

Yang Hanri

## Artistic-polylogical knowing-how in ensemble musicking: structural characteristics

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Yang Hanri

PhD Student

The State Institution "South Ukrainian

National Pedagogical University

named after K. D. Ushynsky"

ORCID: 0000-0002-4739-0187

*The aim of the study was to determine the structure of artistic-polylogical knowing-how (hereinafter – APKH) of future Master of Musical Art as a construct that provides the ability to participate and organise multi-level polylogical communication in the process of ensemble musicking. The leading levels are: (a) intersubjective interaction, which ensures the exchange of various verbal and non-verbal information, in particular, interpretive and creative ideas; (b) artistic communication in the process of joint interaction with a musical artwork. The interconnection of communication processes of these levels is considered as a polylogical process, in which intersubjective communication provides the possibility of joint analysis and development of a unified interpretive concept that takes into account the creative vision and perception of each ensemble member. The result of polylogical communication in ensemble musicking is the creation of a joint creative product – a performing interpretation of a musical artwork.*

*The application of theoretical and methodological approach Actor-network theory (ANT) allowed us to study APKH as a latent construct, the formation and functioning of which is influenced by a number of interrelated factors that determine the ability of future Master of Musical Art to conduct and organise multi-level polylogical communication in the process of ensemble musicking. As a result of considering such factors as actors, and the channels of their mutual influence, respectively, as networks, four main interrelated components were identified in the APKH structure, namely: polycommunicative-motivational, semiotic-epistemological, descriptive-reflexive and discursive-participative. The prospect of further research is defined in the development of a criterion apparatus for assessing the levels of APKH future Master of Musical Art formation, and the experimental study of this construct in accordance with the ANT methodology.*

**Keywords:** artistic polylogue, ensemble musicking, polycommunication, knowledge-how, co-creation, joint interpretation, component structure.

**Introduction.** Ensemble musicking is an important component of many music students' future professional lives (Kokotsaki & Hallam, 2007). Practice shows that it is not uncommon for students who have completed a master's degree in music and music pedagogy to pursue ensemble performance as a career (Munnely, 2017). In demand on the labour market are also music teachers with sufficient qualifications to lead various types of ensembles, functioning both autonomously and at educational institutions – schools, lyceums, colleges, etc. This is due to the fact that ensemble musicking is a special form of collaborative activity that promotes cooperation through communication with art and co-creation (Kelleher et al., 2019).

A central process in collaborative creative activity is communication, which unfolds on several levels (Volpe et al., 2016). In particular, at the level of intersubjective interaction, communication enables the exchange of information of various kinds, including interpretive and creative ideas (Laroche et al., 2022). At the level of interaction with the musical work, the process of artistic communication unfolds in the projection of composer-performer-listener (Mendoza Rivas & Khmelevska, 2023). Both levels interact with each other, as artistic communication in ensemble musicking requires intersubjective communication to create a joint creative product – a performing interpretation of a musical work. In particular, it is intersubjective communication that provides the possibil-

ity of joint analyses and the development of a unified interpretive concept, which, at the same time, takes into account the importance of the vision, perception and performance contribution of each ensemble member.

Thus, multi-level communication in ensemble musicking is essentially polycommunication, as it develops according to the laws of polylogue, that is, integrating the unique voice of each of the many communicating participants in a common, coherent discourse (Lewiński & Aakhus, 2022). The special role of polylogue in the artistic-interpretative process of ensemble musicking necessitates the need for musicians – ensemble players and artistic directors – to possess specific Artistic-polylogical skills that allow for such multi-level, organised discourse in the artistic-creative process.

In view of the above-mentioned prevalence of ensemble activity of Master of Music graduates and the need to possess knowledge-how to “competently rehearsing” (Colson, 2012) and to organise the emergent communication process in ensemble activity (Dobson & Gaunt, 2015) as an artistic polylogue, the formation of appropriate specific Artistic-polylogical skills in future Master of Music graduates seems relevant. Such knowledge-how is designed to enable them to be effective in ensemble musicking and in teaching such musicking to students in their future professional activities.

**Literature review.** A review of the literature has shown that knowledge-how is explored within the theory of intelligent action (Stanley & Williamson, 2001) as a construct consisting of propositional knowledge and skills (Fridland & Pavese, 2020). Propositional knowledge, in turn, is structured from interiorised information of various kinds, specifically (a) about the objects associated with the activity; and (b) about the activity process itself (Pavese, 2022). Skills, in turn, are considered as a factor that ensures the possibility of instantiating knowledge in the process of activity through intellectual and motor movement actions brought to automaticity (Stanley & Williamson, 2001).

According to research from the perspective of philosophy (Johansson, 2015), psychology (e.g. Bishop, 2018; Dobson & Gaunt, 2015; Pezzulo & Castelfranchi, 2009), neuroscience (Laroche et al., 2022), musicology (Camlin, 2015; Seighman, 2015) and music pedagogy (e.g. Kokotsaki & Hallam, 2007; Sutherland & Cartwright, 2022) ensemble interaction at the level of polylogue (Lewiński & Aakhus, 2022) is enabled by the functioning of skills consisting of multiple interrelated elements. The role of the basis for the functioning of the whole construct is played by the ensemble members' striving to define and realise common artistic and interpretive goals in performance and to find a way of coordinating joint actions that will also allow them to take into account the individual needs and style of each of the participants (Davidson & King, 2004).

Thus, interpersonal interaction plays an important role in ensemble musicking. At the same time, traditional theories of social group interaction, with the corresponding distribution of roles, cannot be fully applied to analysing the ensemble community (King, 2006; McCaleb, 2014). The above mentioned is due to the fact that interaction in an ensemble, the purpose of which is musical performance, requires interpersonal interaction of a level that is rarely found in non-musical activities (McCaleb, 2014). Such specificity is due, according to J.M. McCaleb (2014), a number of factors. Let us consider them in more detail.

*Multimodality of musical information.* In the process of music-making, ensemble members exchange three types of information. The first is propositional knowledge: musical-theoretical; musical-historical; and procedural knowledge about the specifics of the process and direction of ensemble musicking. Such knowledge in combination provides the awareness that allows to read competently the musical text of the ensemble score, taking into account the peculiarities of performing not only one's own part, but also the parts of other participants in the context of achieving a common sound of a certain character and quality (Nolet, 2007). This implies, among other things, the ability to predict sound, which is very important for ensemble musicking. Such prediction is a complex process involving experience-based stra-

tegic planning, real-time performance self-monitoring, post-analysis, and, intuitively, based on empathy and experience of collaborative music-making, mental modelling of the process (Amos et al., 2013). Overall, the above propositional knowledge, including that based on one's own experience of ensemble performance and predictive analysis, provides the ability to interpret, which in ensemble musicking is a complex process as it requires the integration of coherence factors and individual understanding.

The second type is auditory information. The exchange of auditory information is traditionally associated with auditory control in music performance. However, in ensemble musicking this communicative channel plays a special role, as it provides a literal possibility of synchronous collaborative music-making (Keller, 2007). In the context of organising such music-making on the basis of polylogue, a special kind of auditory control is actualised – it is an increased attention, simultaneously projected on the sound of each instrument and differentiation of one's own contribution to the overall sound. Thus, the polylogue unfolds as a mental process of identifying individual responsibility for each of the aspects of sound – intonation, rhythm, timbre, phrasing (McCaleb, 2014). The functioning of the auditory communicative channel is the main factor motivating the reinterpretation to improve the overall sound.

The third type is visual information, the skill of lightning-fast reading and transmission of which largely determines the success of the entire performance. The active functioning of the visual communicative channel in polylogic ensemble interaction allows for a holistic awareness of oneself as part of the global holistic ensemble mechanism and ensures the transmissive nature of communication (McCaleb, 2014). The latter means both the ability to signal (e.g., to start playing, such as nodding, breathing) and to understand the signals of other ensemble members. Such signals play a particularly important role during the performance of key parts of a piece – e.g. transitions between structural parts, but also to coordinate the performance of phrase endings, tempo changes, dynamics, strokes, and so on (Seighman, 2015).

*Musical influence.* As emotions play a crucial role in musical activities (Juslin, 2013), particularly performance activities, the emotional content of music has a significant impact on performers. The degree of intensity of the final effect of such influence is heterogeneous and depends on the individual characteristics of each, i.e., each of the ensemble players demonstrates a different level of emotional response to the expressiveness of the music. It should be noted that such influence is, in fact, mutual influence, since the performer's emotional response also determines the peculiarities of the performance, in particular, the degree of its expressiveness. For this reason, balancing the emotional plan of the performance is

an important task, as inconsistency in this aspect can lead to an imbalance between the layers of the quasi-space of the ensemble sound (Harley, 1993; Taylor, 2017). In this context, we are talking about the sonic focus on one or another layer of the texture of ensemble sound, for the efforts of each performer create a coherent fabric of the musical work, where each of the strands plays an important role, being included in the near or far plane of sound. It is obvious that drowning out the intonation conceptually important for understanding the work by lines designed to fulfil the function of background will lead to an unacceptable sound result. At the same time, it is fundamentally important for each of the ensemble players to understand that background lines play an absolutely equivalent role to the melody, but their function is different – they create space for the unfolding of musical events.

Another factor of musical influence is style. The influence of the style affiliation of the performed work is to activate the relevant parameters of artistry as the ability to feel and embody the artistic image. On the basis of style identification, certain interpretive strategies are developed, which also presuppose that the performers will embody a certain aesthetics in the manner of interaction, since the performance of, say, a Webern piece requires a different paraverbal interaction (Mirea, 2020) between the performers than the performance of a Mozart quartet. The most effective strategy for setting up such an interaction is, in this case, to include all ensemble members in a kind of game where everyone lives the role of a representative of a certain era and interacts with others in an appropriate communicative way.

*Intersubject relations.* Relationships between ensemble members play a very important role – far more important than professional partnerships in any other activity (Dobson & Gaunt, 2015; Laroche et al., 2022). This is due to the particular influence of non-verbal and musical communication – responding to the slightest changes is very important. Musical performance is an art of expression and therefore communication plays a major role in it rather than an auxiliary one. When performing music, ensemble members express a whole range of emotions, among which emotions addressed to other members of the ensemble also have a certain place (Keller, 2014). For this reason, the polylogue that unfolds in musical performance is, to some extent, an extension of the polylogue that unfolds at the level of intersubjective interaction. In this regard, the skill of participating in verbal polylogic discourse at the stage of preparing a musical work (in the rehearsal process) directly affects the nature of artistic polylogue during performance.

Thus, ensemble musicking requires the formation of specific Artistic-polylogical skills, which cover several levels, in particular: (a) the level of propositional

knowledge (musical-theoretical, musical-historical, procedural-performance); (b) the level of communicative skills of information exchange (propositional; auditory, visual); (c) the level of reflexion, at which the analysis of artistic communication, realised in the interpretative process, takes place, and also, a mentally modelled polylogue unfolds, which makes it possible to predict interaction, as well as to jointly construct and correct performance strategies. The basis on which the above elements function is the intention to communicate with a high level of empathy towards the music, as well as towards other members of the ensemble.

**Purpose of article.** The purpose of the study was formulated on the basis of the recognition of the relevance of the task of forming in future Masters of Musical Art the ability to participate and organise communication in the process of ensemble musicking at several levels – between ensemble participants, at the level of artistic communication in joint interpretative discourse, as well as at the level of reflection and mental modelling of the joint interpretative-performing process. In view of the fact that the mentioned ability requires the formation of special artistic-polylogical knowledge-how, the aim of this article is defined in specifying the structural components of this construct.

Thus, the aim of this study is to define the structure of artistic-polylogical knowledge-how (APKH) of future Masters of Musical Art, functional in the context of ensuring their ability to participate and organise multi-level communication in the process of ensemble musicking.

**Research methods.** The study is based on the theoretical and methodological approach of *Actor-network theory* (ANT), which focuses on communication as a multilevel process involving multiple actors (Latour, 2007). As such actors, according to this approach, we should consider both people and various processes, objects and circumstances that are in interaction and mutual influence. Thus, ANT is based on the belief that there are constantly changing networks of relations in the world that connect all phenomena with each other. In this regard, any phenomenon – material or mental – is seen as resulting from the interaction of a multitude of actors of different levels, each of which fulfils its own role – equal to the others, but at the same time unique.

ANT methodology allows us to study both explicit sociological processes and latent constructs, such as knowledge-how, mastery, literacy, competence, etc. (Clarke, 2022; Fenwick, 2010; Mulcahy, 2011). According to ANT methodology, the study of such constructs should be based on the realisation that their formation and functioning is influenced by many factors, including: individual characteristics and abilities, educational programme, cultural field, environmental factors, etc. At the same time, such research

requires a clear understanding of the basic characteristics of the construct, in particular the components that make up its structure.

Thus, the ANT approach is applied to investigate the component structure of the APKH by theoretical modelling based on network analysis. The channels of mutual influence of various factors that determine the ability of future Master of Musical Art to conduct and organise multi-level polylogical communication in the process of ensemble musicking are considered as such networks. The reference point for modelling the structure of APKH on the basis of understanding the functioning of such networks was the factor of orientation of the polylogical process of exchange of multilevel information to achieve a certain desired result in ensemble performance and application of appropriate knowing-how for this purpose (Davidson & King, 2004).

**Results & discussion.** To determine the component structure of APKH, in accordance with the ANT methodology, theoretical modelling based on network analysis was applied, which involved studying the elements of this construct in their mutually influential relationships. As a result, it was determined that one of the key components of APKH is the *polycommunicative-motivational* one, which covers the desire of ensemble players to be part of the overall creative process, to make a significant, unique and, at the same time, equivalent contribution to achieve the common goal of creating a creative product – a performing interpretation of a musical artwork. This aspiration is based on an altruistic feeling, which implies a special psychological state of spiritualisation and a kind of ‘dissolution’ in the joint creative process (Davidson & King, 2004).

The main elements of the polycommunicative-motivational component are: (a) intention in the pursuit of a common performance and interpretive goal; (b) empathy in ensemble interaction to generate the desired musical performance as a joint creative product. The identification of these elements is due to the confirmation of the relationship between the manifestation of empathy in ensemble interaction and the success of the ensemble’s musical performance.

The mechanisms of empathy are complex, meaning that they function through the interaction of factors of both physical and psychological origin. In particular, as proven by neuroscientists, the physiological basis of empathy is the work of the so-called mirror neuron system (Sonnby-Borgström, 2002). The latter trigger specific brain activity in response to observing other people’s facial expressions, gestures, etc. This activity manifests itself as a desire to understand the emotions embodied in facial expressions and gestures and to experience the same feelings. In the practice of communication, the MNS is manifested in the ability to read non-verbal and paraverbal vocabulary in tens of milliseconds (Sonnby-Borgström, 2002).

The MNS mechanism is essential for understanding, and thus for the survival of social groups and entire communities. This mechanism is especially important for ensemble interaction, in particular, as noted by G. Seighman, this mechanism provides a “...relationship between physical synchronization and collaborative thinking” (Seighman, 2015, p. 10). In practice, this is manifested in empathy, which is based on the desire to read information and predict future actions through reflecting (living) the feelings of others. In particular, the ensemble members, interpreting each other’s actions, facial expressions, gestures, behaviour, etc. as “...physical precursors of sound production”, create a common “affective motion experience”, expanding the range of modal channels of communication in the ensemble (Seighman, 2015, p. 11).

At the psychological level, this process of poly-modal empathic dialogue is triggered by the intention to achieve a common performance and interpretive goal. The “common goal” in ensemble performance is an emergent phenomenon, because as a result of each ensemble member’s contribution, something unique is formed – a holistic sound that is much more than just the sum of the individual performances of all ensemble members (Seighman, 2015; Sutherland & Cartwright, 2022; Johansson, 2015). The common goal, as A. Sutherland and P. Cartwright note, mobilises ensemble members to contribute their performance, “...to share ideas and create a sense of community” (Sutherland & Cartwright, 2022, p. 3). This particular shared experience of unity has been classified as a sense of “group flow” that encourages each performer to be creative and improve their interpretation (Dennett, 2019; Sutherland & Cartwright, 2022).

The second component, *semiotic-epistemological*, encompasses knowledge of the signs through which polylogue unfolds – in intersubjective communication (between ensemble members) and in communication with musical artwork (Agawu, 2014). Accordingly, its basic elements are (a) knowledge of idiosyncratic, verbal, non-verbal and paraverbal signs of intersubjective communication in ensemble musicking; (b) knowledge of artistic and communicative connotations of signs of musical language.

The ability to correctly interpret the signs that ensemble members produce in the process of joint music-making is vital for achieving the common goal of generating the desired sound of a musical artwork. Against this background, the ensemble player’s ability to understand information about the intentions of other participants to apply this or that interpretative technique associated with changes in tempo, sound volume, strokes, etc. becomes important. Only the harmonisation of such actions can ensure the creation of a proper relationship in the sound of the parts and the overall harmony. Such harmonisation requires appropriate propositional knowledge based on the experience of playing music together.

Obeying the intentionality of achieving a common performance goal, ensemble members – both intentionally and latently – share information about their own performance intentions. This exchange of information is part of such a global phenomenon as the culture of ensemble performance, which also includes the culture of sharing conventional non-verbal markings – the beginning and end of performance, tempo changes, dynamic waves, the nature of sound production, etc. Thus, the epidemiological basis of APKH is, first of all, the knowledge about the information load of conventional designations accepted in the general ensemble-performing culture.

At the same time, it should be taken into account that such designations are idiosyncratic to a certain extent, because they are generated against the background of the interaction of a number of subjective factors. Among such factors are aesthetic preferences of an individual (Ragert et al., 2013), emotional reactions to the artistic expressiveness of music (McCaleb, 2014), and performing experience. The influence of the above factors is manifested by the choice of a specific performance-interpretation strategy, in particular agogic decisions, which, given the temporal nature of musical art, have an important expressive value. In addition to their expressive function, agogic decisions are significant for joint ensemble performance, which is organised in time, hence coherence, and sometimes synchrony, is the key to the success of the whole process. At the same time, the subjectivity of the factors that determine the choice of certain variations in the organisation of musical time is manifested at many levels, from tempo micro-shifts in the performance of phrases to the prominent *accelerando*, *ritardando*, *rubato*, other, which are used to emphasise climaxes, endings of periods, parts, etc. to mark more saliently the dramaturgy, structure and overall form of the musical artwork (Ragert et al., 2013).

Thus, the epistemological basis of APKH is closely related to the process of semiosis, which, at the level of intersubjective polylogue, requires an understanding of non-verbal cues informative about the ensemble members' performance intentions. However, there is another important level – the level of artistic communication, which in ensemble musicking becomes polycommunication. This is due to the fact that the interpretative process involves several performers, each/each of whom has his/her own vision of the performance based on performance training, experience, individual perception, and so on. Thus, the interpretive polylogue acquires the features of polynomiality, because each of its participants contributes to the process of signalling the signs of musical language, thus influencing the final result.

At the same time, it should be taken into account that interpretation is a complex intellectual activity that requires a versatile awareness, in particular,

music-theoretical, music-historical, art history, art history, as well as, cultural and philosophical knowledge. Interpretation in ensemble musicking is complicated by the obvious heterogeneity of the levels of such awareness, because for each of the participants this level is individual. In addition, since interpretation is to a large extent based on subjective perception, the choice of a common interpretive concept becomes a difficult task, especially in ensembles practising musicianship without a conductor. Consequently, signification, as the process of assigning meanings to musical language signs based on an understanding of multiple contexts and connotations, becomes very complex and can even cause interpersonal disputes. In this process, it becomes important to know-how to organise a polylogue for semiosis based on the actualisation of knowledge about interpretative and performing traditions, conditioned, in particular, by the work's connection with the aesthetics of artistic style, the specificity of individual composer's writing, intertextual links, cultural and historical contexts, etc.

The importance of the factor of subjective perception in communication (in particular, in artistic communication, which is inseparable from the interpretive process) necessitates the definition of the *descriptive-reflexive* component, the elements of which are: (a) self-reflection in the description of the content of artistic-communicative musical messages; (b) modelling of the interpretive-performance process through a predictive mental polylogue with the participants of the ensemble.

The basis for determining this component was the identification of the significance of the reflexive stage in the process of describing the artistic-communicative connotations of musical language signs (Agawu, 2014). Such significance is due to the essence of the semiosis process itself, which involves defining the interpreter through the differentiation of representational characteristics relative to the object and reinterpretation through the prism of the subjective dispositions of the interpreter. Thus, interpretation requires double reflection – at the stage of differentiation of significant characteristics and, further, for analysing one's own attitude to the signified object and, in the case of musical art, to the sign itself, since the aesthetic form itself is also an object of cognition in art (Goldman, 2005).

The peculiarity of the process of descriptive meanings in ensemble musicking, is its polylogical nature. In particular, it should be taken into account that each of the participants relies in interpretation on its own, subjectively determined reflexive process, which gives birth to a multitude of understandings and, accordingly, a multitude of interpretations. Harmonising interpretive decisions by means of verbal discourse is one way of solving the problem. However, the practice of ensemble musicking proves that the professional success of the ensemble depends on the ensemble

members' ability to anticipate each other's interpretative choices and to make possible self-corrections on this basis.

The ability to anticipate is seen as one that largely provides "an understanding of the actions of others and the possibility of imitating them, orientated towards a common goal" (Pezzulo & Castelfranchi, 2009, p. 439). Anticipation is provided by the functioning of a mechanism necessary for human survival, specifically a system of representations that allow for "anticipation of space, time, comparability, causality, finality, and the form of subjective probability or propensity" (Riegler, 2001). In ensemble musicking, anticipation is of particular importance as it provides the ability to predict joint actions, based on analyses of musical and situational contexts (Amos et al., 2013).

Thus, APKH, which is based on the motivation to achieve a common goal and specific knowledge about music and the ensemble musicking process, also encompasses the skills of reflective analysis aimed at modelling future joint performance actions. All this complex of knowledge and skills is instantiated directly in the process of joint ensemble musicking, which, in turn, covers the stages of strategic artistic-interpretative planning in the discussion and, directly, in the joint performance of musical artwork. This process is ensured by elements of the *discursive-participative* component of APKH, namely: (a) knowledge sharing and polycommunicative interaction in achieving a common performance goal; (b) competent participation in the mutually organising process of artistic-creative collaboration to realise a common interpretive concept.

Knowledge sharing is important given the emergent nature of ensemble interaction, for, in order to achieve a common goal, ensemble members must undertake certain transformations of their own performance, in order for everyone's individual contribution to be incorporated into the overall performance outcome (Bishop, 2018; Keller et al., 2007). Thus, ensemble members should discuss their interpretive vision, performance intentions, and share the knowledge on the basis of which they prioritise the choice of certain means of musical expression. This process should unfold as a polylogic discourse aimed at finding common meanings (Amos et al., 2013). Given the above, it is appropriate to master discourse skills on the basis of partisanship (Camlin, 2015).

The success of the considered process of ensemble musicking as a performing interaction to achieve a common goal is determined by the presence of a sense of "group flow" among ensemble players (Bishop, 2018; Keller et al., 2007). At the same time, at present, this phenomenon is not seen as a mystified phenomenon of inspiration, but a skill that is quite teachable (Bishop, 2018). In particular, as L. Bishop, a state of "group flow" is identified in conditions where

ensemble members, "fully focused on the task of performance, feel an intense connection to the music that flows as if effortlessly" (Bishop, 2018, p. 10). The aforementioned feeling arises from the achievement of an optimal match and coherence between the interpretive demands and the performance, which is boiled down by the efforts of all performers. Thus, the skills of alignment in the polylogic-discursive process of interpretation-performance strategies and cooperation to create a collaborative performance as an artistic polylogue become important in the APKH construct (Bishop, 2018).

Thus APKH, as a construct, encompasses polycommunicative-motivational, semiotic-epistemological, descriptive-reflexive and discursive-*participative* components. All structural components of APKH are interconnected through a common goal – the creation of an interpretive concept of a musical artwork and its successful performance embodiment, which is a kind of creative product of joint performance-interpretative work of an ensemble group.

**Conclusions.** This study focuses on artistic-polylogical knowledge-how (APKH), which is seen as a construct that provides the future Master of Musical Art with the ability to participate in and organise multi-level polylogical communication in the process of ensemble musicking. In particular, it implies communication that unfolds at the levels of: (a) intersubjective interaction, which provides the exchange of interpretative and creative ideas and other information; (b) artistic communication in the process of joint interaction with musical artwork. All communicative links and processes formed and unfolding at the above levels interact with each other, which determines the main property of such communication and characterises it as polylogical. In this process, intersubjective communication provides an opportunity for joint analysis and the development of a unified interpretative concept that takes into account the creative vision and perception of each ensemble member. This kind of polylogical communication in ensemble musicking promotes joint creativity, the purpose of which is to create a certain common product – a performing interpretation of a musical artwork. The ability to participate in such communication in the process of ensemble musicking to ensure "competent rehearsal", as well as to organise an emergent communication process at the level of polylogue, is provided by special knowledge-how, considered in the study as artistic-polylogical.

To determine the structure of APKH of future Master of Musical Art the theoretical and methodological approach of ANT was applied, the specificity of which consists in focusing on communication as a multilevel process, due to which all phenomena are in interaction and mutual influence. Within the framework of this methodology, any phenomenon, including latent constructs, such as skills, is studied as being formed

and functioning as a result of interaction between a multitude of actors of different levels, each of which fulfils its own role – equal in comparison with others, but, at the same time, unique.

The application of theoretical modelling method on the basis of ANT-approach consisted in the study of mutual influence of various factors that condition the ability of future Master of Musical Art to conduct and organise multilevel polylogical communication in the process of ensemble musicking. As a result of considering such factors as actors, and the channels of their mutual influence, respectively, as networks, four main interrelated components were identified in the APKH structure, namely: (a) the polycommunicative-motivational component, which is responsible for the ensemble members' desire to be part of the overall creative process, to make a meaningful, unique and, at the same time, equally important contribution to the achievement of the common goal of creating a creative product – musical-performance interpretation; (b) semiotic-epistemological component, knowledge of signs that are used in intersubjective and artistic polylogues in the process of ensemble work on interpretation; (c) descriptive-reflexive component, which is responsible for the processes of deciphering and understanding, on the basis of reflection, various information important for ensemble work, in particular, artistic, non-verbal information about the ensemble members performance intentions, etc., for mental predictive modelling, on the basis of comprehension of such information, of the future interpretive concept; (d) discursive-participative component, providing the processes of instantiating knowledge and reflexive skills directly in the ensemble's polylogic polycommunication, which ensures strategic artistic-interpretative planning and competent participation in the mutually organising process of artistic-creative collaboration for the realisation of a common interpretative concept.

The prospect of further research is to develop a criterion apparatus for assessing the levels of APKH future Master of Musical Art formation, and to empirically investigate this construct in accordance with the ANT methodology.

#### List of Abbreviations:

APKH – the artistic-polylogical knowledge-how.

ANT – Actor-network theory.

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## Художньо-полілогічні уміння в ансамблевому музикуванні: структурна характеристика

Ян Ханьжи

здобувач третього (освітньо-наукового) рівня вищої освіти

ДЗ «Південноукраїнський національний педагогічний університет імені К. Д. Ушинського»

ORCID: 0000-0002-4739-0187

*Мета дослідження – у визначенні структури художньо-полілогічних умінь майбутніх магістрів музичного мистецтва як конструкту, що забезпечує здатність вести й організувати багаторівневу полілогічну комунікацію в процесі ансамблевого музикування. Провідними визначаються рівні: (а) міжсуб'єктної взаємодії, що забезпечує обмін різноманітною – вербальною і невербальною – інформацією, зокрема, інтерпретаційно-творчими ідеями; (б) художньої комунікації у процесі спільної взаємодії із музичним твором. Взаємозв'язок комунікаційних процесів цих рівнів розглядається як полілог, у якому міжсуб'єктна комунікація забезпечує можливість спільного аналізу і вироблення єдиної інтерпретаційної концепції, яка враховує творче бачення і сприйняття кожного учасника ансамблю. Результатом полілогічної комунікації в ансамблевому музикуванні є створення спільного творчого продукту – виконавської інтерпретації музичного твору.*

*Застосування методології акторно-мережевої теорії (Actor-network theory (ANT)) дало змогу дослідити художньо-полілогічні уміння майбутніх магістрів музичного мистецтва як латентний конструкт, на формування та функціонування якого впливає низка пов'язаних між собою чинників, що зумовлюють спроможність згаданих здобувачів вести й організувати багаторівневу полілогічну комунікацію в процесі ансамблевого музикування. У результаті розгляду таких чинників як акторів, а каналів їхнього взаємовпливу, відповідно, як мереж у структурі досліджуваного конструкту було виявлено чотири основні взаємопов'язані компоненти, а саме: полікомунікативно-мотиваційний, семіотико-епістемологічний, дискретивно-рефлексійний та дискурсивно-партисипативний. Перспектива подальших досліджень полягає у розробці критеріального апарату оцінювання рівнів сформованості художньо-полілогічних умінь у майбутніх магістрів музичного мистецтва та експериментальному дослідженні такого конструкту на основі методології ANT.*

**Ключові слова:** художній полілог, ансамблеве музикування, полікомунікація, уміння, сотворчість, спільна інтерпретація, компонентна структура.