

The antecedents of task behaviour: A dynamic systems account of task motivation

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I. INTRODUCTION

The behaviour of language learners in various communicative tasks is determined by a wide range of variables – task motivation is a very complex issue, involving the intricate interaction of factors such as:

- **learner-specific factors** (e.g. cognitive, motivational and emotional factors; level of L2 competence; personality traits, parental support)
- **learning situational factors** (e.g. teacher, class size, composition of the learner group, school ethos, norms and regulations)
- **task-related factors** (e.g. task content, task structure, expected task outcome, task participants, the availability of support structures)
- **other factors** (e.g. various time/timing-related issues, different types of distractions and disruptions)

II. PAST CONCEPTUALISATIONS OF TASK MOTIVATION

Trait/state accounts

- Traditional view (Julkunen, 1989, 2001; Tremblay, Goldberg & Gardner, 1995):

TASK MOTIVATION = GENERALISED MOTIVES + SITUATION-SPECIFIC MOTIVES.

This corresponds to the well-known distinction in psychology between *trait* and *state motivation*:

- *trait motivation*: stable and enduring motivational dispositions – largely task-independent
- *state motivation*: transitory and temporary motivational responses or conditions – largely task-dependent

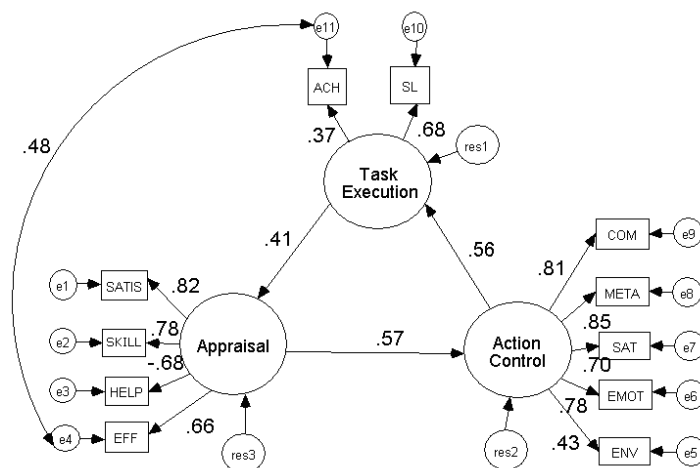
- Extended view (Dörnyei, 2002): On-task behaviour is embedded in a series of **ACTIONAL CONTEXTS** (e.g., taking up the study of a particular L2, going to a specific school, attending a particular class), each of which exerts a certain amount of unique motivational influence, that is, generates **MOTIVATIONAL CONTINGENCIES**. Engaging in a specific task, then, activates a number of different motivational contingencies, resulting in dynamic motivational processes underlying task completion.

Motivational task processing

- Dörnyei (2003) proposed a simple model to describe the state motivation that energises the learners' moment-to-moment task participation, made up of three interconnected mechanisms:

- **Task execution**: actual task performance
- **Appraisal**: continuous processing of the multitude of contextual stimuli regarding one's progress, including comparisons with predicted or hoped-for progress or with performance that alternative action sequences would offer
- **Action control**: self-regulatory mechanisms that are called into force in order to enhance, scaffold or protect learning-specific action

- Dörnyei and Tseng (2009) confirmed – through structural equation modelling (SEM) – the circular relationship of the three components: Signals from the appraisal system concerning task execution trigger the need to activate relevant action control strategies, which in turn further facilitate the execution process.



III. A DYNAMIC SYSTEMS APPROACH TO MOTIVATION

- The interconnected, constantly changing and environmentally sensitive system of task motivational factors is a good example of a complex, dynamic system that has been discussed recently by three interrelated theories: *dynamic systems theory*, *complexity theory* and *emergentism* (in most cases these three terms are used interchangeably in the literature to describe nonlinear systems; for recent SLA-specific overviews, see Larsen-Freeman & Cameron, 2008; Dörnyei, 2009; and the references at the end of this handout).
- Key tenet: Due to the manifold interacting influences, any development in complex dynamic systems is characterised by a *non-linear* growth curve, displaying a contextually sensitive, moment-to-moment trajectory of change. Individual variation is not so much a function of the strength of any individual determinants (e.g. aptitude or motivation) as of the way the complex system of all the relevant factors works together.
- Although a dynamic system displays continuous fluctuation, there are times of seeming stability when system behaviour seems to be predictable. These settled states – called *attractor states* – are associated with preferred patterns to which the system is attracted and in which the elements are coherent and resist change.
- Not every system reaches equilibrium states, but if there are strong attractors in place, they act as stabilizing forces, and this stability, in turn, translates into consistency and predictability in system behaviour. Higher-order individual difference variables such as motivation can be seen as powerful attractors that act as stabilizing forces.
- From a dynamic systems perspective, rather than following the traditional pattern of trying to isolate distinct motives and examine their operation in isolation, a more fruitful way forward involves taking a systemic approach by identifying higher-order *motivation conglomerates* that also include cognitive and affective components and which act as ‘wholes’.

IV. TASK MOTIVATION WITHIN A DYNAMIC SYSTEMS FRAMEWORK

- Can we identify optimal combinations of motivational, cognitive and emotional factors with regard to task behaviour that operate as integrated units? I believe we can and it is these units which may be of special interest for future research on task-based language teaching. In the following, I outline four motivational conglomerates: *interest*, *productive learner role*, *motivational flow* and *vision*.

Interest

- *Interest* is a prime example of a motivational conglomerate: Besides its obvious motivational quality it also involves a salient cognitive aspect – the curiosity in and engagement with a specific domain – as well as a prominent affective dimension concerning the joy associated with this engagement (e.g. Renninger, 2009; Eccles, 2009; for a dynamic systems summary, see Dörnyei & Ushioda, in press)..
- Renninger et al. (2008, p. 463): “Interest ...describes both a state of heightened affect and a developing predisposition to reengage work with particular domain content (e.g., music, science). Interest is identified based on learner’s feelings, principled knowledge, and value for particular domain content, and evolves over time through interactions with the others and objects/activities in the environment.”

Productive learner role

- ‘Role’ as a technical term comes from sociology and refers to the socially shared expectation of how an individual should behave. The term has been widely used in group dynamics because of the observation that every member fills at least one role in a group and that this role greatly determines how the person will function (see Dörnyei & Murphey, 2003).
- Student roles are basic building blocks for successful class performance. If a student is cast in the right role, he/she will become a useful member of the task team and will perform necessary and complementary functions.
- Task motivational illustration: Dörnyei and Kormos (2000) administered to a group of students a communicative task both in their L1 and L2. Besides other factors, they assessed the quality of the relationship between the two members of each dyad performing the task, and this measure showed a contrasting pattern in the two language versions:
 - In the L1 task the dyads in which there was a mutual friendship relationship produced significantly more speech.
 - In the L2 task, surprisingly, the friendship variable did not have any significant impact on the students’ performance.

- Why did the interpersonal relationship between the communication partners have no detectable influence on the speakers' performance in the L2 task? That is, what was it about the L2 task that overrode the interpersonal relationship effect which was clearly manifested in the L1 task?
- The communicative task used in the study was a common learning task – a moderately life-like make-belief situation – in which students adopted a *learning mode*, that is, pretended to take the pseudo-communication seriously. In language classes we can often observe the existence of such a 'language learner role' (e.g. when certain traditional, non-authentic L2 activities require the participants to produce often bizarre, highly artificial interactions with little or no real communicative meaning, and yet motivated learners do not seem to have any problem acting out their parts). In contrast, when the language of the task was changed into the students' mother tongue, the 'learning' element naturally disappeared and the students behaved normally.
- The importance of group dynamics was further confirmed by Dörnyei (2002), who computed correlations between motivation and task performance at the dyad level, that is, by pooling the data for the two members of each dyad (e.g., the sum of the two members' scores on self-confidence was correlated with the total number of words the two members produced together). Multiple correlations between the motivational variables and speech size were over 30% higher at the dyad level than the at the individual level (72 percent!), which provides strong support for the thesis of *motivational co-construction*.

Motivational flow

- The experience of *flow* (Csikszentmihalyi, 1990) refers to a state of intensive involvement in and focused concentration on a task that feels so absorbing that people often compare it to being outside everyday reality. It happens when, faced with a challenging activity, people are fully aware of what needs to be done and how, and at the same time they are confident that the task is doable and their skills are sufficient to succeed. Thus, flow can be seen as a heightened level of motivated task engagement; in many ways it is the *optimal task experience*.
- Egbert (2003) found that the task conditions under which flow occurs can be organized along four dimensions:
 1. there is a perceived balance of task challenge and participant skills during the task
 2. the task offers opportunities for intense concentration and the participants' attention is focused on the pursuit of clear task goals
 3. the participants find the task intrinsically interesting or authentic
 4. the participants perceive a sense of control over the task process and outcomes
- These underlying dimensions display a balanced mixture of motivational, cognitive and affective constituents: The intrinsic motivation generated by the enjoyment of the task is dependent on cognitive factors such as the appraisal of the challenge of the activity; the self-appraisal of the level of the individual's skills and competence involved in the activity; a firm sense of control over the completion of the task; clarity about the task goals; and focussed attention.

Vision

- The *ideal self* is the vision-like representation of all the attributes that a person would like to possess; it can be seen as our internal image of the wished-for person that we would like to become.
- A key component of the 'L2 Motivational Self System' (Dörnyei, 2005, 2009a) is the *Ideal L2 Self*, which is the L2-specific facet of one's ideal self: If the person we would like to become speaks an L2, the Ideal L2 Self is a powerful motivator to learn the L2 because of the desire to reduce the discrepancy between our actual and ideal selves.
- An effective ideal L2 self is a broad constellation that blends together motivational, cognitive and affective areas: It needs to come as part of a 'package', consisting of an imagery/vision component that activates appropriate emotions and is cued to a variety of appropriate cognitive plans, scripts and self-regulatory strategies. In many ways, it can be seen as the ultimate motivational conglomerate.
- How does vision operate in specific tasks? If learners see the task to be on a contingent path towards reaching the vision, their general desire for pursuing the vision will be transferred to the pursuit of the particular task.
- Norton (2001, o. 164): "When Katarina and Felicia entered their language classrooms, they not only saw a classroom with four walls, but envisioned a community that transcended time and space. Thus although these learners were engaged in classroom practices, the realm of their community extended to the imagined world outside the classroom – their imagined community."
- Norton argued that while Katarina and Felicia were actively engaged in classroom practices, the realm of their community extended beyond the four walls of the classroom; that is, they were operating at the interface of reality

and imagination. However, in their case some serious problems occurred because their imagined communities were not accessible to the teacher, who, in each case, focused her energy on practices of engagement, rather than on practices of the imagination. Because of this, Katarina and Felicia ultimately withdrew from their ESL classes. This points to the pedagogical conclusion that teachers should try and link tasks to the learners' visions.

V. CONCLUSION

- **Motivational conglomerates** are a salient part of the psychological foundation of task performance. This salience marks the need for a new research approach: Traditionally, we have tried to break down motivation to the lowest possible denominators, hoping that the resulting motives would be 'pure' components that can then serve as building blocks for all motivational phenomena. This approach has by and large failed, and our task, then, is to find the level of analysis that captures the right combination of motivation, cognition and affect in any specific task situation.

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