Plurilingual Creativity at work: Theoretical and empirical arguments for expanding framework for research in the consequences of acquisition and use of multiple languages for creative behavior

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Moscow, 2021
Список подтверждающих материалов

Вебинара "Полилингвальная креативность в действии: теоретические и эмпирические аргументы в пользу расширения рамок исследования о влиянии языковых практик на творческое поведение», 15.12.2021, онлайн платформа Zoom

1. Программа вебинара (на русском языке)

2. Программа вебинара (на английском языке)

3. Презентация доцента департамента психологии НИУ ВШЭ Хармурина А.В «"Полилингвальная креативность в действии: теоретические и эмпирические аргументы в пользу расширения рамок исследования о влиянии языковых практик на творческое поведение"

4. Скриншот
Вебинар "Полилингвальная креативность в действии: теоретические и эмпирические аргументы в пользу расширения рамок исследования о влиянии языковых практик на творческое поведение"

Семинар состоится 15 декабря с 15.00 до 17.00 и будет посвящен вопросам креативности и творческого поведения, которые занимают важное место в программе исследований НЦМУ.

С докладом выступит Хархунин Анатолий Владимирович, Ph.D. в экспериментальной психологии, доцент факультета социальных наук НИУ ВШЭ, руководитель лаборатории Креативности и Мультилингвизма, стипендиат Fulbright и National Science Foundation (ША) и Deutsche Forschungsgemeinschaft (Германия).

Доклад пройдет на английском языке.

Тема доклада: «Plurilingual Creativity at work: Theoretical and empirical arguments for expanding framework for research in the consequences of acquisition and use of multiple languages for creative behavior» («Полилингвальная креативность в действии: теоретические и эмпирические аргументы в пользу расширения рамок исследования о влиянии языковых практик на творческое поведение»).

Анатолий Владимирович представит результаты исследования факторов многоязычия и мультикультурности, которые помогают формировать личностные черты, способствующие развитию творческого потенциала. Также будет представлена парадигма Полилингвальной Креативности в образовании и программа «Ключи к полилингвальному, межкультурному и творческому образованию» (Plurilingual Intercultural Creative Keys; PICK).

Дискуссионным вопросом выступит Todd Lubart (Тодд Любарт), президент Международного общества изучения творчества и инноваций профессор психологии Университета Ларжа (Франция).

Аннотация (на русском и английском) — по ссылке.

Семинар пройдет в гибридном формате.
Webinar “Plurilingual Creativity at work: Theoretical and empirical arguments for expanding framework for research in the consequences of acquisition and use of multiple languages for creative behavior”

This presentation focuses on the consequences of multilingual practice for creative behavior. Interest in the relationship between multilingualism and creativity was revived about 15 years ago. This relationship was formalized in the Multilingual Creative Cognition (MCC) framework and received extensive empirical support showing a positive effect of multilingualism on creative behavior. However, the MCC paradigm appears to take a rather narrow perspective on these two phenomena. Since it was developed within the traditional bi-/multilingualism and creative cognition frameworks, respectively, it focuses primarily on the cognitive mechanisms underlying creative capacity, which could benefit from an individual’s multilingual practice. At the same time, scholarly reflection on learning and use of multiple languages has introduced a broader perspective with work in translanguaging, linguistic multi-competence and especially plurilingualism. The latter presents languages as composing a single dynamic language repertoire, thus shifting the focus from the languages to the agency of the individual in the interaction of languages. Similarly, reflection on creativity has expanded towards a broader and more articulated conceptualization, with a number of models being developed that stress the complex and multidimensional nature of creativity. Both shifts paved the way to a reconsideration of the relationship between linguistic and cultural diversity on one side and creativity on the other. In this talk, after briefly recapitulating the MCC paradigm, we present an argument supporting the need for a broader perspective on the relationship between multilingual and creative practices. We introduce some of the plurilingual and pluricultural factors, which may shape personality traits fostering creativity. Then, we provide empirical evidence from the studies investigating these factors. The presentation culminates with a discussion of the applications of the expanded Plurilingual Creativity paradigm in education and introduces Plurilingual Intercultural Creative Keys (PICK) program, which constitutes a unified teaching model blending language-learning and creativity-fostering instructions into school curriculum.
Plurilingual Creativity at Work

Theoretical and empirical arguments for expanding framework for research in the consequences of acquisition and use of multiple languages for creative behavior

Anatoliy V. Kharkhurin

Laboratory for Creativity & Multilingualism
Presentation Structure

- Multilingual Creative Cognition
- Plurilingual Creativity
- Plurilingual factors influencing creativity
- Empirical evidence
- Plurilingual Creative Education (PICK)
Multiple languages and creative practices: the start of a relationship

- **Multilingual Creative Cognition (MCC)** (Kharkhurin, 2015)
- **A positive effect of bi-/multilingualism on creative cognition** (see Kharkhurin, 2018, van Dijk, Kroesbergen, Blom, & Leseman, 2019, for an overview)
Creative Cognition

- An ability to initiate multiple cycles of divergent and convergent thinking (Guilford, 1967)
  - Convergent thinking
    - Extracting creative ideas from the pool of those generated during divergent thinking
  - Divergent thinking
    - Generation of a multitude of often unrelated ideas
    - Abbreviated Torrance Test for Adults (ATTA, Goff & Torrance, 2002)
    - Properties
      - Fluency (the ability to rapidly produce a large number of ideas or solutions to a problem)
      - Flexibility (the capacity to consider a variety of approaches to a problem simultaneously)
      - Elaboration (the ability to think through the details of an idea and operationalize it)
      - Originality (the tendency to produce ideas different from those of most other people)

- This creates an active, attention-demanding process that allows generation of new, alternative solutions characterized by
  - novelty (original or unexpected)
  - utility (useful or meeting task constraints)
- Everyone has creative ability, but it’s realized differently in different individuals (Ward, Smith, & Finke, 1999)
Just suppose you could walk on air or fly without being in an airplane or similar vehicle.
What problems might this create? List as many as you can.
Use the incomplete figures below to make some pictures. Try to make your pictures unusual. Your pictures should communicate as interesting and as complete a story as possible.
Use the incomplete figures below to make some pictures. Try to make your pictures unusual. Your pictures should communicate as interesting and as complete a story as possible.
ATTA Activity 3

See how many objects or pictures you can make from the triangles below, just as you did with the incomplete figures.
See how many objects or pictures you can make from the triangles below, just as you did with the incomplete figures.
Multilingual Creative Cognition

• **Speaking more than one language extends an individual’s cognitive capacities** (e.g., Adesope, Lavin, Thompson & Ungerleider, 2010; Barac, Bialystok, Castro & Sanchez, 2014; Bialystok, 2005, Bialystok, Craik & Luk, 2012, for an overview)

• **Specific architectures of the mind that are likely to promote later cognitive advantages** (Cook, 2016: Bak & Mehmedbegovic-Smith, 2021)

• **Acquisition and use of multiple languages facilitates creative functioning** (Kharkhurin, 2012)
Multilingual factors influencing divergent thinking

- **Language proficiency**
  - **Balanced > Unbalanced** (e.g., Kharkhurin, 2008, 2009, 2011; Lee & Kim, 2011)

- **Age of language acquisition**
  - **Early > Late** (e.g., Cushen & Wiley, 2011; Kharkhurin, 2008; Kostandyan & Ledovaya, 2013)
Cognitive mechanisms underlying multilingual creativity

- **Language Mediated Concept Activation (LMCA)** (Kharkhurin, 2017)
  - Specific architecture of bilingual memory facilitates the greater spreading activation between conceptual representations and thereby stimulates an ability to activate a multitude of unrelated concepts (i.e., divergent thinking)
Language Mediated Concept Activation

- Translation equivalents automatically activate each other through shared conceptual representations (e.g., concept mediated translation in Kroll & de Groot, 1997)

- Although translation equivalents share most of the conceptual features, these representations are not identical (e.g., Paradis, 1997)

- Variations in the conceptual representations of translation equivalents may result in the simultaneous activation of additional concepts, which eventually may produce a large pattern of activation over unrelated concepts from different categories (Kharkhurin, 2017)
Conceptual level

Semantic level

Lexical level
Cognitive mechanisms underlying multilingual creativity

- **Selective attention** (Kharkhurin, 2011)
  - *Attentional control is enhanced by bilingual practice* (see the review in Sekerina, Spradlin & Valian, 2019; meta-analysis in Adesope et al., 2010)
  - *It also supports creative problem-solving*
Selective Attention

- **Stroop test** (Stroop, 1935)

Name the Color in Which Each Word is Printed
Selective Attention

- **Conditions**
  - Color-naming control
  - Word-reading control
  - Congruent color-naming
  - Incongruent Stroop color-naming

\[ F(2.13, 189.35) = 323.62, \eta^2 = .78, p < .001 \]

\[ F(1.14, 101.37) = 26.36, \eta^2 = .23, p < .001 \]
Selective Attention

- **Mechanisms** (Bialystok, Craik, & Luk, 2008)
  - Facilitation
    - the rate of the facilitation associated with the word printed in its own color relative to the neutral color-naming condition when no word is present
  - Inhibition
    - the rate of inhibition associated with the word printed in another color relative to the neutral color-naming condition

- **Selective attention** (Kharkhurin, 2011)
  - Highly proficient bilinguals: inhibition mechanism
    - Inhibition $\rightarrow$ innovative capacity
    - Inhibition $\rightarrow$ non-standard thinking
  - Moderately proficient bilinguals: facilitation mechanism
    - Facilitation $\rightarrow$ generative capacity $\rightarrow$ non-standard thinking
Towards a broader conceptualization

- **Bi-/multilingualism** (e.g., Cenoz, 2013; Herdina & Jessner, 2002; Hornberger, 2002)
- **(Trans)languaging** (Williams, 1996; García, 2009)
  - Welsh-English bilingual programs
  - Systematic and intentional alternation of input and output languages in bilingual instruction
  - ‘language’ as a social practice in which learners engage rather than a set of structures and functions that they learn
- **(Linguistic) multi-competence** (Cook & Wei, 2016)
  - *Dynamic system theory*: major transformation of the cognitive and linguistic system as a result of acquiring multiple languages (Larsen-Freeman & Todeva, 2021)
  - It is not seen as the sum of different linguistic competences but as a specific competence of a higher taxonomic order, which posits a systemic cognitive asset in speakers of multiple languages
- **Plurilingualism** (e.g., Coste, Moore, & Zarate, 1997/2009; Council of Europe, 2001, 2020; Lüdi & Py, 2009; Piccardo, 2013, 2018)
- **Creativity**
  - 4+2+1 Ps (Kharkhurin & Charkhabi, 2021; Rhodes, 1961; Runco, 2003; Simonton, 1990)
  - Systems Model of Creativity (Csikszentmihalyi, 2014)
  - 5A (Gläveanu, 2013)
  - 4in1 (Kharkhurin, 2014)
  - 7C (Lubart, 2017)
4+2+1P Approaches to Creativity

- Process
- Person
- Product
- **Place/press** (Rhodes 1961)
- **Persuasion** (Simonton, 1990)
- **Potential** (Runco, 2003)
- **Perception** (Kharkhurin, 2017)
• Monolingual native-speaker model (*ein monolingualer Habitus*, Gogolin, 1994, 2002)

• Additive approach
Plurilingualism

- The ability to interact, even imperfectly, in several languages in everyday setting (Council of Europe, 2001, 2020)

- Linguistic repertoires include unevenly developed, fluid, and constantly shifting competencies in a variety of languages, dialects, and registers (Cummins, 2021)

- It is a practice, something we do rather than something that precedes our activities (Lüdi, 2021)

- The knowledge of multiple languages as well as the understanding of different sociocultural and emotional contexts in which these languages were acquired contributes to improvement of an individual’s communicative skills (Council of Europe, 2018)

- Plurilingual and pluricultural competence (Coste, Moore and Zarate, 1997/2009)
  - ... the concept of plurilingual and pluricultural competence [...] defended the (sociolinguistic) notion that [...] plurilingual individuals used two or more languages – separately or together – for different purposes, in different domains of life, with different people, and because their needs and uses of several languages in everyday life could be very different
Multi- vs. Pluri-lingualism

Multi-
L1 + L2 + L3 + ... + Ln

Pluri-
{L1, L2, L3, ..., Ln}
Plurilingual Creativity

Kharkhurin (2021)
Sociocultural Experience

• **Acculturation studies**
  – Language acquisition is often accompanied by the adoption of the cultural values of the country in which this language is acquired (e.g., Birman, Trickett, & Vinokurov, 2002)

• **Creativity research**
  – Sociocultural values and norms determine and shape the concept of creativity, which in turn may influence the way creative potential is understood and developed (e.g., Lubart, 1999)

• **Cross-cultural research**
  – The effect of multilingualism on creative performance is often confounded with the effect of multiculturalism (e.g., Kharkhurin, 2010; Leung, Maddux, Galinsky, & Chiu, 2008)
  – Variations in the manners of socialization, degrees of self-perception and self-expression, education, and social conduct may modulate the differences in creative performance of the representatives of different cultures (e.g., Kharkhurin & Samadpour Motalleebi, 2008; Niu & Sternberg, 2001; Zha, Walczyk, Griffith-Ross, Tobacyk, & Walczyk, 2006)

• **Individuals’ experience with multiple sociocultural settings may encourage their creative behavior**
Emotional Experience

- **Emotions can either help or hurt creative endeavors** (e.g., Montgomery, Hodges, & Kaufman, 2004; Russ, 1999)

- **Emotions are realized differently in multilinguals’ languages** (see Dewaele, 2016; Pavlenko, 2012, for an overview)

- **Experience of different emotions in different linguistic contexts can lead to a variation in creative behavior** (Kharkhurin & Altarriba, 2016)
Intercultural Competence

- **Co-orientational model of global competence** (Gudykunst, Matsumoto, Ting-Toomey, Nishida, & Karimi, 1994; Pusch, 1994)

- **Intercultural competence is determined by the presence of cognitive, behavioral, and affective abilities**

- **Personal attributes**
  - **Flexibility**
    - the ability to change cognitive structures and behaviors (cf. accommodation vs. assimilation in Piaget, 1936/1952)
  - **Cross-cultural empathy**
    - the ability to connect emotionally with representatives of other cultures
  - **Tolerance for ambiguity**
    - the ability to maintain a relaxed attitude toward an unclear situation
  - **Mindfulness**
    - openness to the variations in the communication flow determined by differences in people’s cultural perspectives
Contribution of intercultural competence to creative personality traits

• **Cognitive flexibility**
  - This trait allows an individual to find different perspectives, to switch between perspectives, and to think outside the box
  - **Bilingual > monolinguals → flexibility** (e.g., Carringer, 1974; Kharkhurin, 2008; Konaka, 1997)
  - **Code-switching contributes to flexibility in thinking** (Kharkhurin & Wei, 2014)

• **Tolerance of ambiguity**
  - “Tendency to perceive ambiguous situations as desirable” (Budner, 1962, p. 29)
  - **3+ languages > 1-2 languages → tolerance for ambiguity** (Dewaele & Wei, 2013)

• **Open-mindedness**
  - Openness to different sociocultural constructs
  - Open and unprejudiced attitude towards outgroup members and towards different cultural norms and values
  - **Openness to new ideas and experiences** (e.g., Feist, 1998; Silvia, Nusbaum, Berg, Martin, & O'Connor, 2009)
  - **Advanced knowledge and frequent use of more languages was linked to open-mindedness** (Dewaele & Stavans, 2012; Dewaele & van Oudenhoven, 2009)
Other factors underlying plurilingual creativity

- **Preference for complexity**
  - Creative perception predicts creative behavior (Kharkhurin, 2017; Kharkhurin & Yagolkovskiy, 2019, Kharkhurin & Charkhabi, 2021)
    - Creative perception of the environment = preference for complexity
  - Plurilingual individuals live in complex linguistic and sociocultural systems
  - Plurilingual practice enhances preference for complexity

- **Motivation**
  - Creativity generally prospers under conditions that support intrinsic motivation (stimulated by personal interest and inner potential) and suffocates under conditions accentuating the extrinsic motivation (such as rewards and incentives)
  - Motivation plays a pervasive role in language learning
Plurilingual Creativity

- language repertoire
- multicultural experience
- intercultural competence

Divergent thinking
Plurilingual Creativity

- language repertoire
- multicultural experience
- intercultural competence

extraversion

divergent thinking
Plurilingual Creativity

- Language repertoire
- Multicultural experience
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Tolerance of ambiguity

Intolerance of ambiguity

Divergent thinking
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Tolerance of ambiguity

Intolerance of ambiguity

Divergent thinking

Extraversion

Neuroticism

Kharkurin. Laboratory for Creativity and Multilingualism
Plurilingual Creative Education

Kharkhurin & Pasechnik (2020)
Plurilingual Creative Education

• Two types of educational programs
  – ones fostering foreign language learning
  – ones intended to facilitate students’ creative capacities

• Neglect of the importance of nurturing intercultural competence

• A relationship between linguistic, cultural, and creative competencies

• Greater synergy
  – This program would capitalize on the assets of both forms of education to establish an effective and comprehensive curriculum
MONO.edu

- Additive approach
- Monolingual approach to multilingual education
- Linguistic appropriateness
- Raciolinguistic ideologies
- Prescriptive standardized ideologies
- Marginalized non-standard linguistic practices of plurilingual students

PLURI.edu

Introduced by the Council of Europe in 1996

- Founding principles
  - the acceptance of cultural diversity
  - the right to use one's mother tongue as a form of communication
  - the right to gain experience and knowledge of another language
  - the acceptance that language is the core of human dialogue
- Guiding principle
  - plurilingual repertoires to be developed through education can be diverse
  - languages that are the components of plurilingual competence do not all have to be learned to the same level
  - language education takes place throughout life and not exclusively during school years
Plurilingual Intercultural Creative Keys (PICK)
THE MODEL OF THE DEVELOPMENT OF SYSTEMIC ADAPTATION THROUGH THE PICK EDUCATIONAL PROGRAM

PERSONALITY TRAITS

- INTRINSIC MOTIVATION
- OPENNESS TO EXPERIENCE
- ASSERTIVENESS
- EMOTIONAL INTELLIGENCE
- CURiosity

SYSTEMIC ADAPTATION

- CREATIVE POTENTIAL ACTIVIVATION

FOREIGN LANGUAGES LEARNING

INTERCULTURAL COMPETENCE FORMATION

SKILLS ABILITIES

- LANGUAGE SKILLS
- COMMUNICATION SKILLS
- CREATIVE PERCEPTION
- GOAL-SETTING SKILLS
- CULTURAL AWARENESS
- SELECTIVE ATTENTION AND COGNITIVE FLEXIBILITY
PICK training for teachers (3 modules)

Creativity creates the creator
- Fostering creative potential
  - Knowledge base formation about creativity
    - The phenomenon of creativity
    - How to develop creative potential?
  - Acquisition of skills developing students' creativity
    - Approbation of creativity fostering methods and techniques
    - Application of them in the educational setting
  - Actualization of personality traits necessary to develop students' creativity

The world is open to everyone
- Developing Intercultural competence
  - Knowledge base formation about intercultural competence
    - The phenomenon of intercultural competence
    - How to form intercultural competence?
  - Acquisition of skills developing intercultural competence
    - Cultural awareness
    - Communication skills
    - Emotional intelligence
  - Actualization of personality traits necessary to develop students' intercultural competence

New language - New life
- Stimulating foreign language learning
  - Knowledge base formation about plurilingualism
    - The phenomenon of plurilingualism versus the bi-/multilingual approach
    - How to stimulate foreign language learning in the context of intercultural communication?
  - Acquisition of skills developing plurilingualism
    - Code Switching and interlanguage games
  - Actualization of personality traits necessary to stimulate students' foreign language learning
## PICK lectures and workshops for teachers (3 blocks)

### Where is their button
- Developing intrinsic motivation for learning activities and maintaining curiosity
  - Lectures
    - The role of intrinsic motivation
    - How to maintain curiosity
    - The personal significance of the schooling material
    - Concentration of selective attention
    - Competitive team environment
    - Positive adult role model
    - Independent thinking
  - Workshops
    - Directed visualization in the classroom
    - Game techniques to maintain motivation
    - Dialogue and team problem solving
    - Storytelling
    - Tolerance of deviant behavior
    - Self- and peer-assessment by students in learning

### Comfort zone
- Creating a favorable psychological climate in the educational community
  - Lectures
    - The role of psychological climate
    - How to maintain a favorable psychological climate
    - Stress and how to overcome it
    - Ergonomics and aesthetics of the educational space
    - Person centered approach
  - Workshops
    - Body and meditative practices in the classroom
    - Using aromatherapy to optimize learning activities
    - Using music therapy to optimize learning activities
    - Practice of person-centered interaction between a teacher and a student

### Simply about complex
- Developing critical thinking and the ability to implement project activities
  - Lectures
    - The concept of critical thinking
    - How to develop critical thinking of schoolchildren
    - Technology of critical thinking development
    - Project as a way to actualize critical thinking
  - Workshops
    - Critical thinking development techniques
    - Techniques to optimize students' project activities


Lüdi, G., & Ph, B. (2009). To be or not to be ... a plurilingual speaker. International Journal of Multilingualism, 6(2), 154-167. doi:10.1080/14790710902846715


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