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Task and Syllabus Design for Morphologically Complex Languages

Roger Gilabert and Joan Castellví

22.1 Introduction

Like planes that after thousands of hours of careful engineering design can successfully take us to our destination, task design for second or foreign language (L2) use and learning should be able to take learners who do not know or have not mastered a language to successfully and appropriately communicating in it. In this chapter, we reflect on how task design may be carried out when second languages are morphologically complex.

The goals of task design are manifold, and most L2 task designers and researchers would agree on the following facts: firstly, task design should guarantee that the pedagogic tasks used in a classroom slowly but steadily approximate L2 learners to real-life performance (see for example the concept of "target tasks" in Long, 2005; 2015). Secondly, while maintaining a focus on meaning, task goals, and task completion, task design should facilitate the conditions for language processing and language learning to take place through focus on form (Doughty & Williams, 1998; Doughty, 2001), and hence guarantee exposure to rich and meaningful input, the provision of opportunities for interaction, production, and feedback (Gass & Mackey, 2007). Thirdly, design should guarantee that regardless of what learners bring to the task (differences in their capacities, motivations, or agencies) certain things happen, such as, for example, the processing of task essential language. In the fourth place, while providing a certain sense of a challenge, task design should help reduce negative emotions of anxiety or perception of difficulty since they may hinder successful task performance and completion. In the fifth place, tasks should be motivating and interesting in order to encourage task engagement (Platt & Brooks, 2002).

Whether working in task-supported or in task-based programmes, task design is ultimately a job many teachers and syllabus designers are

faced with, since, among other reasons, there is an almost complete lack of available commercial textbooks for the teaching of languages from a task-based perspective. While in the field of task-based language teaching (TBLT) there are no task design models per se, task design is often inferred from the few research frameworks that have taken task design features into consideration in order to investigate how task manipulations may affect performance and learning. In studies following such research agendas, the manipulation of task design and task complexity features has been thought to affect cognitive processes, which in turn affect performance and learning outcomes. The following are three well-known facts about task-based research. Firstly, studies following those agendas have overwhelmingly focused on outcomes rather than on processes. Secondly, they have analysed task features affecting cognitive and conceptual complexity (as independent variables) with little or no attention to linguistic difficulty (see Sasayama, Malicka, & Norris, in press, for a recent research synthesis of complexity studies). This is not exclusive to task-based research since, as we have learnt from Housen and Simoens (2016), in second language acquisition (SLA) linguistic difficulty has rarely been dealt with explicitly as a primary research variable. In the third place, research into tasks has overwhelmingly been done with morphologically poor languages such as English.

The goal of this chapter is to address the issue of how task design and task complexity interact with particular characteristics of a morphologically rich language such as Russian. In the first part of the chapter, we define Russian as a morphologically rich language and briefly review the issue of teaching Russian communicatively. In the second part, linguistic difficulty in the context of task design models is discussed, and it is claimed that linguistic difficulty needs to be considered a more central variable during task design since it will interfere with other cognitive processes and this will affect learning opportunities and language outcomes. In the third part of the chapter, we will specifically deal with the issue of linguistic difficulty at lower levels of proficiency. The chapter will end with some recommendations for teachers and syllabus designers engaged in the design of tasks for the teaching of Russian as a second or foreign language.

22.2 A Brief Commentary on the Morphology of Russian and the Tradition of Teaching L2 Russian

22.2.1 The Morphology of Russian

By all standards, Russian can be considered a morphologically rich language (MRL), and it is taken here as a representative of languages at the high end of the morphological complexity continuum. As opposed to

English, in which position and adjacency often implicitly define the relations between grammar elements (e.g., a direct object is generally realized by a noun phrase that appears after the verb without any explicit marking), Russian expresses multiple levels of information already at the word level. As Tsarfaty et al. (2013) suggest: "The lexical information for each word form in a MRL may be augmented with information concerning the grammatical function of the word in the sentence, its grammatical relations to other words, pronominal clitics, inflectional affixes, and so on." As a way of example, a noun typically has ten different forms, which usually include stress movement, which in turn entails changes in vowel quality due to vowel reduction. For example, дом *dom* [dóm], "house" in nominative or accusative case; дома *dama* [damá], in plural nominative or accusative case; дому *domu* [dómu] singular dative; etc. It can also entail the generation of new prosodic and lexical structures of the same word, for example in о домах *o domakh* [adamáx] plural prepositive case, in which the preposition is attached to the noun's prosodic word as if it were a prefix.

In stark contrast, and at the low end of the complexity continuum, in English knowing the form of a word ensures to a large extent the comprehension of the different forms related to that word (e.g., the word "house" is invariant whether it appears in subject, object, or adverbial position). This makes processes such as word recognition, noticing, or cognitive comparison manageable while using the language communicatively. Without a doubt the particularities of Russian morphology pose a considerable challenge for L2 learners and make teachers approach the teaching of Russian with very different conditions from those under which the teaching of English proceeds.

22.2.2 The Tradition of Teaching L2 Russian

While it is beyond the goals of this chapter to review the whole history of methodologies for the teaching of L2 Russian, a brief comment on teaching approaches may help the reader contextualize the issue of task and syllabus design for the teaching of Russian as an L2. Communicative language teaching (CLT) for Russian as second language was initiated in the 1980s in Russia, but widespread use of the method was not consolidated, and the fact remains that CLT has had and still has a residual implementation. One often advanced explanation is that teachers found the results of applying CLT to be not as satisfactory as those of the conscious-practical method (сознательно-практический метод). The conscious-practical method was developed by Beljaev (1964, 1965) and Scherba (1974a, b), among others, and it is based on psycholinguistics, and more specifically on Leontjev's (1970) Activity Theory ("Теория деятельности") and Vygotsky's (1966)

work. In this approach, with considerable research behind it since the 1970s, fifteen per cent or less of the instruction time should be devoted to explanations, and the learners' communicative activity in the target language should be eighty-five per cent of the time or higher[1] (Beljaev 1965, pp. 209–210). This is coherent with the tradition of communicative approaches to language teaching and learning, and it would seem to suggest that communicative language teaching is what teachers of L2 Russian around the world follow. But since the 1980s, Russian L2 teaching has wavered between traditional explanations in grammar syllabi and incursions into CLT, all the way to the conscious-practical method, and with even a few calls for L2 Russian programmes to embrace TBLT (see Comer, 2007, for an example of the teaching of Russian in the United States). For most teachers, it is still common practice to focus heavily on forms and use communicative activities as support practice of the recently explained grammar features. As Comer (2007) puts it, most first-year Russian textbooks follow CLT principles and include activities that are clearly communicative but "they are not pedagogical tasks, inasmuch as they lack an achievable outcome whose propositional contents are verifiable" (p. 184). It is a very common belief that Russian cannot be learned unless explicit focus on forms is provided given the complexities of the language for non-Russian speakers. Communicative activities are often designed to support such explicit teaching and learning. For those wanting to implement a most radical version of CLT, such as TBLT, there is also a need to guarantee that language will be attended to and processed without all attention going exclusively to the communicative and content dimensions of the task.

Before some recommendations for task and syllabus design are made, we focus in the next section on how linguistic difficulty is approached by existing task-based models.

22.3 Linguistic Difficulty in Task-Based Models

22.3.1 The Multiple Uses of the Terms Complexity and Difficulty

The debate about difficulty and complexity of learning certain aspects of a second language is a central one at the moment. As Housen and Simoens (2016) suggest, how difficult some aspects of grammar are depends on the synergistic influence of the characteristics of a particular L2 feature (e.g., its linguistic complexity, frequency, and salience), the learning conditions under which such a feature needs to be processed, and the individual

[1] Among other goals, current approaches to the teaching of Russian are meant to prepare learners to pass the official Russian exams (TORFL). The descriptors of the levels are consistent with the Council of Europe (2001) and they are presented as CAN DO statements.

characteristics of the learner. Housen and Simoens (2016, p. 166) provide a superb extended discussion on the difficulties that the SLA field has had in order to define and discriminate the different things researchers mean by using the term "complexity". They distinguish between, on the one hand, *structural complexity* (also linguistic or absolute complexity) that has to do with the intrinsic linguistic properties of a particular feature ("typically operationalized in terms of the number and variety of the discrete components of which a language feature consists, and the number and nature of the internal relationships and interconnections with the other features"; p. 166), and, on the other hand, *cognitive complexity* that is learner-dependent and about how difficult or costly a given feature is for a particular learner at a particular time in a given learning context ("particularly in terms of the mental resources allocated and cognitive mechanisms deployed in processing and internalizing the feature"; p. 166). When Housen and Simoens talk of difficulty, they have the cognitive complexity of a feature in mind and they summarize their concept of difficulty by saying that "a language feature is more difficult than another if its processing and learning requires more time and/or more mental activity from a particular language learner in a particular learning context" (p. 166). That is the definition of *difficulty* that we adopt in this article since we believe it is the language dimension that, combined with task *complexity* (i.e., in Robinson's (2001a) terms, the attention, memory, and reasoning demands imposed by the structure of the task on the language learner), contributes to overall cognitive load of a language learning task.

Before moving on to analysing the concept of linguistic difficulty in task-based frameworks, Table 22.1 provides a terminological clarification between the various meanings of complexity as used in this chapter, and it distinguishes it from difficulty and from cognitive load. The goal is not to provide an exhaustive description of complexity and difficulty, but simply to help the reader navigate our text (for extended descriptions and in-depth discussions of the constructs, see Michel, 2017; Housen & Simoens, 2016; Palotti, 2009; 2014).

22.3.2 Linguistic Difficulty in Task-Based Models

But how does linguistic difficulty feature in task-based models? As we pointed out earlier, in TBLT there has been no theorizing about design per se. We do not yet have any models of task design that bring together our knowledge of all important components that are necessary for the design of pedagogic tasks for L2 learning. For example, we have no comprehensive models that bring together intrinsic task features (e.g., the reasoning and/or linguistic demands of a task), with the goals and internal structures of the different task phases (e.g., pre-task, task, post-task), in different task

Table 22.1. *Terminological clarification of complexity and difficulty.*

Concept	Definition	Associations
Linguistic complexity	From a general SLA perspective, Housen and Simoens (2016) define it in terms of intrinsic linguistic properties of a particular feature.	It is also referred to as absolute complexity. Linguistic complexity subsumes system (lexical) and structural (morphological and grammatical) complexity.
Cognitive complexity (Linguistic difficulty)	Housen and Simoens (2016) define cognitive complexity as learner-dependent. For them "a language feature is more difficult than another if its processing and learning requires more time and/or more mental activity from a particular language learner in a particular learning context" (p. 166).	Although it may generate increases in general cognitive load (see below in table), cognitive complexity here only refers to the cognitive load generated by linguistic features (and not by other task factors or conditions, such as the amount of reasoning or time pressure) for a particular learner at a given time. From a task-based perspective, cognitive complexity is sometimes used alternatively with "task complexity"
Task complexity	From a task-based perspective, Robinson (2001a) has defined it as the attentional, memory, and reasoning demands imposed by the intrinsic characteristics of the task on the processing of L2 learners.	Task complexity can be associated with the idea of cognitive load, since higher or lower cognitive load (see below in table) can be induced by task design. The amount of reasoning or time pressure are typical task complexity factors.
Task difficulty	In task-based frameworks, Skehan (1998) sees it as the amount of attention the task demands from the participants, while for Robinson (2001a) it is what learners bring to the task (ability and affective variables),	Skehan's concept of task difficulty corresponds to Robinson's concept of task complexity but it also encompasses code complexity (see below in table) and communicative stress.
Code complexity	From a task-based perspective, Skehan (2001) defined it as the linguistic demands a task imposes on the L2 learner.	It is related to Housen and Simoens' (2016) concept of linguistic difficulty, but only in the context of task-based studies.
Cognitive load	From a cognitive psychology perspective, Sweller (1988) defined it as the cognitive effort called by the total amount of mental activity in working memory at a given moment.	In the context of language learning tasks, cognitive load can be affected by a number of factors such as task design (i.e., amount of reasoning or time pressure) and the specific linguistic features called upon by a task. It resembles Skehan's concept of "task difficulty".

types (e.g., narrative, decision-making, or information-gap tasks), or with the focus-on-form techniques (e.g., input flooding, input enhancement, or input elaboration) that may be needed to facilitate the conditions for language processing and learning. What is available for task and syllabus designers are two research agendas that have suggested a number of variables of relative "difficulty" or "complexity" that may have an impact on L2 task performance, production, interaction, or development. Task and syllabus designers have often had to infer design decisions from these two very prolific research agendas that have focused on task variables contributing to difficulty and complexity. The two agendas have typically tested variables in isolation (e.g., the effects of pre-task planning time, task familiarity, reasoning demands, or number of elements) and only occasionally by combining two variables (e.g., the effects with pre-task planning with displaced past time reference in here-and-now or there-and-then narrative tasks), and have measured the effects of manipulating such variables on L2 learners complexity, accuracy, and fluency (CAF), interactional moves (e.g., recasts, language-related episodes), and, to a lesser extent, development (in pre-test and post-test designs or longitudinal designs). As will be seen in what follows, even if provisions have been made in one of the agendas for linguistic difficulty to be factored in during task design, no empirical studies have actually computed linguistic difficulty as a design factor or as and independent variable.

Skehan's model of task difficulty has to do with the amount of attention the task demands from the participants, and so difficult tasks require more attention than easy tasks (Skehan, 1998; Skehan & Foster, 1997). Skehan proposed a three-dimensional model of task difficulty based on code complexity, cognitive complexity, and communicative stress. Code complexity reflects the linguistic complexity and variety, lexical load and variety, and the redundancy and density of forms. Cognitive complexity is affected by cognitive familiarity factors (e.g., familiarity of topic, familiarity of discourse genre, familiarity of task) and cognitive processing factors (e.g., cognitive processing, information organization, amount of computation, clarity of information, and sufficiency of information). Communicative stress is about the conditions under which a task is performed, and it varies according to such factors as the number of participants, the time available for task completion, the length of texts, and opportunities to control interaction. To these he adds learner factors such as learner's intelligence, breadth of imagination, and personal experience that may also contribute to the difficulty of a task. "Code complexity" in Skehan's framework refers to the concept of "linguistic difficulty" discussed at the beginning of this section and it clearly stands as an important feature. Most research coming out of this model has focused on cognitive complexity as affected by planning time or familiarity, with no studies factoring in the dimension

of "code complexity". An important design recommendation by Skehan (1998) is that: "Given that attentional capacities are limited, tasks of appropriate difficulty imply that learners will be able to cope with the demands upon their attentional resources" (p. 134). We will return to this issue when we consider linguistic difficulty in the context of task design.

Robinson's (2001a, 2003, 2007; Robinson & Gilabert, 2007) Cognition Hypothesis and associated Triadic Componential Framework serve both as references for task design and for sequencing in a syllabus, and draw a distinction between task complexity and task condition, and so they distinguish among cognitive, interactive, and difficulty factors. Robinson (2001b) defines task complexity as "the result of the attentional, memory, reasoning, and other information processing demands imposed by the structure of the task on the language learner" (p. 28). For Robinson (2003) task complexity "refers to the intrinsic cognitive demands of the task" (p. 56). It is important to emphasize that those "cognitive demands" are not specified as either conceptual or linguistic, but rather as general "information-processing" demands. Research coming out of this agenda has overwhelmingly focused on the "conceptual demands" (e.g., in terms of spatial reasoning, intentional reasoning, or number of elements in a task) without computing the load that the specific linguistic features called by the task will contribute to such information-processing (see Robinson, 2001a, 2003, 2007; Robinson & Gilabert, 2007, for complete descriptions of the framework). In Robinson's view, task design features may affect conceptual demands, which in turn will call for syntactization and grammatization affecting outcomes (in terms of CAF, interaction and/or development). Interestingly, Robinson does not include linguistic difficulty as a sequencing criterion in his framework.

We would like to speculate that perhaps linguistic difficulty (or code complexity in Skehan's terms) is less relevant to English, which is characterized by a relatively morphologically simple structure, few and clear syntactic marks, and a great tendency for monosyllabic words, which simplifies the lexicalization process and allows memory and attention resources to be oriented to lexical entry processing. Code complexity is, however, crucial for morphologically complex languages such as Russian, and it makes the process of a task-based syllabus design difficult, especially at lower levels where linguistic difficulty may take so much attention that learners might barely handle other dimensions of the task.

22.3.3 Claim for a More Central Role of Linguistic Difficulty

It is at this point that we would like to suggest a stronger prominence of linguistic difficulty in task-based models and their research agendas as well as a design option for task and syllabus designers. Firstly, we believe that

linguistic difficulty (as we described by referring to the work of Housen and Simoens, 2016) will compete with conceptual demands. Whether in the input that is usually provided in the pre-task phase, or during production in the task phase, task structure will call both conceptual and linguistic material and will need to be processed simultaneously during task performance. The more we know about what those conceptual and linguistic demands are, the better we can adjust our design for a successful processing and internalization of both meaning and form. Secondly, linguistic difficulty will undoubtedly contribute to cognitive load because the lack of linguistic resources may interfere with the successful completion of the task. Unless carefully controlled during design, linguistic demands that are overwhelmingly high or too far from the learner's possibilities may pose serious problems for task completion. Thirdly, linguistic difficulty should be considered both at the level of the number of features and the relative difficulty of each feature. In the following section, we illustrate the three arguments with a task for the teaching of Russian as an L2.

22.3.4 An Illustration of Intertwined Conceptual and Linguistic Demands in an L2 Russian Task

Let us picture the following task[2] that will help illustrate the arguments just laid out. A class of twenty students who have been learning Russian as a foreign language for 150 hours and are about to reach A2 level. The goal of the task (which we will label as "The Russian computer") is to have learners agree on the use of a single computer with a Russian keyboard that is available in the library. Students must work in groups of four and each one has a schedule that they need to consider as they agree on who will be using the computer and when. The outcome of the task must be a commonly agreed upon schedule for coordinated computer use. At the level of cognitive load, the task is clearly demanding. On the one hand, there is only one computer, it is available for a limited period of time (9 am to 5 pm), and the four learners must consider the four different schedules containing different classes and restrictions. Each schedule contains five days and eight hours every day. The task will demand learners to engage in reasoning that requires a considerable number of logical operations ("I arrive early in the morning but I must leave two hours later"). Interactive demands are also high because it is not just the coordination with one person but with three more people. Linguistic difficulty is explained by the fact that several linguistic features are simultaneously called by the structure of the task. These include, but are not limited to, verbs of movement, imperfective verbal forms (in the present tense, associated with the expression of frequency), and perfective forms (in the past and future

[2] This task is used in a task-based programme for the teaching of L2 Russian at the University of Barcelona.

tense). To these we must add that both reference to numbers and days of the week and their inflected forms, which are needed for successful task completion. It is not just about the amount of linguistic features needed to complete the task, but also about the fact that some features are more difficult than others because they depend on other features (e.g., in order to use numbers in "three days" or "two appointments" in Russian the genitive case is needed in the word immediately following). From the point of view of task definition, the task meets all the criteria that have been advanced by task-based scholars over the years (see Van den Branden, 2006, for a list of definitions of "task" over the years). This task is therefore a differentiated goal-oriented process, where meaning is primary; it is comparable to real-world activity, with a number of steps, which draws on a series of cognitive and communicative procedures and has a defined outcome. Additionally, it is sequenceable and can be subject to pedagogical intervention. The assessment of the task can be carried out in terms of outcome.

In this task, linguistic difficulty clearly competes with conceptual demands. Attentional and memory resources need to be utilized both for solving the problem and for processing the language involved in such problem resolution. In terms of mental activity, learners probably need to compare and organize information coming from the different participants, hold it in working memory and in long memory so that it can be recalled recurrently, need to jointly interrogate one another and plan together, and need to reach an agreement that is satisfactory to everyone. As for language processing, they need to joggle not only with lexical items but also with the morphology of verbs of movement, imperfective and perfective verbal forms, numerals and days of the week, and their respective morphologies, all of which are needed for the successful completion of the task. In sum, the higher the mental activity related to conceptual content and to the processing of forms involved in this task the higher the amount of computation needed during task performance.

Secondly, linguistic difficulty caused by lack of resources will undoubtedly cause higher cognitive load (Sweller, 1988, 1994) because it may interfere with the successful completion of the task. Both conceptual complexity and linguistic difficulty contribute to what Sweller defined as *intrinsic* cognitive load. When the conceptual demands of a task are very high, an L2 learner may lack the linguistic resources to meet those demands, and so cognitive load may reach a certain threshold after which task completion, processing, and any potential learning are beyond reach. As Sweller suggests, the solution is to try to work on reducing *extraneous* cognitive load, that is, the information presented to learners in task materials. If we do so, *germane* cognitive load (Sweller, Van Merriënboer, & Paas, 1998) will be generated that directs leaners attentional and memory

resources to the creation, construction, and automation of schemas. In the case of L2 pedagogic tasks, these are schemas for both content and language form. In the task we are using as an illustration, two potential solutions are available. On the one hand, a possibility is to reduce extraneous cognitive load by means of changes to the design that will reduce the amount of conceptual demands, for example by splitting the complex task into more manageable, simpler sub-tasks (e.g., one where they only exchange information, another one where they exchange information and identify potential conflicts, one where information exchange and conflict identification also prompt decision-making, and so on and so forth). A second alternative is to reduce linguistic difficulty, where linguistic features are dealt with as separately as possible (e.g., one sub-task where they only deal with hours—because the schedule refers to a single day—followed by another sub-task where they deal with hours across different days). We will return to this issue in section 22.5.

Thirdly, linguistic difficulty should be considered both at the level of the number of features and the relative difficulty of each feature. While our first argument dealt with the amount of linguistic features, this argument has to do with linguistic difficulty proper. Let us just take numbers in Russian. One can learn the numerals in Russian as individual words, but he or she will only be able to count numbers. In order to count objects, the genitive case is needed. Number 1 requires the nominative case in the word it precedes (with different forms for the masculine, feminine, neutral, and plural). Numbers 2, 3, and 4 (or any other numbers ending in 2, 3, or 4) will call the genitive singular. Numbers 5, 6, 7, 8, 9, and 0 (or numbers ending in 5 … 0) and from 11 to 14 are associated with the genitive plural. So if in the task at hand someone asks a participant how many days he or she can use the computer at 15:00, in order to answer something as simple as "five days" the person will have to remember at least the numeral-case mapping as well as the different forms of the genitive of the word "days" (one day = один день [adin dʲenʲ], three days = три дня [trʲi dnʲa], five days = пять дней [pʲatʲ dnʲej] …). If the learner does not use the right form of the nominative or genitive case for the counted object after the numeral, he or she may still be understood if that is the only error in the utterance. But from a pedagogical viewpoint, it is not only a problem of how to produce the right construction. In the pre-task phase or in previous tasks the amount of comprehensible input needed for noticing forms after the numeral must be larger, and the number of linguistic items the learner must handle in a task involving numerals can also increase the general difficulty of the task.

As this point we are not even considering the sequencing issue or what form should be targeted first. All we are claiming at this point is that linguistic difficulty needs to be computed during task design in order to avoid cognitive overload. If not gauged appropriately, the whole computation

by L2 learners during task performance may collapse and be transformed into negative perceptions of difficulty and anxiety that may cause insufficient processing and learning. Sequencing is an issue we will return to in our specific recommendations. In the following section, we use as a way of example the elementary levels of morphologically rich languages as a suitable context to illustrate the role of linguistic difficulty in task design.

22.4 TBLT for Elementary Russian

It is at the early stages of learning Russian as a second or foreign language that linguistic difficulty plays a larger role. It is so much the case that prominent experts in the teaching of Russian suggest that task-based courses for elementary Russian are beyond reach (Comer, 2007). Beyond the basic alphabet and phonetic system, elementary L2 Russian learners are faced with the enormous endeavour of decoding words with many layers of information. As with any other learners, their limited attentional and memory capacities will force them to prioritize meaning over form, and they will only focus on the latter if they can liberate enough resources to deal with both simultaneous conceptual and linguistic processing.

At lower levels, it is really a challenge to design real life tasks that are affordable for beginners. Non-adapted Russian language uses six cases with different declension paradigms for nouns, adjectives, numerals, and pronouns, which agree in gender, number, and case. The conjugation model is relatively simple, but it has six personal forms in the present/future, and four in the past tense. At higher levels learners have sufficient linguistic knowledge to integrate new linguistic elements, while beginner learners do not have any references to associate the new linguistic items with. For them, there is often overwhelming competition of cues and the attentional limitations make it difficulty for attention to be efficiently distributed among all of them. The lower the level of proficiency, the more important the role that linguistic difficulty plays in the overall amount of computation of the task. Even a simple task in terms of cognitive complexity (resource directing/dispersing), interaction (participation and participant variables), and learner factors (e.g., low anxiety) may sometimes be unattainable when there are too many new linguistic elements. Therefore, the problem for task designers at this level of profiency is not only to create the conditions to favour noticing of new form or of gaps, but also to ensure that the amount of computation is not too high, so that the task can be attainable and satisfactorily completed.

In the following section, we make a series of suggestions for task design that will help learners liberate attentional and memory resources in order to be able to cope with linguistic difficulty.

22.5 Recommendations for Task and Syllabus Design for L2 Russian

In the introduction to this chapter, we outlined some desirable principles that can guide second language task design: pedagogic task resemblance to real-life performance; a balanced focus-on-meaning and focus-on-form; the avoidance of negative perceptions; the in-built guarantee of language processing and learning despite individual differences; and the promotion of task engagement through motivating and interesting design. These are of course very general criteria that would be impossible to look at in detail in this chapter. Because we need to be selective, we will focus our recommendations on a series of design considerations that we believe will be specifically useful for morphologically complex languages.

22.5.1 Needs Analysis for Task Selection and Description in the Case of Morphologically Rich Languages

Regardless of whether a programme is task-supported or task-based, some kind of needs analysis (NA) must happen prior to course implementation. Obtaining detailed information about the kind of tasks learners in the programme will need to perform outside the class is not only desirable but it is the only reasonable option for task and syllabus design to be meaningful and efficient. Needs analysis is by now a highly specialized area of SLA and one that requires careful planning, methodology, and implementation (Long, 2005; Serafini et al. 2015). Methodologically speaking, it involves the use of multiple sources (i.e., different types of informants) and methods (e.g., interviews, observations, and questionnaires, among others) to extract information about the tasks that people will need to perform in specific discourse communities (see for example Malicka, Gilabert, & Norris, 2017, for an example of needs analysis in the hotel industry). If the possibility of such highly sophisticated NA is not available or the discourse community is too general, a decision still needs to be made as to what real target tasks are going to be used as a reference for the design of pedagogic tasks for a language programme. Whatever the case may be, NA information should be collected and/or specified as to:

- the goals of the task and how frequently the task is performed;
- its internal and external features, such as the number and types of participants typically involved in the task, the kind of channel in which it happens—online, face-to-face, etc.—and the topics they will include, among others;
- the competencies, skills, and **language** needed to perform the task;
- the steps and sequences of procedures of the tasks;

- the factors contributing to *task complexity* such as available planning time, amount of information to be shared, or the level of reasoning involved; and the *sources of difficulty* like the excess, relative difficulty of features or lack of linguistic resources; and
- the performance standards that can be used for the assessment of the task outcome.

In italics, we highlight the aspects of NA that are going to be particularly relevant to MRLs since they will interact during task performance and therefore need to be carefully considered during task design. Despite the many advances in NA theorizing and research, it is an unresolved issue as to how NA may exactly transfer to actual task design (see Malicka, Gilabert, & Norris, 2017, for an example). This is especially true about how the information about the variables contributing to the task's intrinsic linguistic difficulty can be used to manipulate such features in instructionally meaningful and effective ways during pedagogic task design.

Beyond the thorough reading of the NA literature, of all the processes involved in NA, we would like to emphasize a special focus by designers on the identification of the linguistics demands called by the tasks, the careful identification of factors affecting conceptual complexity, as well as the sources of difficulty.

22.5.2 Identification of Target Forms Called by the Task

In order to balance out cognitive conceptual complexity and linguistic difficulty so that the learner can accomplish the task, task designers should monitor the amount of "mininal code" demanded by each task. Tasks do not limit the linguistic resources that learners can use, but there are a number of resources that are necessary or "essential" to get to an outcome. One could say that if task designers impose the grammar involved in a given task, they run the risk of putting a TBLT dress on a grammar syllabus (Long, 2015, 2016), but this is not what we are suggesting here. When designing tasks for morphologically poor languages, which are more dependent on mostly lexical meaning, no one would set a task that demands eighty per cent vocabulary that is unknown to learners. In the case of MRLs, we cannot ignore the number and quality of the morphological features that will be needed when performing a task. Observing or asking expert task users how the task is performed during NA will certainly provide information about the linguistic resources needed for task performance. Testing the task with first language (L1) users after NA but before it is re-designed for L2 users, and finally gathering and updating information about the kinds of difficulties L2 learners run into during task performance over the years may serve as rich sources of information for task design. All of these will render a realistic picture of the linguistic difficulty generated by the task,

and it can be one more factor to compute in order to help designers with making better informed decisions about how to adjust cognitive and conceptual complexity, and this is the issue to which we now turn.

22.5.3 Balanced Task Design Between Cognitive and Conceptual *Complexity* and Linguistic *Difficulty*

As Révész (2011) suggests, complex tasks will let students focus on form when they are not extremely challenging and when understanding between interlocutors is sufficient for communication. During NA, detailed information about the conceptual content and mental operation required by the task can be obtained. Taxonomies of cognitive processes, such as Bloom et al.'s (1956) taxonomy and its revised version by Anderson et al. (2001), can serve as a basis for the description and classification of processes involved in each particular task. This will range from low order skills such as sharing or summarizing information to higher order skills like interpreting or checking information against other pieces of information, as we saw with the "The Russian computer" task. While breaking up a task into simple sub-tasks by itemizing linguistic difficulty (and presenting one or few linguistic features at a time), it is often the case that doing so renders tasks highly artificial, and we run the risk of again imposing an external grammatical syllabus on L2 learners by isolating features. For example, if we take "The Russian computer" task again as a reference, it would be unreasonable to try to limit the task to the use of some numbers (e.g., 1, 2, 3) but not others if we want them to just focus on the nominative case instead of both the nominative and the genitive case. Instead, itemizing cognitive complexity seems a lot more reasonable because it does not seem so artificial if we limit a schedule to certain times (e.g., we can ask learners to choose between any time from 9:00 to 15:00 or limit it to a less constrained schedule going from 9:00 to 21:00, which provides more options and reduces complexity). This is in line with the claims of Robinson's (2001a, 2003, 2005) Cognition Hypothesis (i.e., that cognitive task complexity should be used as the sole basis for task design and sequencing), but it is not quite the same since the Cognition Hypothesis does not make a specific mention of the integration of linguistic difficulty. Balancing out conceptual and cognitive demands and linguistic difficulty is crucial, realistic, and doable, but it takes considerable design.

22.5.4 Proactive, Reactive, and Post-Active Focus on Form in the Different Task Phases

If we admit to the central role of linguistic difficulty in MRL, it is especially important that focus on form should happen throughout the whole task. As we have learned from the focus on form literature (Doughty &

Williams, 1998), focus on form may happen proactively during task design, reactively during task performance, or post-actively after the task has been performed. Because reactive focus on form is incidental and is mostly unpredictable as it depends on learners' internal syllabuses, here we focus on proactive and post-active focus on form since both can be addressed during task design.

While input to the task provided during the pre-task phase is important to any kind of task in any kind of context, in the case of MRLs, it is of particular value. Input is external to the learner and the noticing of forms (Robinson, 1995, 2003; Schmidt, 2001) will depend on both its characteristics (e.g., saliency, communicative value of the forms) and what learners bring to the task, such as their internal syllabus, communicative needs, developmental readiness, felt task demands, prior language knowledge in terms of L2 proficiency or L1, processing capabilities, motivation, task construal, and agency, among many other factors or combinations of factors (for a review, see Han, Park, & Combs, 2008). As we have learned from SLA models, positive evidence through input will trigger input processing, intake, and intake processing before other deeper processes can take place (Leow, 2015). Pre-tasks are an opportunity to provide input and encourage processes such as the *noticing* (Schmidt, 2001) of language forms. It is by now a widely accepted fact in TBLT that design should promote noticing, and for MRLs in task-based approaches which wish to avoid explicit grammar teaching, the noticing of morphological aspects is a pre-requisite for any understanding, performance, and learning to take place. Available to designers are a series of techniques that will draw learners' attention to specific forms. Visual *input enhancement* (see Lee & Huang, 2008, for a meta-analysis on written input enhancement; see Cho & Reinders, 2013 for oral input enhancement), by highlighting, underlining, enlarging, or bolding morphological forms, will typically guarantee that certain linguistic features get noticed. This in turn may cause learners to engage in cognitive comparisons or demand reactive focus on form by their teachers or peers. Another technique is *input flooding* (Arteaga, Gess, & Herschensohn, 2003; White, 1998), which entails the flooding of a text with target features considered relevant to task completion. In the case of MRLs, this technique may be used with caution since Russian texts, even at lower levels, may be already flooded with many examples of a feature. A third technique involves the transformation of texts in terms of their relative complexity. Texts in pre-tasks have been transformed by using *input simplification* (Leow, 1995), *input elaboration* (Oh, 2011)—where difficult features in a text are not removed but their understanding is facilitated—and *explicit teaching* (Carroll & Swain, 1993; Leow, 2000).

It is assumed here, but not addressed, that reactive focus on form will happen during task performance. During task-based performance, leaners

will identify gaps in their knowledge or will notice new forms with which they are unfamiliar. In such circumstances, they will typically look for help, either from peers, the teacher, or other resources such as dictionaries or their mobile phones. However, the noticing of forms and noticing of gaps during pre-task and task work is certainly going to generate the need to consolidate the many linguistic aspects that task performance generates. In order for learners to engage in processes beyond registering new forms and taking them in order to start generating hypotheses and various mappings, they will probably need more time and resources to internalize, modify, or consolidate what they know about the language. Post-task work can certainly serve that purpose. Focused language work that is meaningfully connected to the task at hand will provide opportunities to reflect on language and raise awareness (through more input and intake processing). Post-task work typically involves specific focus on form, and so attentional and memory resources are liberated from the pressures of task performance. Through language-focused activities ranging from more implicit to more explicit, post-task work can be addressed towards processes such as hypothesis testing, rule-formation, and form–function mapping that will be eventually turned into internalized, modified, and consolidated knowledge (Leow, 2015) available for the performance of future tasks.

22.5.5 Tasks in a Syllabus

Task sequencing is largely an unresolved issue in SLA. Despite some recent proposals (Baralt, Gilabert, & Robinson, 2014), exact guidelines for sequencing still remain elusive. We believe that tasks can be organized in increasing complexity according to students' needs. Certainly, information about task conceptual and cognitive complexity and linguistic difficulty can be used beyond the individual task in order to inform decisions on the grading and sequencing of pedagogic tasks. Cognitive and conceptual complexity can undoubtedly be a criterion for organization, but we would also like to claim that linguistic complexity, and the amount of computation required by it, should also be considered during task design and sequencing. Our central claim in this chapter is that linguistic difficulty should remain stable and realistic (i.e., not artificially split into isolated grammatical units). Even if often there is not much available information about developmental sequencing (which is especially true about Russian; Magnani & Artoni, 2015), designers should have a sense of what kinds of features need to be known by the learner before other specific features can be used. Learners should start with conceptually simpler tasks and progressively approximate more complex real target tasks. The experience of Russian instructors often shows that an overwhelming amount of computation needed to address the language processing required by the task may prevent learners from satisfactorily achieving task completion. Additionally, a negative

perception of task difficulty, too high a level of anxiety, and other affective perception factors may get in the way of successfully performing the task. We propose that for MRLs, each task provides a manageable level of cognitive and conceptual complexity that will allow learners to cope with the linguistic difficulty of the task. If we retake "The Russian computer" as an example, certainly dealing just with information transmission in a first simple sub-task of the task in pairs would be reasonable for them to start becoming acquainted with all the linguistic features that will be needed for the completion of the task. A sub-task asking learners to resolve a limited number of easily solvable conflicts could follow. This would let learners recycle the language and schema generated by the pre-task-, task, and post-tasks of the first sub-task. The complexity of the task could increase progressively (and we have no guidelines in the literature as to how many versions may be needed) until the version we presented, with four participants, and with many and complex conflicts to resolve, can be attained.

Another aspect of syllabus design is that of task repetition (Bygate, 2001). Whether through exact task repetition or the repetition of similar tasks, it seems especially useful in the case of MRLs, since the first time a learner performs a task in L2 Russian all attention may be geared to the processing of meaning. The repetition of the same task a second time will certainly liberate resources.

A third consideration for task design is the alternation of oral, hybrid oral–written, and written tasks in order to take full advantage of what oral and written modes may offer for second language acquisition (Gilabert, Manchón, & Vasylets, 2016). More attentional and memory resources are available during writing, and the processes of planning, exaction, and revision associated with writing provide a better opportunity to focus on form (Gilabert, Manchón, & Vasylets, 2016). While at this point there is not a comprehensive model of syllabus design, and task and syllabus designers are largely left to their own resources, some suggestions for syllabus design and reasoned sequencing of task have begun to emerge (Baralt, Gilabert, & Robinson, 2014).

22.6 Conclusion

Exactly in the same way that we cannot imagine the engineering design of planes without aerodynamics or propulsion, we believe that for morphologically complex languages such as Russian, linguistic complexity should be an integral part of task design that is carefully considered and integrated in order to guarantee successful task completion. In this chapter, we first contextualized the issue of teaching Russian as an L2. We presented some of the complexities that characterize Russian as an MRL. We

then identified some of the problems that current task-based models have when it comes to the integration of the particularities of MRLs, which certainly makes linguistic difficulty a much more central aspect than in other types of language. Finally, we made a series of general task and syllabus design recommendations.

A number of conclusions can be drawn on the basis of the issues addressed. The first is that there is no reason why Russian, despite its enormous morphological complexity, cannot be taught communicatively through the use of tasks (but see Comer, 2007, 2012). We have argued that MRLs require particularly careful task design, but we also believe that design can solve many of the problems of integrating meaning and form in tasks for the teaching of L2 Russian. This can be done by means of the design of meaningful, realistic, and interesting tasks that present meticulously crafted pre-tasks, tasks, and post-tasks. Pre-tasks can certainly draw L2 learners' attention to, and help them process, the many and complex features to which they are exposed from very early stages in Russian. Engaging in task performance will provide a testing ground for uses and hypotheses, for the provision of feedback and the mapping of new forms, and for already known meanings, and will help learners identify the gaps in their knowledge. This, we have claimed, will be more efficiently done if the right balance between cognitive/conceptual and linguistic processing is found, and we have provided some examples as to how teachers and designers may go about it. We assume that slowly but steadily engaging in meaningful task performance will help learners traverse developmental sequences (Long, 2015). We are fully aware that language courses have limited numbers of hours, and that the use of tasks may not guarantee covering all the content that learners need to cover for each level. That is indeed an empirical question that TBLT needs to address (see Long, 2016, for some counterarguments). Experiences start being reported (Castellví & Markina, 2017) on how whole initial courses can be taught through tasks.

Finally, as Lawson (2005) suggests, designers generate objects, places, or materials which may have a major impact on the quality of life of many people. Mistakes can be inconvenient to the life of people; they may be expensive and can even be dangerous. We would not ask an aeronautical engineer to spare some hours for the sake of quick commercialization of a plane. We would like to make the same type of demands for second language task design. In task-based approaches, we urgently need to revise and advance our research agendas by refining the operationalization of the constructs of complexity and difficulty during task design. While task design for the specific communities we teach is costly—it takes time, often several years of redesign before tasks are fully functional—it is worth every minute if it is done for the sake of achieving successful second and foreign language acquisition.

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