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Artículos de investigación científica y tecnológica

A REFLECTION ON CHILDHOOD EDUCATORS' TRAINING WITH A PROSPECTIVE VIEW

Reflexión sobre la formación del educador de infancia con
mirada prospectiva

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Abstract: The article herein is a reflection with a prospective view about the elements of the relationship between early childhood educators' training and current professional demands. Thus, a literature review conducted in different databases such as: Redalyc, ProQuest, Google Scholar, in addition to research, magazine articles, book chapters and government documents helped track information on topics regarding education for the 21st century, early childhood education policies, inclusive education, educational management, training ethical culture, prospective and education. After the process of consulting and analyzing the literature, it is concluded that there is a need to promote training spaces in which public policies in childhood, inclusion and education management converge, in order to assertively respond (from the pedagogical scope) to the training demands of educators who build new worlds anticipating future needs. That is why the training process of early childhood teachers must encourage thinking, feeling and duties of professionals to impact their contexts, becoming project leaders and change agents.

Education; professional performance; teacher training; globalization; research and prospective.

Keywords: Education, professional performance, teacher training, globalization, research and prospective.

Resumen: El presente artículo plantea una reflexión, con una mirada prospectiva, acerca de los elementos que marcan la relación entre la formación del educador de primera infancia y las demandas profesionales de la actualidad. De tal manera, a la luz de una revisión de la literatura en diferentes bases de datos tales como: Redalyc, ProQuest, Google Académico, además de investigaciones, artículos de revista, capítulos de libros y documentos gubernamentales, se planteó el rastreo de información alrededor de los temas de Educación para el siglo XXI, Políticas Educativas en Primera Infancia, Educación Inclusiva, Gestión Educativa, Cultura Ética Formadora, Prospectiva y Educación. Luego del proceso de consulta y análisis de la literatura, se concluye que hay una necesidad de promover espacios de formación en los que converjan las políticas públicas en infancia, la inclusión y la gestión educativa, a fin de responder asertivamente, desde el ámbito pedagógico, a las demandas de formación de educadores que desde su

gestión construyan nuevos mundos, anticipándose a las necesidades futuras. Es por ello que, el proceso formativo de los maestros de primera infancia, debe promover el pensar, sentir y quehacer de un profesional para impactar los contextos en que se desempeña, haciendo conciencia de los de su contexto y convirtiéndose en líder de proyectos y agente de cambio

Palabras clave: Educación, desempeño profesional, formación docente, globalización, investigación y prospectiva.

INTRODUCTION

This exercise of documentary nature is a literature review about childhood educators from a prospective view. It is a fundamental exercise since there is a current need to understand the requirements of childhood educators in the globalized world and to validate their professional condition. Consequently, the task of educators goes beyond support and becomes an act of construction from leadership and context transformation, making it essential for societal development.

In relation to the aforementioned, ASCOFADE (2013) asserts that professional educational practices of childhood pedagogy graduates from five education departments in Bogota are characterized by low levels of academic development and knowledge that mostly focuses on supporting the child (p.282). Therefore, it is necessary to rework the way in which childhood educators are being trained in terms of proposing ideas to strengthen students' academic knowledge along with an active and transformative teaching practice.

Likewise, the research "*Profile and Role of the Childhood Educator, a Necessary Discussion*" by Universidad El Bosque and Universidad San Buenaventura (2017), refers to the importance of asserting the role of teachers as professional with social recognition with delimited knowledge in the different contexts they perform their duties. This implies rethinking the educational offer in higher education, in connection with today's demands concerning early childhood training, and just as contextual needs have changed, so must the ways of conceiving and conducting education.

In that framework, this research becomes relevant to the extent that it enables a reflection on childhood educators' training in terms of professional demands taking place in an ever-changing globalized society. These reflections will provide direction to early childhood teachers' training and respond to current and future demands.

Methodologically, this exercise was divided in two phases, as proposed by Caro et al. (2005) who suggest a first moment to undertake an overall review of the topic of interest and a second to "plan the review, develop the review and publish the results of the review" (Caro, 2005, cited by Calle, 2016), which is developed in a rigorous and comprehensive exercise in a period of time.

METHOD

Literature Review

1. Education of the 21st Century

The 21st century began as a society of knowledge that called for novel and reinforced competences and skills, such as learning how to learn and others mentioned by Delors (cited in Al Mufti, 1996): learning to know amidst permanent changes; learning to do, a topic that has been translated as competences in education; and learning to be, which encompasses ethics and autonomy; among others. Gomez Buendia (1998) foresaw education as the foundation of ages and understood it (beyond the school) as a function of all social institutions and as a personal obligation to develop skills that prepare someone to face affronts.

Education has traversed transference of information, production of knowledge and development of competences and skills required by the 21st century, all of which have enabled students to be successful in life's spheres in the short and long term (Concepts, 2016).

A review of childhood training programs would result in endless profiles and characteristics of teachers in training and graduates. However, that is not the focus of this work, as it is the perspective of turning teachers' aspirations into reality concerning training of an ethical teacher who is inclusive and who can think in the citizen of the 21st century. This raises questions about the organizational culture of childhood teacher training programs.

A first point identified as a guiding framework focuses on the impact of quality early childhood education on countries' social and economic development. Young (2007) admits that programs that combine nutrition and stimulation strengthen cognitive and psychomotor functions, levels of activity and attention capacity, among others. Consequently, Arnold (2004) and Young (2007) agree that this quality education has positive effects on primary education (and further) outcomes, particularly on affective, social and linguistic development, among others.

As a result of this impact, the cost-benefit relationship has been studied in times when school desertion and repetition rates and the need for official recovery programs decrease. On the other side, Heckman, a laureate of the Nobel Prize in economic sciences, proved that early childhood education is the most efficient measure to improve public expense and public policies (cited by Izquierdo, Pessino and Vuletin, Banco Interamericano, 2018).

This all took place while unprecedented technological advancements were introduced, these contributed to a connected global society with widespread awareness of international problems, which also helps magnify participation spaces and generates a permanent source of innovation. Despite the fact that technological developments satisfy many personal needs and create new challenges and opportunities

regarding competitiveness, it has also widened social gaps, inequality, social and political crises, among others.

On the other hand, the role of technology has been discredited in many aspects. First, many teachers have limited it to a repetition of traditional education, while parents and students have given it recreational value or use it for social information with total disregard for its intermediation in knowledge construction. Another consideration is the fact that children and teenagers are the first to use and master emerging technologies, shifting the tradition of adults being responsible for transmitting knowledge. They also have “free creativity, integrative participation, unstructured vision, chaotic thinking, etc.” (Sanchez, 2008), necessary to respond to the innovation systems required by the times, often against the values established by experienced teachers.

In education, there are few studies on the impact of the usage of apps, tablets, makers workshops, games and several technological and robotics equipment in the present and future of this generation. But the fact is that the presence of technology in the learning process is irreversible and tends to intensify in upcoming years.

It must be said that in the case of preschool education, the topic must be carefully tackled with prevention due to possible inappropriate or exaggerated uses in children. Hence, the implementation of technological tools must have specific objectives, limited times and permanent surveillance. In this regard, successful experiences such as those by Gimnasio Campestre de Bogota (Palabra Maestra, 2016), framed in fluidity and connectivity competences of its curriculum, uses technology with the purpose of identifying its impact on creativity of children in nursery and kindergarten. Resources applied for children to make an incursion in scientific fields are: the Science Journal, Google’s science journal; Space Place, a place for children to learn about space through play alongside NASA; NOVA, UNESCO’s scientific journal for children; EAFIT’s Children’s University (BBC, 2016).

Another perspective is that proposed by Reina (2016) with an initiation of teachers in programming languages and educational robotics, given the current need to make them knowledgeable in new digital languages, aimed at understanding the technological setting in which they live and express via an electronic device. Aside from interacting with new technologies, new ones need to be created. “Shortly, there will be a new type of illiteracy and a new type of social exclusion between individuals that are familiar with these codes and those who are not” (p.24). this knowledge is applied in the creation of games, animations, interactive scenes that do not require being a professional in the field.

It is understandable that some gaps persist in terms of integration of ICT in educational media, but very soon, these will close and there will be no excuses left to avoid the implementation of changes in pedagogical models. According to the Secretary of Education of Bogota and Universidad Javeriana (2015) if future teachers have not been prepared for it yet, it is already too late.

It is also wise not to standardize the use of new technologies, a specific response needs to exist for detected needs, each sector is taken into account based on uses, customs and beliefs. Therefore, this requires each educator to have the possibility to develop and/or strengthen their ICT competences to manage classrooms with applications that clearly evince pedagogical usefulness from the point of view of reality and interest. Successfully integrating technological tools depends on context, activities, moment and content, as well as on personal interactions occurring at the moment of implementation (Rojas, 2016).

On the other hand, the role of the childhood educator entails thinking about a future that promotes ethical and cultural experiences, and that allows appropriation of available knowledge in a way that is critical and reflexive. As affirmed by Maturana (1990), the teacher's task is to guarantee training "children that grow up to become people that accept and respect themselves, while accepting and respecting others in coexistence with others that accept them by respecting and accepting themselves" (p.31). In this regard, childhood educators must think about an education that is based on cooperation and peace, in problem-solving skills and teamwork.

To conclude, education of the 21st century requires clear preparation in handling and applying new technologies in the educational scope; although some of the teachers' population still lags behind, the possibility of updates to respond to current students' needs is more accessible nowadays. Finally, technology cannot overshadow the need to develop interpersonal processes and soft skills such as teamwork and emotional intelligence.

2. Early Childhood Educational Policies

When it comes to defining the "tasks" pertaining childcare -its hows and whys- a country's effort is unmistakable. Care, nutrition and education in different spheres have become a priority in early childhood's comprehensive care at national and international levels. In that regard, the Ministry of Education (2014), on behalf of the Intersectoral Commission for Early Childhood's Comprehensive Care, produced all of the technical references of education for children aged 0 to 5 in the country, which intend to advance the quality of the educational setting to lead, accompany and make sense of practices taking place in childhood education.

The reference "qualification of human talent working with early childhood" (*Document No. 19*, MEN, 2014) was published to ensure quality in children's comprehensive care, providing elements to consolidate qualification processes among different actors, with the aim of consolidating the comprehensive development of girls and boys.

Along the same lines, in March 2018, UNESCO recommended an agenda for early childhood care and quality education, setting goals by 2030; this agenda provides an improved educational system for children and for early childhood educators with the purpose of building equitable societies that embrace excluded and underprivileged children.

The *2016-2026 Decennial Education Plan: the Road to Quality and Equity*, fosters quality education to improve people's life conditions in the future, encourages innovation and technological development, boosts the country's productivity, economic and social development and builds a society on the pillars of justice, equity, respect and acknowledgement of differences, to generate an inclusive and participative nature, and thus increase the opportunities for national and regional progress (MEN, 2017).

According to it, by 2026 the state is expected to have taken the necessary measures aimed at (starting in early childhood) Colombians developing critical thinking, creativity, curiosity, values and ethical attitudes; respect and embrace ethnical, cultural and regional diversity; actively and democratically engaging in the nation's political and social participation, in the construction of a national identity and in the development of what is public.

In this way, childhood educators' training has been provided clear guidance, yet it requires establishing cognitive, affective and political dimensions that allow, from the ideals of public policy, analyzing their role (beyond its knowledge) as liable for reflexive and contextualized practices. Regarding training programs, teachers must be prepared to train denizens of this society of knowledge ensuing critical, participative and leading vision.

UNESCO (2015a) has defined that by 2030, education must guarantee every person to have the bases to build knowledge, develop creative and critical thinking, and innovation skills. Firstly, teachers must polish these qualities themselves to become a trainer and to set an example on how to achieve the profile. On the other hand, the *Incheon Declaration* (UNESCO, 2015b) outlined five key fields for sustainable development: human beings, the planet, prosperity, peace and joint initiatives, in the latter, education and teachers are critical components to attain the planet's conservation goals.

Thereby, educational policies in early childhood pursue the development of the country's boys and girls from a holistic perspective, i.e., acknowledging the needs of intellectual, human, creative and sentimental development, consistent with reality and with the capacity of becoming its own transformative element.

3. Inclusive Education

Evidently, governments, non-governmental agencies and civil society in general have recognized the need to understand education as the quintessential space of inclusion, this has manifested in policies and guidelines that justify the practice of actions that favor and guarantee access to and continuity in the educational system, with commensurate opportunities for the benefit of all.

Thus, inclusive education becomes the answer for population groups that have been excluded from the fundamental right of receiving an education without differences and in predictable contexts. In this lines, UNESCO (2008) defines education as a process that has the main goal of servicing diversity, students' needs and participation in cultural and

communal educational spaces to decrease exclusion as a result. Therefore, inclusive education is built step by step with actions and roads and through constant transformation, deriving from deep conviction for change in every level involved in the educational community.

In Colombia, as in many Latin American countries, progress has been made on this topic, yet it is still an ongoing process that requires actions to fulfill the objectives not only to guarantee access to educational institutions without distinctions, but student retention in a system that provides excellent quality in the educational offer and in each aspect of school life.

It is key to understand that overcoming barriers of access, student retention and participation of the population being excluded must comprise, aside from cases regarded as "special educational needs" (related to disabilities), similar opportunities for children and teens with social, cultural or learning differences (Ainscow & Booth, 2002).

As core of their work, childhood educators must tend to comprehensively develop children's potentialities with pedagogical proposals in which students' diversity prevails to benefit their individual and group growth, understanding their role as fundamental axis of social growth. As per Barrero (2016), the early years of school offer contact with diversity and this is when childhood educators become a model of opinion and ideas amidst group circumstances, this projection may range from exclusive management to accepting, respecting and valuing differences in an inclusive environment.

For Echeita (2014) the role of childhood educators is critical and demands the development of competences in the stage of professional training that aim to support context transformations, avoiding uncertainties generated by lack of tools that give them the power to apply inclusive educational practices, that promote meaningful changes in accepting, respecting and tolerating individual differences.

From what has been proposed by Sales (2006), educators' training must entail a commitment of universities, since these need to capture the value of inclusive education through a culture of flexible and tolerant professionals who encourage democratic and participative spaces in the school. In other words, the roads, methods and strategies must leave behind traditional educational actions that reflect intolerance and reject difference.

Ultimately, the question rises in terms of how to teach inclusiveness without being included and experimenting inclusion processes that develop sensitivity and strength to manage and tap into the differences, imagine solutions that are not evident and understand and develop a sense of tolerance. Can the value of inclusion be learned in excluding environments? Or do environments, strategies and actions aimed at inclusion need to be reworked to allow future teachers to learn its conditions and instruments.

4. Educational Management, Emphasis on an Ethical Training Culture

Life in educational institutions is a basic unit of change, innovation and transformation that take place as pertinence and quality of the training

process are being reviewed. Relationships between reality of professional practice and cultural actors need to be established and compared with society's new requirements, which are framed in globalized dynamics to identify new ways of organizing and leading these systems, with the objective of strengthening and building new competences and capacities of teachers in training.

Good management is key for each member of an institution achieving a sense of pertinence in a common project. In other words, it is crucial to make everyone row in the same direction to fulfill the objectives and achieve permanent improvement.

Undoubtedly, education supports social and educational changes. Nevertheless, crediting systems evaluate many things except what is taking place in the strategic location: classrooms, which can only get better if institutions implement comprehensive change, and especially if their climates, school environments and organizational cultures set the example of what they want to achieve in terms of individual and collective groupwork models; constructive relationships; social, personal and developmental values; and most distinctively, ethical and social inclusion values.

Traditional curricular design does not apply prospective methods, this leads to projects for short-term needs, marking knowledge with a useful life that is limited to the student population of the moment, if the time between learning and its full working practice is accounted for. Accelerated changes impact academic world with some delay, undertaking a reconsideration of the vision of the future and of the definition of characteristics, traits, competences considered pertinent and fundamental over time.

Information is forgotten and knowledge becomes outdated, but essential training persists for life. Therefore, the daily experience of participating in decision-making, dealing with difficulties, assuming changes, creating new solutions, relating with peers and superiors, working in teams, leading projects, researching to open paths with rigor and innovation, takes on a training sense that can be as or more important than provisional knowledge and information compendium. This is what Senge et al. (2000) have called "the school that learns", meaning, the development of a culture oriented towards organizational learning.

On the other hand, organizational learning focuses on culture as the pillar of teacher training based on how people work, relate and make decisions. A culture that rebuilds mental models and observes how individuals think and act to become aware and study "truths" that have always been known, ways in which knowledge is created and how sense is given to life, and aspirations and expectations. But a glance outside is also required to explore new ideas and different ways of thinking, and to clarify the vision for the organization and the community (Senge et al., p.32).

Aside from regarding the formal structure, the aforementioned requires an analysis of social schemes, such as productivity of conversations, the way in which members of the program listen and defend themselves, how conflict and differences are managed, truly

genuine interests, the real mission of the program, among others. Throughout this daily practice, future teachers have to consolidate solid management grounds with long-term perspective, so as to occupy positions in which they can lead the changes that the system is calling for, overcoming the vision of children assistance.

As expressed before, human actions in today's world are framed in changing contexts with social challenges resulting from globalization and technological progress, it is necessary to understand the sense of what is new and stable to select alternatives for the current moment in anticipation to the future. Thus, professional training is built inside and outside the classroom, based on life's experiences, opportunities and settings in which the person participates. Then, in the context of professional values, reflection is required on professional actions, new responsibilities and frameworks of education, not of the prior century, but of this one. As per this proposal, ethics, alongside education, contributes to training values for the construction of social change in order to surpass professionalization and lead to humanization of education and its quality, gazing at future assumptions (Bauman, 2007).

This perspective introduces new challenges for teachers that position them at the forefront as a citizen that is capable to respond to today's society, exposing the teachers' profession. In fact, the Ministry of Education sets forth in Law 115 of 1994, the General Law of Education, its overall purposes:

To train educators with the highest scientific and ethical quality; developing pedagogical theory and practice as fundamental part of their knowledge; strengthening research in the pedagogical field and specific knowledge; preparing educators in undergraduate and postgraduate levels to different ways of rendering the educational service (Art. 109).

The intention is to offer future teachers learning and development from *praxis* to enable responsible pedagogical and ethical knowledge in their task. So, the teaching practice constitutes an axis of possibilities to exercise the components dictated by ethics. As per Velaz and Vaillnat (2015), *praxis*' end is in itself, and is manifested in its development, determining the quality of the teacher's executions. In that regard, Perkins (2008) makes a case for "transforming the classroom culture into a thinking culture" (p.13), bolstering critical and creative thinking as part of the duties of childhood educators.

To conclude, teaching ethics demands a pedagogy of respect for others, to consolidate women and men's personalities, training them in questioning and rupture, strengthening their capacities of reflection, criticism, personal positioning and debate as invigorating elements of the new ethics of commitment, solidarity, equity, justice and liberty, basic pillars of the new moral that is concerned with revindicating the values of respect for others and for nature.

5. Foresight and Education

The future is multiple and imaginary, and the human mind scrutinizes it based on its own mind maps, yet reality drives changes that reinvent the way in which we live from different social and economic, political

and social outlooks. Foresight studies the future, not to predict it nor to shape it based on pure imagination, but to build the meanings with which decision-makers can visualize the future, offering tools to question it and think about the unthinkable.

Currently, organizations are navigating high levels of uncertainty, turbulence, novelty and ambiguity, these lead them to think about possible futures by assuming that reality will be different than the present and that they require a systemic view for its analysis, as well as the capacity to anticipate complex problems and major changes. A vision of the future and the capacity to propose innovative solutions are needed to facilitate and lead processes and analyses of possible futures (Senge, 2000).

In the 60's, the United States established the Hudson Institute in New York with the participation of sociologist Daniel Bell, making way to interdisciplinary research. Years later, the Club of Rome was founded, computing models are used to describe sustainable and disastrous scenarios; this institution set the debate of humankind's future in motion.

Around that time, other systematic and participative approaches surfaced, turning into strategic projects between the army and the Club of Rome, for instance. During World War II, the first forecast of technological capacities paved the way for the first Think Tank, funded by the Ford Foundation, responsible for developing the Delphi Method.

In 1957, Gaston Berger's French school created the International Center of Prospective Studies, which affirmed that adopting a prospective attitude entailed getting ready for action, and that aside from a discipline or method, it is the attitude to understand that short-term actions always oppose long-term actions, and in general, they seem immediately successful, but as time goes by, errors and catastrophes appear. Berger believed that everything that happened could be explained in the past.

On the other hand, the French school of Bertrand de Jouvenel intended to research if questions about possible futures could become means to better understand the current situation or not, and to ask the most adequate questions to people in power. In 1960 and with the support of the Ford Foundation, they began a project known as *Futuribles*, which consisted in gathering international experts in different scientific fields to create images of possible and desirable futures (Garzon 2013).

Jouvenel understood foresight as the art of conjecture and proposed a research on different plausible futures instead of focusing attention on predicting a sole certain future. He was the founder of the *Futuribles International*.

For Mojica (2005), the future can be built instead of having to suffer it, offering competitive advantages for making strategic decisions in advance, seeing as the current accelerated development of technology and the need of having people with greater competences demands permanent updates and investment in processes. Foresight manages to anticipate possible occurrences in the future and to recognize circumstances which are likely to occur if we took the wrong paths in training.

Overall, foresight does not individually build a future, it leverages on social actors due to the fact that trends exist as a result of their actions. Their participation is one of the conditions of validity in prospective studies. "What will happen in the future can be explained in the present, therefore the role of foresight is to make more accurate decisions to build the future and not do it blindfold" (p.27). With this in mind, it is necessary to understand that the educational process, due to its social action nature, merits being analyzed not just in its current state, but in what it will become.

DISCUSSION

Throughout the research exercise, elements that mark the relationship between early childhood educators and the professional demands of a future vision were identified and analyzed. So, it was observed that childhood education teachers' training has clear guidelines in Ministry documents but requires training institutions to establish cognitive, affective and political dimensions to allow (based on public policy) analyzing their role, which goes beyond knowledge in the area, making use of it integrating a reflexive and contextualized practice.

In terms of training programs, teachers must be prepared to train citizens of this society of knowledge ensuing critical, participative and leading vision, with the skills and competences required in the 21st century, which will allow them to be successful in the spheres of life in the short and long term.

Likewise, the ideas by Echeita (2014) need to be considered in terms of relevance for childhood educators' professional training to develop competences that enable them to contribute to the transformations mandated by the context, driving inclusive educational practices that foster significant change in school diversity.

The connection between foresight and education allows pinpointing ideas of upcoming futures to lead educators towards inquiring and thinking about anticipated solutions; nowadays, organizations have to deal with high levels of uncertainty, turbulence, novelty and ambiguity, which makes them think about possible futures under the assumption that reality will be different than the present, and that they require systemic vision for its analysis, as well as capacity to anticipate change and complex problems by proposing innovative ideas that could facilitate an lead processes and analyses of likely futures (Senge 2000).

On the other hand, traditional curricular design fails to use prospective methods, generating projects for short-term needs that have a useful life limited to the students' population of the time, if the time between learning and full working practice is accounted for. Accelerated changes impact the academic world, this fact is an invitation to rethink the vision of the future and the definition of characteristics, traits, competences that are pertinent and fundamental in time.

It is essential to take into account that training accompanies a subject throughout life. Quotidian experiences that engage in decision-making,

facing difficulties, assuming change, creating new solutions, relating with peers and superiors, working in teams, leading projects, researching to open paths with rigor but innovation, make sense in training. This has been referred to by Senge et al. (2000) as “the school that learns”, meaning, the development of a culture oriented towards organizational learning, a pillar of teachers’ training based on how people work, relate and make decisions. There is also a need to look outside, to explore new ideas and different ways of thinking, to clarify the vision for organizations and the community (Senge et al., p. 32).

As it has been said, in today’s world, human beings’ actions are framed in changing contexts with social challenges that are the result of globalization and technological advancement, this requires understanding the sense of what is new and what is stable to select alternatives to the current world in anticipation of the future. Thus, professional training is built inside and outside the classroom, with life experiences, opportunities and environments of participation.

Nonetheless, the context of professional values requires to ponder upon professional actions, new responsibilities and frameworks for education not for the previous century, but for the one that has started. This is where ethics and education contribute to training in values for social change, so as to surpass professionalization and walk towards humanization of education and its quality, always glancing at future assumptions. The aforementioned intends to take future teachers to learn and develop from *praxis*, to attain ethical and responsible pedagogical knowledge in their task.

Finally, today’s fast-paced changes propose new challenges and demand education to provide an assertive pedagogical answer to the requirements of children’s training with educators that manage the creation of new worlds and who may anticipate future needs using a mutual listening dynamic concerning realities, experiences and expectations.

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