




Conceptual Article

Ricoeur's triple mimesis and the zone of proximal development in the learning processes of interprofessional student teams

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Received 14 July 2020; Revised 13 September August 2020; Accepted 11 October 2020

It has been reported that the temporal aspects of the *zone of proximal development* (ZPD) are underanalyzed. The aim of this article is to use the literary science concept of Paul Ricoeur's triple mimesis to elucidate unanalyzed aspects of the temporal living and learning processes of interprofessional teams in the ZPD. Both *mimesis*₂ and ZPD are temporal constructs embedded in the present of time, and for both *mimesis*₂ and ZPD, activity is created and carried by the actors. While the internal processes in ZPD have remained unanalyzed to date, Ricoeur provides emplotment with its procedural mechanisms for the activity in *mimesis*₂. Being narrating beings, humans have an affinity for narrative emplotments that then structure the activities in the ZPD. Because *mimesis*₂ is based on narrative time, the basic requirement for employing *mimesis*₂ in ZPD is that the ZPD has a narrative base, which is probable when health students are the actors and the case they are working on is a patient.

Keywords: Triple mimesis, zone of proximal development, interprofessional student teams

I. Introduction

Interprofessional (IP) care is carried out at the workplace, and health education programs all over the world are engaging in interprofessional education. Research on interprofessional learning has increased dramatically in recent years, and the theoretical aspects are starting to be elaborated (O'Leary & Boland, 2020). We have recently shown how expansive learning theory may be used as an analytical tool for understanding various aspects of interprofessional learning in the workplace (Baerheim & Raaheim, 2019; Engeström, 2015). Expansive learning theory is based on the third generation of the activity theory, which was elaborated by Lev Vygotsky and brought further by Engeström and coworkers (Engeström, 2015; Vygotsky, 1980). The *zone of proximal development* (ZPD) is a temporal key area for learning both in expansive learning theory and the third generation of activity theory. O'Leary and Boland (2020) found in their scoping review that activity theory was the most used theory in interprofessional research, though none of the scoped articles used the zone of proximate development for analysis.

Through the ZPD, as a key learning area in time, and learners interacting relations, the IP health student team may exercise free and creative action that results in learning *what is not yet there* (Engeström, 2016). Here, Engeström points to the innovative power of interprofessional teamwork, which is notable both in health care workplaces and in other fields (Laing & Bacevice, 2013). Engeström transformed Vygotsky's view that in a ZPD, learners learn from their superiors by refining it to deal with learning from collective interactions among peers. In IP health student teams, every member is more capable in their own discipline than other team members who have other discipline competences. Thereby, every team member may participate in pushing their team learning toward the ZPD through their relational actions, thereby creating *the object*. Engeström states that work in the ZPD will result in the creation of an *object*; such as an artifact, a concept, a narrative, or just a new idea. Typically, a ZPD can go on for days and weeks at the workplace, but micro ZPDs lasting a few hours have also been described (Engeström & Sannino, 2010). In the following sections, when we refer to ZPD, we mean micro ZPDs.

The ZPD is defined by Engeström as "*the distance between the present everyday actions of the individuals and the historically new form of social activity that can be collectively generated as a solution to the double bind potentially embedded in the everyday actions*" (Engeström, 2015; Engeström, Rantavuori, & Kerosuo, 2013). Although the ZPD can be pictured as created by contradictions and double binds when worked on, especially when worked

on by teams, the temporal construction of the whole remains an unanalyzed aspect of the living process (Engeström, 2015, pp 134–139).

We wondered whether other theories might elucidate the temporal construction of ZPDs. McCafferty (2008) stated that mimesis (imitation or representation) is central to communication, human-created events, and culture. Robbins (2001) pointed to the mimetic capacity of normal children and coupled their early learning activity to the ZPD described by Vygotsky. Mimesis is also a central literary science concept. Consequently, we asked ourselves if it would be possible to analyze the interprofessional team's verbal interactions utilizing literary science theories, and eventually, we chose to use Paul Ricoeur's narrative-based triple mimesis and time as an analytical tool.

The aim of this study was to use the literature science concepts of triple mimesis to elucidate the unanalyzed aspects of the temporal living and learning processes of interprofessional teams in the ZPD.

2. Empirical Reference and Methods

2.1. Empirical Reference

In order to facilitate the following elucidation, we felt the need to anchor our discussions in a specific learning situation and chose to use the learning activities at the Centre of Interprofessional Workplace Learning in Bergen, Norway, as a reference activity for IP education (<https://www.uib.no/tveps>). In those activities, students are invited to establish interprofessional teams of five. A typical team then consists of five different professional students, all in their final study year. They spend one day in a nursing home talking to two patients. Based on all available information about the patients, they write a care plan for them. The care plan is discussed with the staff responsible for the patients. In this way, everybody learns from everyone else (Bondevik, Holst, Haugland, Baerheim, & Raaheim, 2015). In our experience, both the student discussions and the care plan have a narrative structure.

2.2. Method

With regard to an IP student team's learning, we will theoretically elucidate temporal aspects of micro cycles of the ZPD of expansive learning theory using Paul Ricoeur's literary work on narrative-based triple mimesis and time as our analytic tool.

3. Human Behavior and Narratives

Humans are narrating beings, building up our nations and our lives through selective narratives. Kathryn Montgomery Hunter (1991) convincingly elucidates how medical work basically has a narrative structure (Montgomery Hunter, 1991; Montgomery, 2006). The same is most probably true for other health professions as well. A typical daily health service narrative start is, "There was this guy . . ." leading into a story of an illness or need for care. Montgomery Hunter (1991) says that in the illness story, the diagnosis is the plot.

The plot is central in narrative-based literature, such as, for example, a crime novel. Such a narrative has one or more agents (e.g., the detective) and it has a plot (whodunit, how, and why). The emplotment is carried out by both author and reader to create an understanding of the full narrative. Likewise, in the ZPD, the IP student team carries out the emplotment through their learning activities.

Literature imitates and represents the world, but it also adds something extra—the fiction. An author constructs the plot while writing the novel, and the reader reconstructs the plot while reading. The plot exists temporally when a human mentally constructs the events in time. What we health professionals put together from a patient's illness story is a verbal construction imitating and representing the patient. Montgomery Hunter (1991) postulated that this medical practice verbal activity has a narrative structure and further indicated that a health student IP team will usually become narrative, verbally assembling various, and often conflicting, events and signs into an illness story or care plan. This assembling is an emplotment, and events will be redefined by the plot, thereby fitting with the diagnosis or the concrete tasks in the care plan. When coworking narratively, the IP team may be mentally caught up in constructing the emplotment as they sense and are inspired by the development of a new, more coherent meaning in their work. As a narrative holds the potential of budding and ramification, the IP team's interchange may result in innovative new emplotments.

The case that the IP student team is working with is the basic unit for health services: the patient. Patients typically transform their discrete illness experiences into an illness story. Then, the patient's narrative is transformed by each health student into a narrative embedded in their different professions' theories, conveyed by their feelings, thoughts, and knowledge (Montgomery Hunter 1991). These two versions of the patient's illness story are fundamentally different. While the former has a help-seeking plot, the profession-based narratives are powerful, guiding the allocation of the health service's resources.

As the team works, the students reconstruct their individual illness stories of the patient into a conceptual whole, which becomes the team's version of the patient's narrative. First, this combined narrative may be innovative and provide recommendations for the patient's care plan that previously had not existed. Second, the patient's narrative will be emplotted three times, with potentially three different plots. The first is the plot of the patient's need for help, the second plot is (in medicine at least) the diagnosis, and the third plot is not yet there until the student team's care plan for the patient is ready.

4. Plot and Emplotment

The term "plot" may be elusive and resist a purely logical definition. A plot is the internal organization of a narrative that makes events interrelated and meaningful in the narrative. As a narrative is a dynamic construct in time, the plot also exists in time as the internal construct of the narrative. For that reason, emplotment is the central constructing force in a narrative, the making of the plot. Citing Georg Lukács, Montgomery Hunter (1991, p 65) states that "the plot is the mediating force in 'the dialectical movement from concrete reality to abstract representation and back to conscious participation in reality'."

The plot mediates the events in the temporal world in at least three ways. It provides a connecting context for discrete events and the narrative as a whole, and the events are defined by their contribution to the narrative (Ricoeur, 1984; p. 64–47). An example from medicine: If the plot is the diagnosis of appendicitis, then the patient's stomach pain and fever are redefined and reconstructed to belong to the theory of appendicitis, which in medical textbooks usually has a narrative structure.

Second, the plot also brings together heterogeneous factors as agents, aims, means, events, and signs. In appendicitis, such seemingly unrelated symptoms as pain location and fever are put together in the plot. Third, the plot belongs to a temporality with certain characteristics. This makes it possible to have a comprehensive synthesis of heterogeneous factors. We may picture this as a reciprocal activity in the IP student team. They bring their heterogeneous professional inputs together in a synthesis, and if they act narratively, as is typical, this synthesis is the plot that organizes the inputs in accordance with the narrative. In turn, that may stimulate an inspiring new direction for their work.

5. Mimesis and Emplotment

Paul Ricoeur (1913–2005) was a French philosopher whose main works on the interface between society and text involved the speaker (writer), the listener (reader), and the outcome of these activities in the time and space of the world we inhabit (Pellauer & Dauenhauer, 2016). Among his main works was the trilogy *Time and Narrative* I–III, where he elaborates our narrative identity, evolving in a threefold mimesis in time (Ricoeur, 1984). Based on *Poetics* by Aristotle, he differentiates between three forms of mimesis. Mimesis may be defined as imitation or representation, and mimetic activity organizes events by emplotment (Ricoeur, 1984).

Ricoeur works out his literature theories by analyzing written narratives (Ricoeur, 1984), but he also addresses history with his theory of *triple mimesis*. The historian Hayden White (1999) takes this double address further in a discussion about which narratives may not be told at a particular time, giving the holocaust as an example, and using the triple mimesis theory as an analytical tool. Thereby, both Ricoeur and White have used the mimesis theory for elucidating historical events.

However, the dynamics of the mimesis theory make it particularly well-suited for the analysis of real-time events. This requires the possibility of an equal transfer from the written novel to the living dialogues of the IP team's interpersonal and intrapersonal verbal and nonverbal exchanges. The written narrative is made living through the analysis by Ricoeur, while our research on the interdiscursive IP learning is made more rigorous through our analysis of the learners' interprofessional living exchange. This is the pivot point of this article; that the resulting theoretical interface between life and novel justifies the use of literary concepts to analyze learning processes in IP teams, just as White used the same theory to discuss historical events. In our

experience, the verbal exchange in such teams quite often has a narrative structure, and Montgomery (2006) states the same for health service workers. From this basis, we go further in our analysis, presenting the threefold *mimesis*.

*Mimesis*₁ encompasses the sociohistorical background for the nursing home with staff and patients, as well as the IP student team, and includes each participant's life story.

*Mimesis*₂ is the creation of the present moment in time by structuring activity, configured by emplotment. The resulting plot gives the evolving narrative a direction and content in time.

*Mimesis*₃ encompasses the reception of the narrative in the future as a reconfiguration of the involved actors, the reader of a literary work, or the actors involved through interprofessional learning at the workplace.

Mimesis is mentioned by Aristotle as a creative action, a meaning that is preserved by Ricoeur within literary language. Bridging the gap between literature analysis and IP learning, we may expand the threefold mimesis as proposed by Ricoeur (1984). *Mimesis*₁ is the sociohistorical background of each student and collectively for the team in the workplace, including their professional and interprofessional competences. So far, our description is still fully within activity theory and expansive learning theory (see Figure 1).

Ricoeur describes *mimesis*₂ as the mimesis of creation, a dynamic process in the present time that is configured by emplotment and is the pivot point between *mimesis*₁ and *mimesis*₃. Thus, it is tempting to claim that *mimesis*₂ becomes the ZPD. Emplotment is the activity that forms the plot of a narrative. In real life, emplotment may be the activity of work processes where human minds collaborate as they are putting together discrete knowledge elements into a more complete whole.

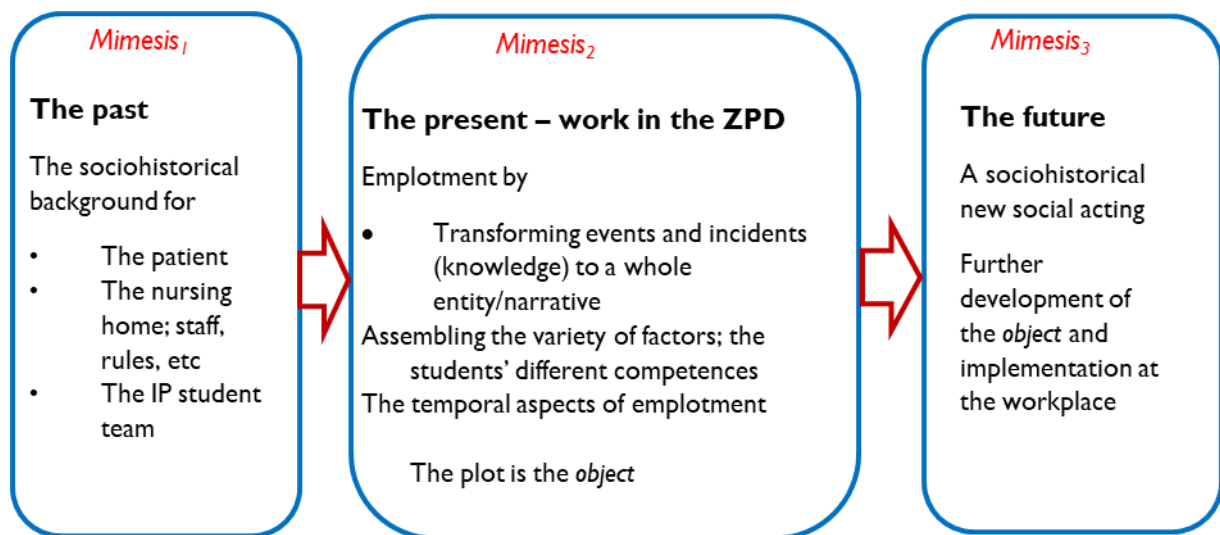


Figure 1. The whole figure represents temporal aspects of an activity system with an orientation in time in accordance with the triple mimesis. The concrete descriptions refer to an interprofessional (IP) student team at the workplace. ZPD = zone of proximal development.

Let us develop this line of thought a bit further. *Mimesis*₂ is situated as the intermediate between the past and the future because it has a mediating function between the two areas in time in at least three ways, according to Ricoeur's (1984, p. 64–71) literature theory (Figure 1). First, it is the mediating force that transforms events or incidents into a complete narrative. An IP student team at the workplace likewise starts with bits and pieces of information about patients. Fitting this information into the patient's care history is narrative work, making the discrete events into a coherent narrative that is the emerging new patient history. In this context, emplotment can be defined as an operation that constructs a configuration of the patient's story or a care plan for a patient from independent successions of events/signs.

Second, the emplotment of *mimesis*₂ brings together widely heterogeneous elements of nearly any kind. Oppositions are combined, and contradictions and double binds are solved by integrating them into something new (*the object*) (Engeström, 2018). In any interprofessional teams, each member of the team represents their specific discipline, which provides the team with widely heterogeneous competences in the interaction. This

way, the actions of the IP team bring the knowledge handling and compilation further due to their various competences working together. By work in the ZPD, a colloquial task may be brought beyond uncertainty and conflicting views and thereby be completed as a new construct.

Third, Ricoeur (1984) says that emplotment has a central temporal aspect by which the synthesis of the heterogeneous is made possible. Also, the ZPD exists in time and through the actions of the IP team's relational interchange, and this temporality makes it possible for the heterogeneous factors to be reworked into something new, the *object*, which, to some extent, may redefine the future.

By regarding the ZPD as narrative-based, the plot becomes the organized structure of the ZPD, transforming and constructing the events into a dynamic whole, which is the plot. We will argue that when an IP team of health students produces a care plan through collective work in the ZPD, the plot is the recommendations in the care plan, which is also the *object*. Consequently, the object will be the plot of the ZPD through the IP team's emplotments and narrative actions (Figure 1).

Regarding the work in the ZPD as an emplotment, this includes the transformation of events or incidents to new significance in the whole in accordance with the plot. The competences and personalities of the students on the team are also aggregated in the plot. These processes get an inner drive through emplotment, fueled by the students as they sense that new meanings are occurring.

Engeström (2018, pp. 13–20) notes that the cycle of expansive transformation may be regarded as a collective journey in the ZPD. Further, Ilyenkov (1977) postulates that “working with contradictions is the principle of the system's self-movement, and . . . the form in which the development is cast” (Ilyenkov, 1977, p. 130; Engeström 2018). Several researchers, including Ricoeur, Ilyenkov, Vygotsky, and Engeström, converge on the self-moving actions in a historically situated presence, the ZPD, or *mimesis*₂ (Figure 1). However, Ricoeur is the one who presented a blueprint of these dynamics, adding layers of meaning.

Our explorations of these theoretical concepts will hopefully provide the reader with further understanding of IP team learning processes. Given that the verbal exchange among the students is basically narrative (there was once this guy/this complex case), their task must be meaningful for themselves and for a third party. They may then be inspired to assemble and transform available data into a new narrative entity. If the students are sufficiently different, they may dynamically bring together their attitudes, values, and competences to construct or rework their task/case narrative, or the object, within the available time. One direct suggestion is for course leaders, and especially IP course leaders, to include in their curricula as many stimuli for mini-cycles of ZPD as possible in order to maximize the students' learning activities.

6. Concluding Remarks

The aim of this article was to utilize the literary science concept of the triple *mimesis* to elucidate unanalyzed aspects of the temporal living and learning processes of interprofessional teams in the ZPD.

We saw that both *mimesis*₂ and ZPD are temporal constructs embedded in the present time, and for both *mimesis*₂ and ZPD, activity is created and carried by the actors. While the internal processes in ZPD have to date remained unanalyzed, Ricoeur provides emplotment and procedural mechanisms for the activity in *mimesis*₂. As we have addressed above, the basic requirement for comparing *mimesis*₂ and ZPD is that the ZPD has a narrative base, which will play out when health students are the actors and the case on which they are working is the patient.

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