<sub>adv</sub> едет на работу.  
 ‘Peter drives to work quickly.’

On the other hand, Polish and Russian use adjectives for the expression of participant-orientation, i.e. as secondary predicates. In Polish, adjectival secondary predicates agree with their controller in case, number and gender, just like primary adjectival predicates do, as shown earlier. Agreement in three categories is also one possibility for adjectival secondary predicates in Russian, see the examples in (15) and (16), where the orientation of the predicative adjuncts towards the subject or the object is signalled by such ‘full’ agreement with the respective controller:

- (15) a. Anna<sub>nom.sg.fem</sub> znalazła Piotra pijana<sub>nom.sg.fem</sub>.  
 b. Анна<sub>nom.sg.fem</sub> нашла Петра пьяная<sub>nom.sg.fem</sub>.  
 ‘Anna<sub>i</sub> found Peter drunk<sub>i</sub>.’
- (16) a. Anna znalazła Piotra<sub>acc.sg.masc</sub> pijanego<sub>acc.sg.masc</sub>.  
 b. Анна нашла Петра<sub>acc.sg.masc</sub> пьяного<sub>acc.sg.masc</sub>.  
 ‘Anna found Peter<sub>i</sub> drunk<sub>i</sub>.’

In Russian there is yet another coding strategy, which is exemplified in (17), where the secondary predicates *пьяной* and *пьяным* ‘drunk’ occur in the instrumental case. Here, the predicative adjuncts still agree in gender and number with their controllers and instrumental case marking can be considered an overt signal of the predicative function of the adjective.

- (17) a. Анна<sub>nom.sg.fem</sub> нашла Петра пьяной<sub>instr.sg.fem</sub>.  
 ‘Anna<sub>i</sub> found Peter drunk<sub>i</sub>.’  
 b. Анна нашла Петра<sub>acc.sg.masc</sub> пьяным<sub>instr.sg.masc</sub>.  
 ‘Anna found Peter<sub>i</sub> drunk<sub>i</sub>.’

It is safe to say that, unlike in copula clauses, short-form adjectives no longer occur in the function of secondary predicates in contemporary standard Russian. They can still be found in texts from the 19th century, but do not conform to the contemporary linguistic norm. Note also that in Polish, unlike Russian, there is no option for coding participant-oriented adjectival adjuncts in the instrumental, whereas—although often perceived as slightly old-fashioned—instrumental marking is in principle possible for nouns (\**wrócił pijanym*<sub>adj.instr</sub> ‘he returned drunk’ vs. *wrócił bohaterem*<sub>N.instr</sub> ‘he returned as a hero’) and for some predicative complements (i.e. arguments, not adjuncts, e.g. *nazywali go głupim*<sub>adj.instr</sub> ‘they called him stupid’), see Chachulska (2008) for details.

<sup>20</sup>Although these three languages in some way or another formally reflect the semantic distinction between event-orientation and participant-orientation for adjectival adjuncts in a broader sense (i.e. including adjectives and adverbs), this does not necessarily mean that this is also the case with other types of adjuncts, for instance, prepositional phrases; these generally seem to behave identically, regardless of their orientation towards the event or a participant, e.g. *Peter met a friend in Warsaw* (where the prepositional phrase *in Warsaw* localises the event as a whole) vs. *Peter found a rat in his bag* (where the prepositional phrase *in his bag* is a secondary predicate of the object); on local prepositional phrases as secondary predicates in Russian cf. Zeller (forthcoming).



To briefly summarise what has been said so far, the semantic distinction between participant-orientation and event-orientation in both languages, Polish and Russian, is—on a broad scale—formally reflected by distinct coding strategies for adjectival adjuncts in a broader sense (i.e. including adjectives as well as adverbs). Typically in these two languages, event-orientation is expressed by adverbs, whereas adjectives are used to signalise participant-orientation (see below for more details). Whereas Polish is stricter about the marking of adjectival secondary predicates, because generally only full agreement is acceptable, in Russian there is a certain variation between agreement case marking and instrumental marking.

In addition to secondary predicates that are coded by adjectives, Polish also offers constructions like the ones in (18) and (19): here adverbs, otherwise prototypical instances of event-oriented adjuncts, exhibit rather clear participant-orientation, and thus need to be considered secondary predicates.<sup>21</sup>

(18) Jan umarł młodo<sub>adv</sub>.  
'Jan<sub>i</sub> died young<sub>i</sub>.'

(19) Piotr chodzi nago<sub>adv</sub>.  
'Peter<sub>i</sub> walks around naked<sub>i</sub>.'

The deadjectival adverbs in these examples are secondary predicates that are oriented towards the referent of the subject-phrase in the respective event, despite their coding as adverbs. Although subject-orientation is quite common with participant-oriented adverbs, they are not restricted to predicating on subjects only, but, for instance, can also take the object as their controller, like *pojedynczo* 'individually' in (20) or *boso* 'barefoot' in (21):

(20) Wzięli każdego z nas pojedynczo<sub>adv</sub>.  
'They took each of us<sub>i</sub> individually<sub>i</sub>.'

(21) Często widziano te dzieci boso<sub>adv</sub>.  
'One often saw these children<sub>i</sub> barefoot<sub>i</sub>.'

Participant-oriented adverbs in Polish do not only occur in the function of (or at least similar to) depictive secondary predicates, but can also instantiate other subtypes of secondary predicates. For example *osobno* 'separately' in (22) restricts the validity of the primary predication as a whole ('if they separated, they might have a chance') and thus can be considered the exponent of a circumstantial secondary predicate.<sup>22</sup> The patient-oriented or object-oriented adverb *gładko* 'smooth' in (23), on the other hand, does not express a predication that holds simultaneously with the event denoted by the primary predication, as would be the case with depictives. Rather, it encodes a state that results from the event, thus being a resultative secondary predicate.<sup>23</sup>

<sup>21</sup>Although some attention has been devoted to such participant-oriented adverbs (cf. Łoś 1927; Pisarkowa 1965; Grzegorzczkowska 1975; Prażmowski 1981 or Kallas 1994), it is fair to say that, so far, they have been somewhat neglected in linguistic discourse; other works on secondary predicates in Polish like Fehrmann (1994), Węgrzynek (1995) or Chachulska (2008) concentrate on adjectival (and other rather canonical) instances of secondary predicates, but do not pay special attention to such adverbs.

<sup>22</sup>For more on this type, see Nichols (1981) and, for a somewhat different view, Hentschel (2008).

<sup>23</sup>See Hentschel (2009) on the problem of resultative secondary predicates, which seem to be rare in Slavonic languages; cf. also Holvoet (2008).

- (22) *Osobno*<sub>adv</sub> *mieliby* szansę, *razem* nie.  
‘Separately<sub>i</sub>, they<sub>i</sub> might have a chance, together not.’
- (23) *Czesała* włosy *gładko*<sub>adv</sub>.  
‘She combed her hair<sub>i</sub> smooth<sub>i</sub>.’

In Polish, the adverbs that in particular cases may exhibit participant-orientation do not seem to form one coherent, homogenous semantic class. But some features such adverbs quite often seem to express are, for instance, related to the amount or distribution of participants, see *osobno* ‘separately’ and *pojedynczo* ‘individually’ above, or the (partial) absence of clothing of a participant, like *boso* ‘barefoot’ and *nago* ‘naked’ (see below). Schroeder (forthcoming) considers adjuncts expressing the distribution of participants as principally vague, arguing that they always indicate participant-orientation as well as event-orientation.<sup>24</sup> The participant-orientation of predicates expressing (partial or full) nakedness, however, seems to be uncontroversial (presumably on ontological grounds).<sup>25</sup>

### 3 Adverbs vs. adjectives as secondary predicates: a closer look at Polish *nago* ‘naked’ and *boso* ‘barefoot’

With regard to the Polish adverbs *nago* ‘naked’ and *boso* ‘barefoot’, it seems that in most contexts in which these adverbs occur as secondary predicate, an adjectival secondary predicate showing agreement would also be acceptable, as shown by the quasi minimal-pairs in (24) and (25), which are current examples taken from the corpus of the IPI PAN:

- (24) a. [...] *widziano* faraona, jak *biegał* *nagi*<sub>nom</sub> *po* *ogrodach*.  
‘The pharao was seen, as he<sub>i</sub> ran around naked<sub>i</sub> in the gardens.’
- b. *Mężczyzna* *biegał* *nago*<sub>adv</sub> *wokół* *pomnika* *Fredry*.  
‘The man<sub>i</sub> ran naked<sub>i</sub> around Fredro’s monument.’
- (25) a. [...] *przez* *chwilę* [...] *widzieliśmy* *ich*<sub>acc</sub> *nagich*<sub>acc</sub>, [...].  
‘For a moment we saw them<sub>i</sub> naked<sub>i</sub>.’
- b. *Antek* [...] *widział* *Anite*<sub>acc</sub> *nago*<sub>adv</sub>.  
‘Antek saw Anita<sub>i</sub> naked<sub>i</sub>.’

In both examples in (24) there is a depictive predicating ‘nakedness’ over a subject-controller, in (24a) it is coded by an agreeing adjective, in (24b) by an adverb. The same variation is shown in (25), where in one case an adjective, and in the other an adverb occurs as secondary predicate. However, in these examples, their controller is not

<sup>24</sup>On the other hand, event-orientation of such distributional adjuncts might also be considered as derived from participant-orientation, again by means of a metonymic shift. Note that in these cases it would be a shift of a quality from a participant to the event, and not one from the event to a participant, as mentioned above when commenting on example (11c).

<sup>25</sup>But things may not be as simple as that. Even here one might argue that, in the process of verbalisation, a quality is shifted from a participant to the event. However, then the question would be whether a given language allows a linguistic expression of that shift by an adverb or not.

the subject, but object of the primary predication.<sup>26</sup> Analogous cases of variation exist between depictive secondary predicates coded by either the de-adjectival adverb *boso* ‘barefoot’ or related adjectival forms.

It would appear that until now no systematic study has attempted to establish the structural and/or semantic contexts in which variation between participant-oriented adverbs and adjectives is possible, and in which contexts one of these two codings is excluded, and this paper cannot change the state of the art on a grand scale. What will be presented, however, are the results of a corpus-based case study concerning only *nago* ‘naked’ and *boso* ‘barefoot’ as two seemingly typical instances of participant-oriented adverbs in Polish. An analysis of the corpus of the IPI PAN yielded a sample of 277 examples in which either the deadjectival adverbs *nago* ‘naked’ or *boso* ‘barefoot’ or a related adjectival form (i.e. forms of the adjectives *nagi* ‘naked’ or *bosy* ‘barefoot’) feature as depictive secondary predicate. The criteria for exclusion from this sample were: all attributive (NP-internal) usages, all cases in which these adverbs or a related adjective is the primary predicate in a copula clause, all occurrences of these items in the function of a predicative complement, all occurrences of the lexical unit *do naga* ‘naked’ (literally: ‘to naked’) that typically functions as resultative secondary predicate (*rozebrał się do naga*, literally ‘he undressed himself naked’) and circumstantial secondary predicates. Furthermore, another distinguishing criterion for depictives was applied: following Schultze-Berndt and Himmelmann’s definition (2004, 78), it is specific for depictives that they are “part of the same prosodic unit as the main predicate”. Thus, examples in which the potential depictive was set apart from the rest of the sentence by commas or dashes were excluded as well, since they might better be described as appositions or parentheses. Finally, examples like (26)–(28), in which the directly superordinate predicate is realised by some non-finite form of a verb, were not taken into consideration for this preliminary case study, since the possibility of variation between adjectives and adverbs is not given (or at least highly limited) in this context.

- (26) Przepis zakazuje pływać<sub>inf</sub> nago<sub>adv</sub>.  
‘A proscription prohibits to swim naked.’
- (27) Opalano<sub>ptcp</sub> się nago<sub>adv</sub>.  
‘[People] sunbathed naked.’ / ‘There was sunbathing naked.’
- (28) Pamiętam występ modelki tańczącej<sub>ptcp</sub> nago<sub>adv</sub>.  
‘I remember the performance of a model dancing naked.’

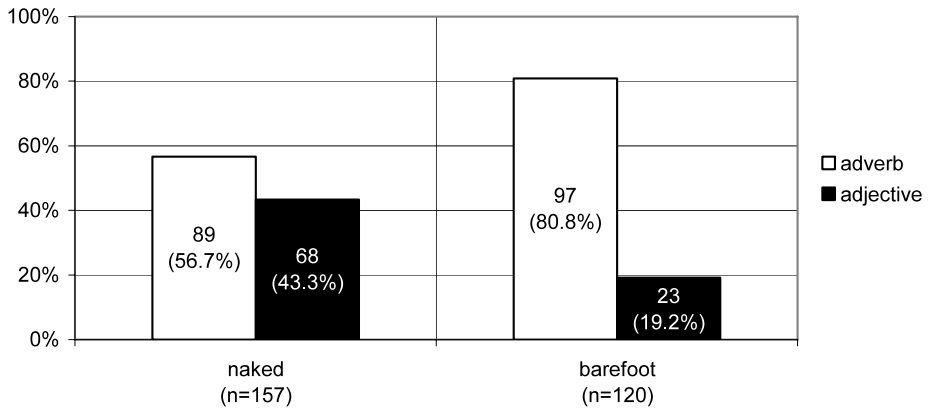
Informally consulted native speakers find adjectives instead of the adverb unacceptable or at least awkward in such examples<sup>27</sup> and, as a matter of fact, in comparable constructions, only adverbs but no adjectival forms occur in the corpus. Since the adverb is basically the only choice in these positions, such constructions do not provide much information on which

<sup>26</sup>This variation is somewhat similar to the variation of agreement case and instrumental case in Russian, in so far as a secondary predicate coded as adverb is potentially ambiguous in its orientation towards agent or patient. This can also be the case with secondary predicates in the instrumental in Russian, whereas additional case-agreement minimalises ambiguity. However, participant-oriented adverbs in Polish can be considered more ambiguous than the Russian instrumental, since the latter still shows agreement in number and gender, whereas adverbs do not. Nevertheless, in many cases it is clear from the context or co-text which participant the secondary predicate refers to, as in (25b).

<sup>27</sup>The example given in (26) may be considered an exception, because here some consultants accept an adjectival form marked for instrumental case, masculine gender and singular (*nagim*) instead of the adverb, at the same time, however, characterising it as an ‘old-fashioned attempt to sound very poetic’.

factors influence the variation between adverbial and adjectival secondary predicates.<sup>28</sup> Such examples indicate, however, that indeed purely syntactic factors can have an impact on the coding of the secondary predicate (which in examples like (28) should rather be called, ‘tertiary predicate’, since the superordinate predicate, the participle *tańczącej* ‘dancing’, is—in some sense—a secondary predicate itself).

The 277 examples were then classified as (a) those in which the secondary predicate is coded by an adverb or (b) those in which an adjectival form is used. All adjectives show full agreement with their controller, no instrumental marking was found. The result of the classification was that, on the whole, adverbial coding is roughly twice as frequent (186 adverbs, i.e. 67.1% of all cases) as adjectival marking of the secondary predicate (91 adjectives, i.e. 32.9%). For *nago* ‘naked’ and related adjectival forms, the quantitative relation between these two coding strategies is somewhat more balanced, with 56.7% adverbs vs. 43.3% adjectives. The adverb *boso* ‘barefoot’, on the other hand, outweighs related adjectival forms with a relative frequency of 80.8% to 19.2% (see Fig. 1).



**Fig. 1** Frequency of coding of depictive secondary predicates in the Polish sample

These quantitative relations can be considered a remarkable result, since—as mentioned previously—adjectives are prototypical instances of secondary predicates in Polish and Russian, whereas adverbs are not. A possible explanation for the high frequency of these adverbs in Polish might be offered by the following considerations: the deadjectival adverbs *nago* ‘naked’ and *boso* ‘barefoot’ as well as related adjectival forms carry a lexical meaning that is inherently (or, at least, typically) participant-oriented. If any event-oriented reading of *nago* or *boso* in the function of an adjunct should occur at all, then it is a ‘secondary’ or derived one, due to some metonymic shift, where a ‘naked manner’ would be some manner that follows from the nakedness of a participant in the event (most likely the agent, who is the participant whose influence on features of the event is potentially the highest). In other words, one cannot act ‘in a naked manner’ without being naked at the same

<sup>28</sup>Examples (26)–(28) have something else in common: the potential controller of the secondary predicate is not realised as an argument of the directly superordinate (non-finite) predicate. Note that variation is still possible with non-finite superordinate predicates when the controller is overtly realised as an argument of that superordinate predicate, e.g. in *trzeba ich<sub>acc</sub> fotografować nago<sub>adv</sub>/nagich<sub>acc</sub>* ‘one must photograph them<sub>i</sub> naked<sub>i</sub>’. Such examples, however, were also excluded from further analysis for the sake of the homogeneity of the sample.

time, unless some quite exceptional context forces this reading—and if so, this will most probably be expressed by different means (e.g. using a phrase like ‘as if being naked’). Therefore, with regard to *nago* ‘naked’ and *boso* ‘barefoot’, the formal distinction between adverb and adjectival forms in general does not carry the functional load of encoding a semantic distinction between event-orientation and participant-orientation.

This is certainly different as far as predicates expressing, for example, psychic or emotional states are concerned. The adverb in (29a), for instance, would usually be interpreted as not only carrying information about the manner in which the event takes place, but also about a state of the agent. However, when (29a) is followed by a sentence like (29b), it shows that the adverb in (29a) semantically modifies indeed only the manner of the event, thus being an event-oriented adjunct. The inference concerning the happiness of the agent is thus no more than the pragmatic default. A corresponding depictive adjective, on the other hand, clearly signals participant-orientation, so an immediate negation of the feature expressed by the adjective results in a logical contradiction, see (29c).<sup>29</sup> In cases like (29), we might speak (in classical structuralist terms) of a privative opposition, in that the adjective is explicitly participant-oriented, whereas the adverb is indifferent as to the expression of participant-orientation.

- (29) a. Jan tańczył z Martą wesoło<sub>adv</sub>.  
 ‘Jan danced with Marta happily.’  
 b. ... ale właściwie on wcale nie był wesoły.  
 ‘... but, as a matter of fact, he was not happy at all.’  
 c. \*Jan tańczył z Martą wesoły<sub>adj</sub>, ale właściwie on wcale nie był wesoły.  
 ‘Jan<sub>i</sub> danced with Marta [literally:] happy<sub>i</sub>, but, as a matter of fact, he was not happy at all.’

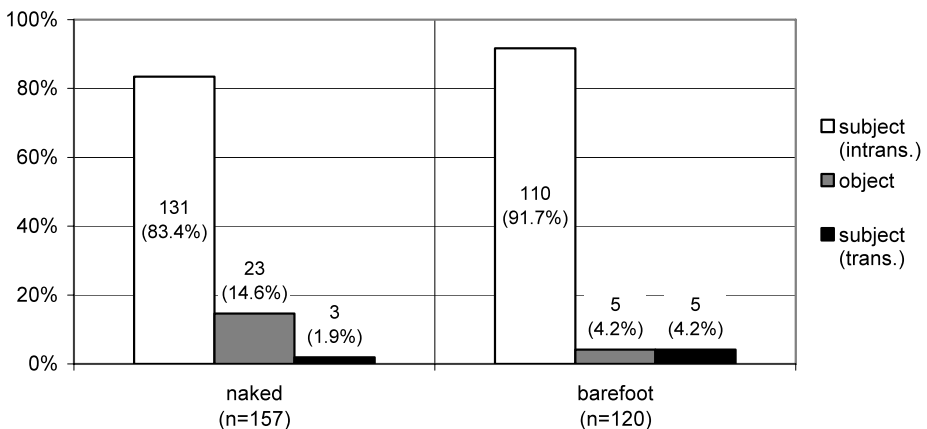
As a tentative working hypothesis, one may question whether, with regard to such inherently participant-oriented adverbs as *nago* ‘naked’ and *boso* ‘barefoot’, the formal distinction between agreeing adjective and adverb in the position of a secondary predicate in Polish can be interpreted in a similar way to the variation between agreement case and instrumental case in Russian. As in the debate on primary predication, there has been considerable discussion concerning the semantics underlying the variation of case agreement and instrumental marking of adjectival and, not to be forgotten, nominal secondary predicates in Russian.<sup>30</sup> What can safely be said (without getting too close to the danger of speculating about the meaning that is underlying different codings), however, is that this variation exhibits two, potentially opposing, principles in the development of Russian and other Slavonic languages that both serve structural transparency. On the one hand, there is the tendency to signalise by formal means as unambiguously as possible that, on the layer of content, some things ‘belong together’ in some respect. This tendency manifests itself, for example, in adjectival predicates (no matter whether primary, i.e. in copula clauses, or secondary) that are in maximum agreement with their subject/controller, i.e. that agree

<sup>29</sup>On the relevance of pragmatic default in the distinction between event-orientation and participant-orientation of adjuncts see also Renz and Hentschel (2008).

<sup>30</sup>In the context of secondary predication, too, a widespread opinion is that the instrumental serves to express a rather transient state, whereas case agreement occurs when more stable features are predicated. Filip (2001) supports a slightly different view, namely that temporality as such is only a subordinate factor, while the semantic core of the instrumental is to denote some kind of ‘change’. Moser (1994) also shows the relevance of expressing a sort of ‘change’ in the historical development of the predicative instrumental in Slavonic languages. For an overview see Hentschel (2009).

in number, gender and case. On the other hand, at least in North Slavonic languages like Polish, Russian, Belarusian, and Ukrainian, there is a tendency to explicitly signalise the predicative function of nouns and adjectives; for adjectives in Russian, for example, by means of short-form adjectives (which, unlike long-form adjectives, are unacceptable in attributive function and are used exclusively in the function of the primary predicate) or instrumental case marking.<sup>31</sup> In the case of adjuncts like *nago* ‘naked’ and *boso* ‘barefoot’ event-orientation is (in the sense of what has been said above) excluded due to their inherent lexical semantics, i.e. in this context the formal distinction between adjective and adverb that otherwise signalises that the respective unit is used as either a participant-oriented secondary predicate or as an event-oriented adverbial no longer fulfils this function. Thus, one can ask whether in this case agreeing adjectival forms are motivated by some need for transparent signalling of which element of the sentence is the controller of the secondary predicate, and if adverbs perhaps can be considered a particular means of transparently signalling predicativity.

To test this hypothesis, in a first step controllers of the secondary predicate in the investigated sample were classified according to their syntactic status as subject in an intransitive clause, subject in a transitive clause, or object in a transitive clause. It turned out that subjects (in the sense of surface subjects in the nominative case) in intransitive clauses are the most frequent controllers, objects in transitive clauses are less frequent, and subjects of transitive clauses are quite rare controllers of a secondary predicate. In general, this picture is reflected in the two subsamples of depictives with the meaning ‘naked’ or ‘barefoot’ in that the most frequent controllers in both are subjects of intransitive clauses. Depictives with the meaning ‘barefoot’, however, differ in that they seldom occur in transitive clauses at all, hence objects are just as infrequent controllers as subjects in this subsample (see Fig. 2).

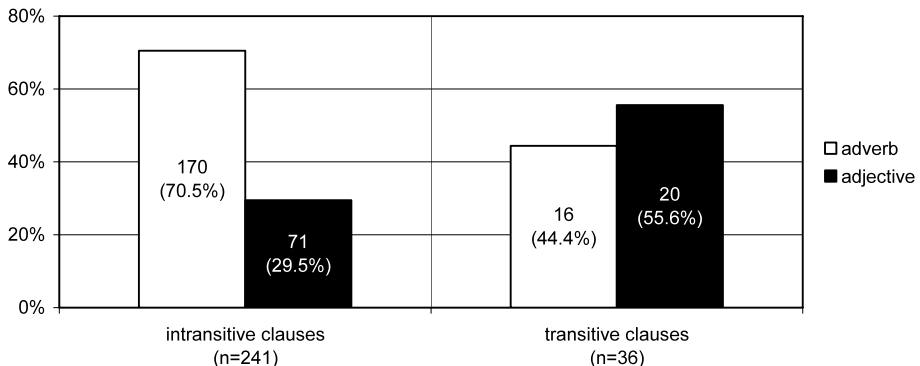


**Fig. 2** Frequency of controllers among the Polish sample

<sup>31</sup>This tendency also holds for nominal predicates, which either show variation between nominative and instrumental marking, too (in Russian in both copula clauses and as secondary predicates, in Polish only in the context of secondary predication), or obligatorily carry instrumental marking. In Polish, for example, the latter is the case with some predicative complements, and, of course, in copula clauses with *być* ‘to be’, cf. \**Piotr jest student*<sub>N,nom</sub> vs. *Piotr jest studentem*<sub>N,instr</sub> ‘Peter is a student’ (but: *Piotr—to jest student*<sub>N,nom</sub>! ‘Peter—that’s a student!’). With respect to the variation between nominative and instrumental marking of nominal predicates in Russian, instrumental marking can indeed be thought of as a redundant means of signalling the status of a particular noun phrase as predicate, as suggested by Hentschel (1991).

This (as to the infrequency especially of ‘transitive subjects’ perhaps surprising) quantitative representation of controllers might be related to the typical information structure of transitive and intransitive clauses: depictives almost always carry information that is rhematic and focal, whereas subjects are usually thematic.<sup>32</sup> In intransitive clauses, the depictive is either the only rhematic element or, alternatively, the primary predicate is rhematic, too. In transitive clauses, apart from the depictive there is another (often) rhematic unit: the object. Hence, one can say that the orientation of a (rhematic) secondary predicate towards the subject as a thematic element is common when there is no other rhematic unit in the clause that is a potential controller, as is the case in intransitive constructions. However, when the depictive co-occurs with an object which is also rhematic, it is preferably oriented towards this other rhematic element, not the thematic subject.<sup>33</sup> In other words, it is sometimes the case that the depictive is rheme of (i.e. says something about) the object, which in turn is rheme of the subject, whereas cases in which the object is rheme of the subject, and the depictive is also rheme of the subject are very rare.

Returning to the question of the factors potentially influencing the choice between different morphosyntactic markings of the secondary predicate, it is interesting that in intransitive clauses the adverbs *nago* ‘naked’ and *boso* ‘barefoot’ occur much more often as secondary predicates than agreeing adjectival forms, whereas in transitive clauses the adjective is even slightly more frequent than the adverb, as shown in Fig. 3. The more or less balanced likelihood of adjectives and adverbs occurring in a transitive clause can be taken as support for the hypothesis advanced above. In transitive clauses, two central participants are involved: one referred to by the object, the other one referred to by the subject. In intransitive clauses on the other hand, there is only one central participant, the subject. It might be argued that in clauses where two central participants instead of only one are involved, adjectives occur more frequently than adverbs because adjectives agreeing in case, number and gender unambiguously signalise, to the greatest possible extent, which



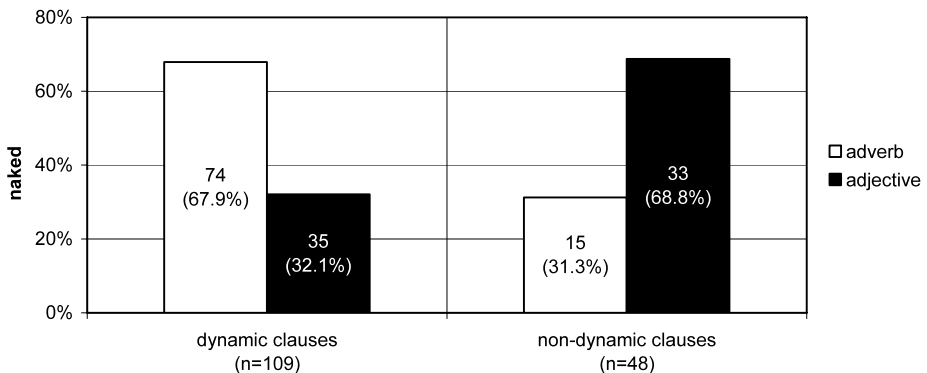
**Fig. 3** Frequency of coding of depictive secondary predicates in relation to the transitivity of the clause in the Polish sample

<sup>32</sup>The terms theme and rheme are used here in accordance with Kiefer (1978): theme being what the sentence ‘is about’, rheme being what is said about the thing named in the theme. Kiefer employs the labels topic and comment for the distinction of old and new information in the sentence. Although often theme and topic, and rheme and comment coincide, this parallelism is not necessarily always the case.

<sup>33</sup>Other potentially rhematic elements, e.g. adverbials, are—at least in Slavonic languages—usually not accessible for secondary predication.

of the two participants is meant to be the controller of the secondary predicate. Indeed, statistical tests indicate that there is a significant interdependence between the number of potential controllers (i.e. the transitivity of the matrix clause) and the coding of the secondary predicate as either adverb or adjective ( $\chi^2_Y = 8.52$ ). However, there seems to be only a rather weak statistical correlation between these variables ( $\varphi = 0.18$ ).<sup>34</sup>

Analysing the subsample of ‘naked’ depictives revealed, however, that other semantic features of the clause have a stronger influence on the coding of the secondary predicate as either adjective or adverb. The examples gathered show that adverbs seem to be rather frequent in clauses where the main predicate is a verb of motion in some broad sense (like *biegać* ‘to run’, *wejść* ‘to enter’, *zbliżać się* ‘to approach’ or *tańczyć* ‘to dance’, or transitive ones like *obwozić kogoś* ‘to drive someone around’ or *przynieść* ‘to bring’), a verb denoting some kind of exposure (like *pokazywać (się)* ‘to show (oneself)’, *występować* ‘to perform, appear’ or *pozować* ‘to pose’), or other verbs denoting some sort of dynamic event. On the other hand, the impression arises that adjectival forms more frequently occur in clauses denoting a rather static, non-dynamic state of affairs; i.e. they seem to co-occur preferably with verbs that specify a spatial orientation or position (e.g. *stać* ‘to stand’, *leżeć* ‘to lie’ or *przetrzymać* ‘to hold, keep’), verbs denoting some kind of visual perception (e.g. *widzieć*, *zobaczyć* ‘to see’ or *oglądać* ‘to watch’) or other non-dynamic situations. With regard to the subsample containing ‘naked’, the frequencies of both coding strategies in relation to the semantics of the state of affairs denoted by the respective clause are shown in Fig. 4.



**Fig. 4** Frequency of coding of depictive secondary predicates with the meaning ‘naked’ in relation to the dynamicity of the clause in the Polish sample

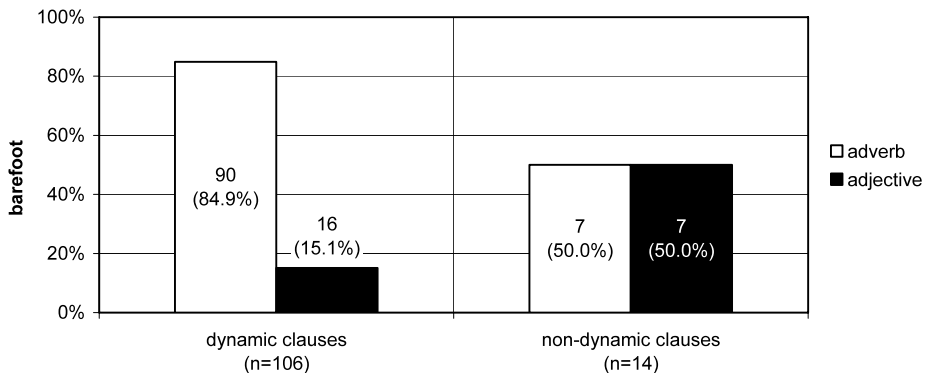
As mentioned above, the overall frequency of the adverb is higher than the frequency of the adjective. The same holds for depictives with the meaning ‘naked’ in the context of clauses that denote a dynamic state of affairs. The inverted quantitative relation is found, however, in clauses denoting a non-dynamic state of affairs; here, the adjective outruns the adverb. Again, a semiotic notion might provide a possible explanation for this distribution, since the high frequency of the adverb in dynamic contexts might be understood as a reflex of indexicality. One of the prototypical functions of an adverb is to be used as an adverbial

<sup>34</sup>These are the results of a  $\chi^2$  test based on the data presented in Fig. 2, applying Yate’s correction for  $\chi^2$ , with  $\varphi$  based on this corrected  $\chi^2_Y$ . For an introduction to statistical methods in linguistics, cf. Woods, Fletcher and Hughes (1986).



modifying e.g. speed, manner or intensity. Such adverbials preferably occur in the context of predications denoting dynamic events, not static situations (cf. Dik 1997, 230). Clauses which denote dynamic events thus provide a so to speak ‘adverbial-friendly (and hence adverb-friendly) environment’. In other words, there is an indexical relation between clauses denoting dynamic events and adverbials, which in turn are frequently coded by adverbs. So dynamic clauses can be thought of as a context in which the speaker/writer is more likely to use an adverb and the listener/reader is more likely to expect one, and that might be the reason why the adverb *nago* ‘naked’ occurs more frequently in such clauses—even though it does not feature as an (event-oriented) adverbial, but as a (participant-oriented) secondary predicate.

To test this hypothesis, the subsample of depictives meaning ‘barefoot’ was also evaluated with regard to the distribution of adjectives and adverbs over dynamic and non-dynamic contexts. The results are presented in Fig. 5. On the one hand, adverb and adjective are both quite rarely found in non-dynamic contexts; on the other hand, the adverb *boso* ‘barefoot’ is much more frequent in clauses denoting a dynamic state of affairs than corresponding adjectival depictives—and that is very much in line with the hypothesis put forward here. Statistical tests based on the data presented in Fig. 5 indicate that—for depictives with the meaning ‘barefoot’—there is a significant correlation ( $\chi^2_Y = 7.6$ ) and even a moderately strong dependency ( $\varphi = 0.25$ ) between the dynamicity of the state of affairs that is denoted by a given clause and the coding of the secondary predicate as either adjective or adverb.<sup>35</sup>

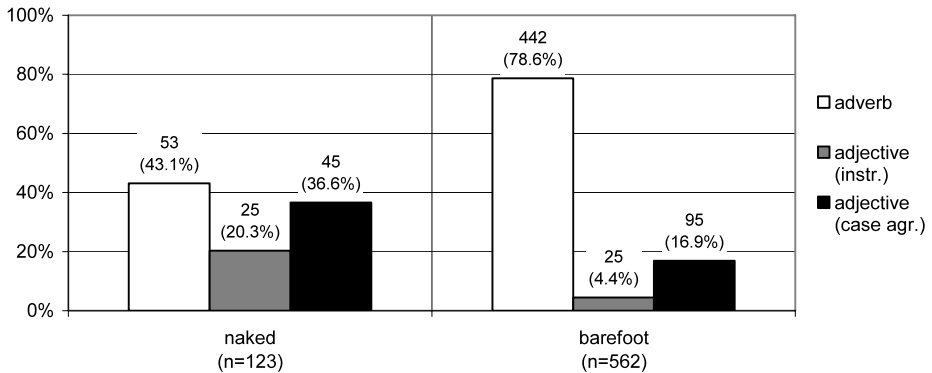


**Fig. 5** Frequency of coding of depictive secondary predicates with the meaning ‘barefoot’ in relation to the dynamicity of the clause in the Polish sample

<sup>35</sup>With regard to *boso* ‘barefoot’, the prevalence of the adverb in only certain contexts might also be interpreted in another way. Following Pisarkowa’s (1965, 60) suggestion, Prażmowski (1981, 56) proposes describing this adverb as an instance of lexicalisation. To legitimate this view he argues (among other things) that *boso* ‘barefoot’—other than *nago* ‘naked’—occurs only in a very limited variety of contexts. Admittedly, the adverb *boso* ‘barefoot’ and related adjectival forms are most frequently found in clauses involving intransitive verbs of motion like *biegać* ‘to run’ or *chodzić* ‘to walk’. Perhaps due to the specific lexical semantics of *boso* ‘barefoot’, it is first of all these contexts in which it is of informational relevance to mention at all that someone is barefoot whilst doing something. The impression, however, that the occurrence of *boso* ‘barefoot’ is limited to such contexts is not endorsed at all by the examples we retrieved, since not only the adverb *nago* ‘naked’, but also *boso* ‘barefoot’ is found in very different contexts, cf. *kaptan dokonuje mszy świętej boso* ‘the chaplain celebrates the mass barefoot’, *ten słynny piłkarz w meczu z Polakami grał boso* ‘this famous football player played barefoot in the match against Poland’, *ona wspiniała*

#### 4 A brief comparison of Polish and Russian

For comparative purposes, the Russian National Corpus was searched for occurrences of forms of the adjectives *нагой* ‘naked’ and *босой* ‘barefoot’ as well as of the adverbs *нагишом* ‘naked’ and *босиком* ‘barefoot’ in the function of a depictive secondary predicate.<sup>36</sup> Altogether, 123 depictives denoting ‘nakedness’ and 562 depictives with the meaning ‘barefoot’ were retrieved. The analysis revealed that in Russian the adverb is also the most frequent coding strategy, cf. Fig. 6.<sup>37</sup> For depictive secondary predicates with the meaning ‘naked’, the adverb *нагишом* accounts for 43.1% of all cases. The adverb *босиком* is even more frequent; it occurs in 78.6% of all cases of depictives carrying the meaning ‘barefoot’. The second most frequent coding strategy is fully agreeing adjectives, i.e. depictives that agree in case, number and gender with their controller. Among the ‘naked’ sample, such adjectives comprise 36.6%, i.e. they are only a little less frequent than the adverb *нагишом*. In the subsample of depictives that carry the meaning ‘barefoot’, full agreement is found in only 16.9% of cases. The least frequent coding strategy is adjectival depictives that agree only partially (i.e. in number and gender) with their controller and take the instrumental case. With respect to ‘naked’, the instrumental is found in 20.3% of all cases; for ‘barefoot’ it occurs with a relative frequency of only 4.4%. The picture is thus somewhat similar to that found in Polish; the relations are more balanced in the subsample containing ‘naked’ depictives, more pronounced in the ‘barefoot’ subsample, and, all in all, the adverb is the most frequently found coding strategy.



**Fig. 6** Frequency of coding of depictive secondary predicates in the Russian sample

*сіę по гóрах босо* ‘she climbed the mountains barefoot’ or *зóлnierzy walczyли босо* ‘the soldiers fought barefoot’, to give just a few examples.

<sup>36</sup>Since the Russian National Corpus was not specially designed for a comparison with data from the IPI PAN corpus of Polish, sources dating back to the 19th century (and some even older ones) were not taken into consideration, in order to achieve a higher degree of comparability of the example corpora. For the retrieval of the Russian data, the same criteria were employed as for the Polish data. In particular, examples analogous to the Polish ones presented in (26)–(28) above were not taken into consideration either. Since no fully agreeing adjectives occur in such constructions, they do not permit the whole spectrum of variation. Additionally, occurrences of short-form adjectives were excluded from the analysis, too, because short-form adjectives in the function of secondary predicates do not reflect the contemporary norm of Russian.

<sup>37</sup>As mentioned above, unlike Polish, the deadjectival adverbs *наго* ‘naked’ and *босо* ‘barefoot’ are not acceptable as secondary predicates in Russian. When talking about depictive adverbs among the Russian examples, we refer to the lexical units *нагишом* ‘naked’ and *босиком* ‘barefoot’.

Considering the frequencies of certain syntactic roles of the controller, the overall picture in Russian is fairly similar to that in Polish, see Fig. 7 (in comparison to Fig. 2 above). Among the Russian examples, subjects of intransitive clauses are by far the most frequent controllers, too, whereas depictives oriented towards an object are less frequent, and occurrences of a depictive controlled by the subject of a transitive clause are very rare. Like Polish, Russian depictives with the meaning ‘naked’ differ from those with the meaning ‘barefoot’ in that the former are oriented towards an object relatively more frequently than the latter. The hypothesis that the low frequency of subject controllers in transitive clauses might be related to the typical thematic structure of transitive and intransitive clauses, as has been argued above to account for the Polish data, also seems to be supported by the Russian data.

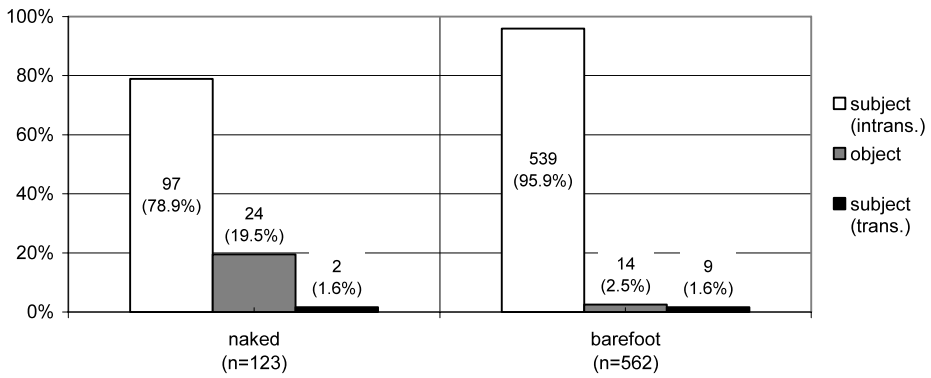


Fig. 7 Frequency of controllers in the Russian sample

Figure 8 presents the frequencies of the three coding strategies in the Russian sample in relation to the transitivity of the respective clause. In intransitive clauses, the investigated adverbs are the most frequent coding (similar to Polish), the second most frequent coding strategy is fully agreeing adjectives, and adjectives in the instrumental case are very rare in comparison with the other two options. In transitive clauses, however, the relative frequencies of the three coding strategies are quite different: instrumental coding

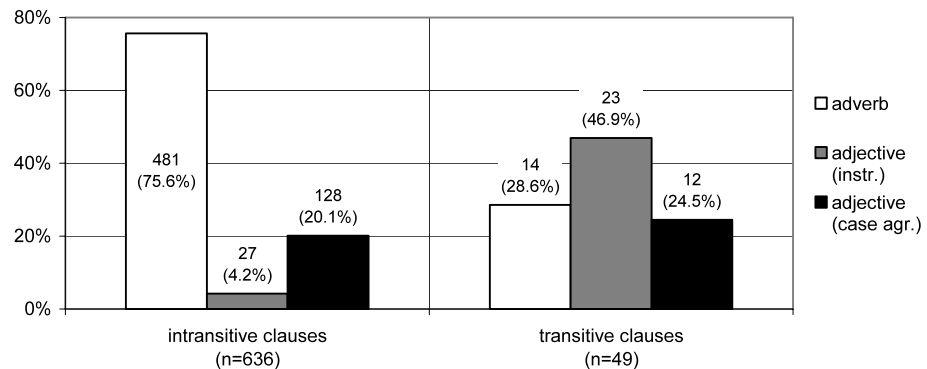
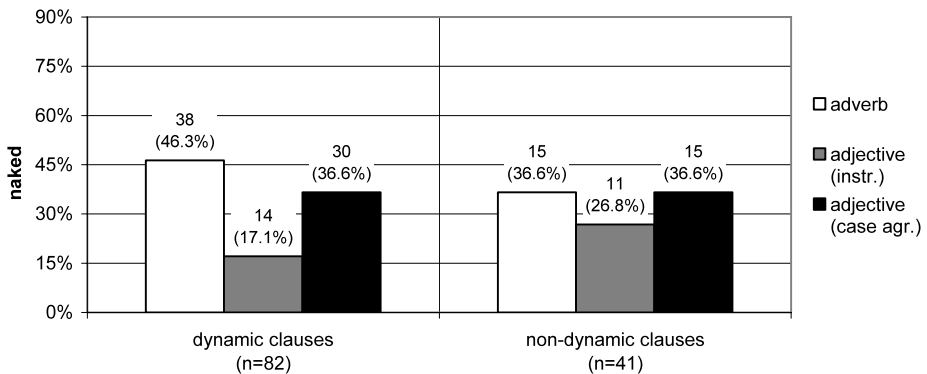


Fig. 8 Frequency of coding of depictive secondary predicates in relation to the transitivity of the clause in the Russian sample

is the most frequent, accounting for about half of all investigated depictives in transitive clauses; adverbs occur much less frequently than in intransitive clauses, and fully agreeing adjectives occur with approximately the same relative frequency in transitive clauses and in intransitive clauses.

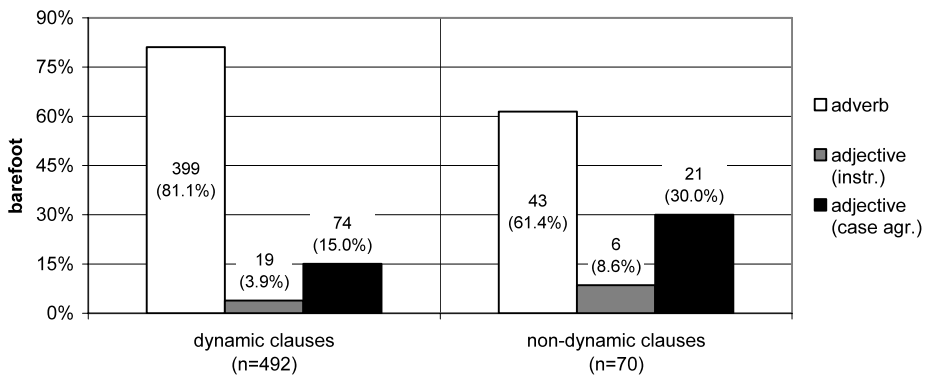
The fact that adverbs are far less frequent in transitive clauses than in intransitive ones can be explained in terms of transparency, as suggested above for Polish. By means of (full or partial) agreement, adjectival coding of a depictive may help to disambiguate which of two potential controllers in a transitive clause is indeed meant to be the controller of the depictive. Such disambiguation, however, is usually not necessary in intransitive clauses that involve only one potential controller. The strikingly high relative frequency of adjectival depictives marked for instrumental case in transitive clauses can to a certain degree be interpreted along the same lines: on the one hand, agreement in number and gender provides a degree of transparency indicating which participant is to be taken as the controller of the secondary predicate, on the other hand, partial non-agreement, i.e. instrumental case marking, may be considered a transparent signal of the predicative function of the respective adjective (or at least a transparent signal of not being part of the subject-NP or object-NP, i.e. not being an attribute of either subject or object).<sup>38</sup> However, if the instrumental were the best (i.e., most transparent) coding strategy of all three, it seems strange that instrumental coding is so rare in intransitive clauses. Transparency may thus play a role in the choice of a particular coding strategy, but it seems it may not yet be the ultimate solution to this puzzle.

As shown above (cf. Figs. 4 and 5), in Polish there is also quite a strong correlation between the dynamicity of the state of affairs denoted by a clause and the coding of the secondary predicate. In Polish, the adverbs *nago* ‘naked’ and *boso* ‘barefoot’ clearly outnumber the corresponding adjectival forms only in clauses that denote some dynamic event (like a movement or some kind of exposition), but not in clauses denoting static situations (expressed, for example, by verbs of visual perception or indicating a spatial position or orientation). In Russian, however, the situation is quite different (see Figs. 9 and 10).



**Fig. 9** Frequency of coding of depictive secondary predicates with the meaning ‘naked’ in relation to the dynamicity of the clause in the Russian sample

<sup>38</sup>As mentioned above, syntactic functions other than subject and object are not readily accessible for secondary predication in Russian (and Polish). At least among the examples retrieved, no depictive controlled by anything other than subject or object occurs.



**Fig. 10** Frequency of coding of depictive secondary predicates with the meaning ‘barefoot’ in relation to the dynamicity of the clause in the Russian sample

In both the ‘naked’ and the ‘barefoot’ subsample, all three codings occur with a higher absolute frequency in dynamic contexts than in non-dynamic ones. Regarding depictives with the meaning ‘naked’, the relative frequencies of the three coding strategies in clauses denoting a dynamic event do not differ considerably from their relative frequencies in clauses denoting a non-dynamic situation: full agreement occurs with exactly the same relative frequency in both groups, the adverb is somewhat more frequent and instrumental coding somewhat less frequent in dynamic contexts than in others. In comparison, in the subsample of ‘barefoot’ depictives, the relative frequencies of the three coding possibilities in non-dynamic contexts differ to a greater extent than the ones found in dynamic contexts. As indicated above (cf. Fig. 6), instrumental coding is on the whole quite rare with depictives carrying the meaning ‘barefoot’. But although adjectives marked for instrumental case and fully agreeing adjectives with the meaning ‘barefoot’ are relatively more frequent in non-dynamic contexts than in dynamic ones, the adverb *босиком* ‘barefoot’ is clearly more frequent than adjectival depictives in either of these contexts.

To conclude, in terms of frequency, transitivity definitely has an impact on the choice between the three coding strategies for secondary predicates with the meaning ‘naked’ or ‘barefoot’ in Russian, but it leads to different results than in Polish (where it should be remembered that only two codings are potentially available). In the light of the frequencies presented above, the relevance of dynamicity, which plays a role in Polish, is more dubious in Russian.

## 5 Summary and conclusions

It has been shown that in Polish the deadjectival adverbs *nago* ‘naked’ and *boso* ‘barefoot’, and in Russian the derivationally idiosyncratic adverbs *нагишом* ‘naked’ and *босиком* ‘barefoot’ (but not the deadjectival adverbs *наго* ‘naked’ and *босо* ‘barefoot’), occur as non-agreeing predicates of first-order entities in variation with adjectival forms that (in one way or another) agree with the noun phrase they predicate upon. In the function of primary predicates in copula clauses, these adverbs occur only rarely in comparison to corresponding adjectival forms, but in the function of secondary predicates they are very frequent.

As is often mentioned in the literature on secondary predication, secondary predicates can be oriented towards the subject or the object of a sentence.<sup>39</sup> The adjectives and adverbs investigated here are also found as secondary predicates with orientation towards an object or a subject. In terms of frequency, however, it was discovered that subjects in intransitive clauses clearly prevail, while objects are less frequent controllers, and subjects of transitive clauses are in fact very rare in this function. It has been suggested that this is not only an oddity in the distribution of predicates denoting a lack of clothing in Polish and Russian, but in general might be related to information structure: depictives, which typically carry rhematic and focal information, are thus preferably oriented towards a thematic controller if the clause contains no other potential controller that is rhematic (which is the case with subject-orientation in intransitive clauses); otherwise they are oriented towards another rhematic element in the clause (i.e., towards an object in transitive clauses).

With regard to the variation between the adverbial and adjectival coding of secondary predicates denoting a lack of clothing in Polish and Russian, it has been argued that semi-otic factors like transparency and indexicality are among the variables that influence the speaker's choice between adjective and adverb. Evidence for the relevance of transparency can be seen in the particular frequencies of depictive secondary predicates coded by the Polish adverbs *nago* 'naked', *boso* 'barefoot' and corresponding adjectival forms in relation to the transitivity of the clause in which they are embedded. These adverbs clearly outweigh the corresponding adjectives in intransitive clauses, but in transitive clauses they are even slightly less frequent than adjectives. A possible explanation for this quantitative distribution could be that adjectival depictives in Polish agree with their controller whereas adverbs do not, and since agreement between depictive and controller serves to disambiguate which of two potential controllers is actually meant to be the controller of the depictive, adjectives are relatively more frequent in transitive clauses. In intransitive clauses, however, no such disambiguation is needed. Here the usage of such inherently participant-oriented adverbs like *nago* 'naked' and *boso* 'barefoot' (due to their lexical semantics) may also serve structural transparency: although these adverbs do not transparently signalise their relation to another unit of the clause (non-agreement), they can be taken as a more or less transparent means of signalling predicativity or at least factuality.

Evidence for the relevance of indexicality can be seen in the correlation between the dynamicity of the state of affairs that is denoted by a given clause and the strategy of coding a secondary predicate adduced to it. With respect to depictives in Polish, it turned out that in terms of frequency the adverbs *nago* 'naked' and *boso* 'barefoot' clearly outnumber their adjectival counterparts only in clauses denoting dynamic events, but not in clauses denoting non-dynamic situations. Clauses denoting dynamic events provide, so to speak, an 'environment' in which adverbs in their typical function as event-oriented adverbials can 'flourish' better than in others. This might be the reason why adverbs like *nago* 'naked' or *boso* 'barefoot' are also quite frequent in such clauses, although, of course, they are not event-oriented, but participant-oriented.

The respective frequencies among the Russian data were quite similar, but also deviated considerably from the quantitative relations found in Polish. With respect to the relevance of transitivity, in Russian the adverbs *нагишом* 'naked' and *босиком* 'barefoot' are the most frequently chosen coding in intransitive clauses, too, with a lower relative frequency in transitive clauses. Adjectival depictives that carry the meaning 'naked' or 'barefoot' and

<sup>39</sup>See, however, Schultze-Bernd and Himmelmann (2004, 72–74) for an example of a critical position on this view.

agree with their controller in all three categories occur with almost the same relative frequency in both transitive and intransitive clauses. Adjectival depictives in the ‘predicative’ instrumental case, however, occur with a very low relative frequency in intransitive clauses, but have the highest relative frequency of all three options in transitive clauses. Although no strict, so to speak deterministic rule can be formulated for these quantitative relations, this striking preference for instrumental coding in transitive clauses might be motivated by transparency, too. Adjectival depictives that agree with their controller in number and gender and carry instrumental marking are, on the one hand, a more transparent signal of the relation between the secondary predicate and its controller than adverbs (which show no agreement at all), and the instrumental marking, on the other hand, can be taken as a transparent morphosyntactic signal of predicativity—a functional advantage in comparison to fully agreeing adjectives.

The question of the extent to which indexicality plays a role in the choice between the three coding strategies in Russian cannot be answered at present for several reasons: on the one hand, the distribution of the three coding strategies in relation to the dynamicity of the state of affairs denoted by the respective clauses differs considerably between the sample of ‘naked’ depictives and the sample of ‘barefoot’ depictives. On the other hand, in the ‘naked’ sample the relative frequencies of the three coding strategies do not differ significantly in relation to the dynamicity of the state of affairs denoted by the respective clauses; in the ‘barefoot’ sample, in fact, the adverb occurs with a higher relative frequency in dynamic contexts than in non-dynamic ones (and the reverse is the case with fully agreeing adjectives), but in both dynamic and non-dynamic contexts the adverb clearly occurs more frequently than the adjectival options.

All in all, one can conclude that, in principle, there is a free variation in the distribution of the adverbs and adjectives with the meaning ‘naked’ and ‘barefooted’ in the contexts discussed. But this does not mean that the choice between them is a matter of complete chance, that it is chaotic. The free variation is only free to a certain degree, which means that factors of a rather general semiotic nature can account for some of the tendencies or preferences in the variation between the adjectival and adverbial coding of secondary predicates in Polish and Russian. Transparency and indexicality quite convincingly account for the quantitative distribution of different codings found in Polish; in Russian, however, indexicality in particular seems to be of lesser relevance.

## Sources

IPI PAN: <http://korpus.pl/>  
 Nacional’nyj korpus russkogo jazyka: <http://ruscorpora.ru/>

## References

- Akademija 1950: Černyšev, V. I. (Ed.) (1950). *Slovar’ sovremennogo russkogo literaturnogo jazyka*. Moskva, Leningrad.
- Anders-Marnowsky, S. (2008). Depiktive und ihre Bezugsnomen: zur Frage präpositional markierter Controller bei *als*-Depiktiven. In C. Schroeder, G. Hentschel & W. Boeder (Eds.), *Secondary predicates in Eastern European languages and beyond* (Studia Slavica Oldenburgensia, 16) (pp. 1–18). Oldenburg.
- Boeder, W. (2005). Depictives in Kartvelian. In N. P. Himmelmann & E. Schultze-Berndt (Eds.), *Secondary predication and adverbial modification. The typology of depictives* (pp. 201–236). Oxford.
- Carlson, G. (1977). *References to kinds in English*. Ph.D. dissertation. Amherst.

- Chachulska, B. (2008). Prädikativer Instrumental, Kasuskongruenz oder analytische Markierung bei sekundären Prädikaten im Polnischen. In C. Schroeder, G. Hentschel & W. Boeder (Eds.), *Secondary predicates in Eastern European languages and beyond* (Studia Slavica Oldenburgensia, 16) (pp. 41–68). Oldenburg.
- Corbett, G. G. (1979). *Predicate agreement in Russian* (Birmingham Slavonic Monographs, 7). Birmingham.
- Dik, S. C. (1997). *The theory of functional grammar. Part 1: The structure of the clause* (Functional grammar series, 20). Berlin, New York.
- Efreмова, T. F. (2006). *Sovremennyyj tolkovyj slovar' russkogo jazyka*. Moskva.
- Fehrmann, D. (1994). Sekundärprädikativische Strukturen im Polnischen. In T. Berger (Ed.), *Linguistische Beiträge zur Slawistik aus Deutschland und Österreich. Jung-SlawistInnen-Treffen Wien 1992* (Wiener Slawistischer Almanach, 33) (pp. 83–117). Wien.
- Filip, H. (2001). The semantics of case in Russian secondary predication. In R. Hastings (Ed.), *Proceedings from Semantics and Linguistic Theory XI* (pp. 192–211). Ithaca.
- Geuder, W. (2002). *Oriented adverbs. Issues in the lexical semantics of event adverbs*. Ph.D. dissertation. Tübingen. <http://w210.ub.uni-tuebingen.de/dbt/volltexte/2002/546/pdf/geuder-oriadverbs.pdf>. Accessed 11 Nov. 2010.
- Grzegorzczkova, R. (1975). *Funkcje semantyczne i składniowe polskich przysłówków* (Prace językoznawcze, 77). Wrocław, Warszawa, Kraków, Gdańsk.
- Hentschel, G. (1991). Der prädikative Instrumental beim russischen Substantiv als redundantes Signal in Kopulasätzen. In M. Grochowski & D. Weiss (Eds.), *Words are physicians for an ailing mind* (Sagners Slawistische Sammlung, 17) (pp. 221–235). München.
- Hentschel, G. (2008). On the classification of (non-resultative) predicative adjuncts. In C. Schroeder, G. Hentschel & W. Boeder (Eds.), *Secondary predicates in Eastern European languages and beyond* (Studia Slavica Oldenburgensia, 16) (pp. 97–123). Oldenburg.
- Hentschel, G. (2009). Morphosyntaktische Markierung sekundärer Prädikate. In S. Kempgen, P. Kosta, T. Berger & K. Gutschmidt (Eds.), *The Slavic languages. An international handbook of their structure, their history, and their investigation. Volume 1* (Handbooks of Linguistics and Communication Science, 32.1) (pp. 369–391). Berlin, New York.
- Himmelman, N. P., & Schultze-Berndt, E. (Eds.) (2005a). *Secondary predication and adverbial modification. The typology of depictives*. Oxford.
- Himmelman, N. P., & Schultze-Berndt, E. (2005b). Issues in the syntax and semantics of participant-oriented adjuncts: an introduction. In N. P. Himmelman & E. Schultze-Berndt (Eds.), *Secondary predication and adverbial modification. The typology of depictives* (pp. 1–67). Oxford.
- Holvoet, A. (2008). Secondary predicates in Baltic. In C. Schroeder, G. Hentschel & W. Boeder (Eds.), *Secondary predicates in Eastern European languages and beyond* (Studia Slavica Oldenburgensia, 16) (pp. 125–140). Oldenburg.
- Kallas, K. (1994). O konstrukcjach współrzędnych typu *Chodził obdarty i boso*. *Acta Universitatis Nicolai Copernici*, 283. *Filologia Polska*, 44, 93–108.
- Kiefer, F. (1978). Functional sentence perspective and presuppositions. In F. Daneš (Ed.), *Probleme der Satzsemantik* (Linguistische Studien, Reihe A, Arbeitsberichte, 47) (pp. 119–157). Berlin.
- Kratzer, A. (1995). Stage-level and individual-level predicates. In G. N. Carlson & F. J. Pelletier (Eds.), *The generic book* (pp. 125–175). Chicago.
- Lyons, J. (1977). *Semantics*. Cambridge.
- Łoś, J. (1927). *Krótką gramatyka historyczna języka polskiego*. Lwów.
- Moser, M. (1994). *Der prädikative Instrumental. Aus der historischen Syntax des Nordostslawischen. Von den Anfängen bis zur petrinschen Epoche* (Europäische Hochschulschriften, Reihe 16: Slawische Sprachen und Literaturen, 45). Frankfurt, Berlin.
- Nichols, J. (1981). *Predicate nominals. A partial surface syntax of Russian* (University of California publications in linguistics, 97). Berkeley.
- Pisarkowa, K. (1965). *Przydatkowość określeń w polskim zdaniu* (Prace Komisji Językoznawstwa, 6). Wrocław, Warszawa, Kraków.
- Plank, F. (1985). Prädikativ und Koprädikativ. *Zeitschrift für germanistische Linguistik*, 13, 154–185.
- Prażmowski, S. (1981). Semantyczno-składniowe użycie przysłówków typu *boso*, *pieszo* itp. w polszczyźnie XVI–XVII w. i dzisiejszej. *Język polski*, LXI, 53–63.
- Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1989). *A comprehensive grammar of the English language*. London, New York.
- Renz, M., & Hentschel, G. (2008). “Transparente” partizipantenbezogene Adverbien im Polnischen und Russischen? *Zeitschrift für Slawistik*, 53(4), 375–393.
- Schroeder, C. (forthcoming). *Depiktive im Sprachvergleich Deutsch-Türkisch. Eine kontrastiv-typologische Analyse*. Wiesbaden.



- Schultze-Berndt, E., & Himmelmann, N. P. (2004). Depictive secondary predicates in crosslinguistic perspective. *Linguistic Typology*, 8, 59–131.
- Węgrzynek, K. (1995). *Składnia przymiotnika polskiego w ujęciu generatywno-transformacyjnym* (Prace Instytutu Języka Polskiego, 96). Kraków.
- Woods, A., Fletcher, P., & Hughes, A. (1986). *Statistics in language studies*. Cambridge.
- Zeller, J. P. (forthcoming). Drei syntaktische Funktionen lokaler Adjunkte? Lokale Depiktiva und lokale Adverbiale im Russischen und Deutschen. *Wiener Slawistischer Almanach*.