Культурно-историческая психология
2016. Т. 12. № 3. С. 269—279
doi: 10.17759/chp.2016120316
ISSN: 1816-5435 (печатный)
ISSN: 2224-8935 (online)

Cultural-Historical Psychology
2016. Vol. 12, no. 3, pp. 269—279
doi: 10.17759/chp.2016120316
ISSN: 1816-5435 (print)
ISSN: 2224-8935 (online)

The Children's Playground in the Context of Cultural-Historical Psychology

E.O. Smirnova*,
Moscow State University of Psychology and Education,
Moscow, Russia,
smirneo@mail.ru

I.A. Kotliar,**
Dubna International University for Nature, Society, and Man, Dubna, Russia,
iakorepanova@gmail.com

M.V. Sokolova*,**
Moscow State University of Psychology and Education,
Moscow, Russia,
sokolovamw@mail.ru

E.G. Sheina**,**
Moscow State University of Psychology and Education
Moscow, Russia,
leshgp@gmail.com

The article describes the possible application of the principles of cultural-historical approach and activity theory to the evaluation of toys and play environments. A children's playground is treated as cultural means or artifact created by adults for starting a child's activity. In terms of cultural-historical psychology, psycho-pedagogical analysis of a playground is based on the identification of the play value level and the compliance with the objectives peculiar to the age. Analysis and design are based on the understanding of the playground as a single space, where each element has the potential for any children's development activity — play, communication, experimentation, etc. The following criteria of psychological and pedagogical inspection are identified and well-grounded: the principle of orientation to age-related peculiarities, the principle of high play value, the principle of transparency of objects, the principle of supporting acceptable risk, the principle of taking account of visitors' activity levels, invitation to dialogue — the principle of dialogueness. The use of these principles in the course of designing playgrounds is illustrated by examples. These show that the conceptual apparatus of cultural-historical psychology may be used not only to explain the mechanisms and forms of mental development, but also for the analysis of particular conditions of a child's mental development and design of play environments.

Keywords: psychological and pedagogical evaluation, children's playground, play environment, child, activity, play, play value, designing children's playgrounds.

For citation:
Smirnova E.O., Kotliar I.A., Sokolova M.V., Sheina E.G. The Children's Playground in the Context of Cultural-Historical Psychology. *Kul'turno-istoricheskaya psikhologiya = Cultural-historical psychology*, 2016. Vol. 12, no. 3, pp. 269—279. (In Russ., abstr. in Engl.). doi: 10.17759/chp.2016120316

* *Elena Olegovna Smirnova*, Doctor of Psychology, Professor, Head of the Centre for psychological and pedagogical expertise of games and toys, Moscow State University of Psychology and Education, Moscow, Russia. E-Mail: smirneo@mail.ru
** *Inna Aleksandrovna Kotliar* , Candidate of Psychological Sciences, Associate Professor of the Department of Psychology, Dubna International University for Nature, Society, and Man, Dubna, Russia. E-Mail: iakorepanova@gmail.com
*** *Maria Vladimirovna Sokolova*, Candidate of Psychological Sciences, an expert in methodological work in the Centre for psychological and pedagogical expertise of games and toys, Moscow State University of Psychology and Education, Moscow, Russia. E-Mail: sokolovamw@mail.ru
**** *Elena Georgyevna Sheina*, Head of the scientific and methodological department of the Centre for psychological and pedagogical expertise of games and toys, Moscow State University of Psychology and Education, Moscow, Russia. E-Mail: leshgp@gmail.com

The key issue for L.S. Vygotsky and his followers was the way a child can take his place in society, i.e., become an adult. B.D. Elkonin proposes to add to this issue the opposite one: "... how can society ("adults") take a place in the formation of the elements of activity of a human ("a child")?" [13]. And this "wedging-in" of society into children's spontaneous activity should not displace or substitute it, but rather convert it into "its own actions". By discussing the ways of including society into a child's life, B.D. Elkonin considers the demand for "relevance", i.e. "... finding a place for one person in the development of the activity of another one" [ibidem]. However, direct interaction with an adult is not the only way to include society (and finding its place) in a child's activity. Adults (society) have created and continue to create a lot of special means and tools aimed at transforming a child's spontaneous activity, to put it into the cultural form of its own actions. These means and tools include the products of the so-called children's sub-culture — first of all, toys, cartoons, children's books, etc. These products stimulate specific modes of action and form the attitude towards the world. Over the past century and a half, a special "children's" area has been singled out in the world culture — toys and games, children's literature, music, theatre, animated films for children, etc. All these products can be considered as "cultural artifacts", i.e. the cultural means addressed to adults and children for their cultural development and for socialization.

Nowadays, products of children's subculture are not only means of cultural development, but also a "commodity", i.e. objects for selling in a rather saturated and competitive market of goods and services. Accordingly, they are subject to marketing. Marketing techniques often ignore a child's development patterns. Attention is focused on attracting buyers, the need to surprise, amaze them, to distinguish themselves from competitors. Manufacturers of toys, books and films are not always focused on their products' development potential and, as a rule, do not take into account the peculiarities of the age of children for whom their goods are intended. The analysis of the market of modern toys shows that the majority of them are no longer intended for children's games. The predominant toys in shops are those which are not meant for playing with, but just to be watched singing, jumping, giving instructions, etc., which results in a child's game often turning into manipulation and enjoying the features of technically elaborate toys. Many books for children are overloaded with teaching tasks, audio- and gaming effects, which detract a child from a meaningful perception of literature. Cartoons watched by children, in terms of their images, vocabulary and content, are addressed not to pre-schoolers and sometimes are difficult to understand even for adults.

In this regard, the task of psycho-pedagogical inspection comes to the fore, aimed at determining the development potential of the products of children's subculture.

For over ten years, at the Centre for psychological and pedagogical inspection of toys and games of the Federal State Budgetary Educational Institution of Higher Education Moscow Psychological and Pedagogical University (hereinafter — the "Centre for toys and games") psychological and pedagogical toys and game materials have undergone a formal inspection, the purpose of which is to assess a specific toy from the point of view of its role in the development of a child and its appropriateness for the age for which it is intended [12]. The theoretical basis of this work is cultural-historical approach and activity theory.

From the perspective of a cultural-historical approach, a toy should be means of familiarization with cultural background. It should guide a child to exercise the capacity it has, i.e. contain ***guidelines*** for specific, culture-consistent actions. At the same time, a toy should be the subject of a child's independent activity and encourage it to act proactively. The most important requirement for a toy is that it should give a child the opportunity for creative, meaningful ***activity***. These two requirements are inseparable and mutually dependent, because the most effective cultural background is assimilated not in a detachedverbal form, but in the process of the actions themselves. On the other hand, a toy can (should) guide a child's spontaneous activity in a certain direction, give it a cultural sense that is born in the course of its own actions. It should be emphasized that the development value refers not to transmission of information or teaching but to stimulation of a child's independent, meaningful activity in a variety of fields: imagination, thinking, communication, empathy, etc.

Thus, the development of the potential of a toy involves, on the one hand, the orienting basis of playing action setting the child's path, and on the other hand, the openness of a toy for a child's own actions (emotions, ideas, appealing).

These requirements apply to all products of children's sub-culture; at the same time, they vary and become concrete depending on the object of inspection.

Over recent years, a special "item" — children's playground — has become the object of psychological and pedagogical inspection at the Centre for toys and games.

The emergence of children's playgrounds at the turn of twentieth century was due to the changes in a child's place within the society. During this period, a system of special institutions, kindergartens, appeared, where special time and place were allocated for children to be in the open air. At the same time, rapid growth of cities was observed, the increase and acceleration in traffic flow in the streets and, as a consequence, there were fewer open safe places for children to play and moveme freely. This explains the dual nature of a playground. On the one hand, it is a kind of compromise between a city environment and children's needs and, on the other hand, it is a space for a child's development.

At the turn of the twentieth century, typical playgrounds consisted mainly of special equipment for physical activity — bars, structures for balancing, and swings. Actually, there was no place for games on such playgrounds, only a space for exercising. By and large, until the 1950s, in fact, there were no special places for children playing in the street. Only during the 1960s, did the situation begin to change: in the major US and European industrial cities separate areas were created for children's activities in the streets. The first to appear were fenced-off areas with metal equipment of the same type (swings, slides, horizontal bars, and sand-pits). Later, production of more complex equipment began to appear, for example, climbing equipment– houses, slides and intercon-

nections between them. On the playgrounds, in addition to this equipment, objects from nature were placed, such as bushes, rocks, logs, stumps, not only for their appearance, but also for the purpose of playing. Since the mid-twentieth century, children's playgrounds in Europe and America became a mass phenomenon and an integral part of the urban environment. At first they were equipped with traditional standardized equipment with a minimum of natural elements on them; and by the 70s of the last century, original playgrounds began to appear with more attention given to uniquely designed equipment, landscaping, natural materials. The beginning of the twenty-first century is characterized by the growing interest in children's spaces using natural materials [7].

Since the second half of the twentieth century, the so-called adventure playgrounds started to develop in many industrial cities [6]. On these grounds, children not only use ready-made equipment created for them by adults, but also build their own playing space. This form of organization of children's activities meets children's need for a game, experimentation, communication and free movement in the best way.

In Russia, the recent decade has been marked with the transition from traditional standardized metal equipment to bright, plastic equipment and artificial turf. There is also growing interest in wooden, ecological equipment with natural elements and landscaping.

Children's playgrounds appear in the studies carried out by architects and urbanists as a special item, but less often in the studies carried out by the representatives of psychological and pedagogical studies [5; 7].

For a long time, the design of children's playgrounds had involved landscape architects and designers focused on the works by J. Gibson and the ecological approach developed by him and his followers [3]. Over the past decade, psychologists have become more active in the analysis and design of children's playgrounds.

Over the past 40 years, much empirical data have been collected describing the characteristics of children's behaviour on the playgrounds. For example, primary school children and adolescents often play on the so-called "boundary" grounds — at the crossroads, near the entrances to the houses, where the situation is constantly changing, new people appear, etc. [2]. Zoning space, dividing a playground into play areas, arranging for fences stimulate the children's creativity and increase the duration of a game. A variety of children's play equipment influences the type, quality and variety of children's games.

Many studies were focused on the relation between the type of playground and the children's behaviour; some common characteristics affecting the value of the play equipment and playgrounds as a whole were distinguished; a relationship between a particular children's activity and the features of the playground was identified.

It was found out that traditional playgrounds stimulate competitiveness rather than cooperation, and encourage individual games, while larger adventure playgrounds stimulate construction and role-playing games that have a plot. Abundance of artificial elements on the playground encourages children to establish a hierarchical relationship, competition; and in spaces full of the natural elements attention is focused on fantasy games and social activity. Children talk more freely on a swing than on a slide; emotional and practical cooperation ("horseplay") occurs more frequently playing on grassy areas.

The qualities which improve the playing potential of a playground were described. They include continuity, i.e. an opportunity to smoothly move between play areas due to connections between them. A "good" playground includes so-called activity loops, i.e. play areas placed in a circle, which ensures the continuity of the game. This arrangement suits the natural course of a game to the greatest extent. This once again confirms the fact that the playing and social potential of a playground depend not only on the equipment installed on it but also on the playground layout as a whole (see Analysis [7]).

The findings show that the content of children's activity is largely determined by the organization of space, and therefore, a children's playground can and should be the object of practice-oriented studies carried out by pediatric psychologists. Currently, playgrounds are created in our country by architects and designers, who focus mainly on aesthetic, economic, and ergonomic aspects of space. The playing and development potential of a playground, as a rule, are not taken into account.

As a result, the majority of playgrounds do not perform their functions and their development potential remains extremely low. The participation of psychologists, who understand the age characteristics of children and conditions contributing to children's activities, will help make playgrounds more adequate to the needs and abilities of children, and improve their development potential. The practical participation of psychologists can be performed both in designing play environments and in their psychological and pedagogical inspection.

In this regard, in the Centre for games and toys, principles for designing children's play equipment are being developed, as well as the approach to the assessment of their development potential. The scientific basis of this approach is a cultural-historical psychology and the activity theory — works by L.S. Vygotsky, A.N. Leontyev, G.P. Schedrovitsky, A.G. Asmolov, V.V. Rubtsov, V.M. Munipov, V.L. Glazychev and others [1; 4; 10].

The analysis of a play environment on playgrounds is based on the same scientific grounds as the method of inspecting toys developed at the Centre and widely used in practice [12].

A children's playground is a cultural facility, cultural artifact created by adults for initiating a child's activities. This is a common space where each element has the potential for development of children's activities. A child's activities on the playground are associated with disobjectification of meanings and functions of the objects of the playing environment, as well as creative, fantasy and transforming activity of children themselves, their interaction with others — children and adults present on the playground.

Designing children's playgrounds requires paying attention to the following psychological principles: consideration of peculiarities related to age, high play value, transparency of objects, supporting permissible risk, recording the visitors' activity levels, invitation to communicate — dialogueness.

Let us consider each principle in greater detail.

The principle of orientation to age peculiarities.

A playground should take into account the age peculiarities of visitors and focus on the needs of children, first of all, in the game, experimentation, transformation, creativity, communication, active movement, rest, learning. It should also take into account the physical abilities and psychophysical characteristics of children (height, weight), and the ability to assess risks as well as self-control.

A playground for young children is a space where the basis of social forms of interaction adopted in a culture is formed. This space is required for full mental development, because basic components of the self-image are formed here: a sense of self-motion, touch and balance that create borders of body self-image, for which a specially built environment is required [11].

At pre-school age, a children's playground is a unique place for free playing in mixed-age teams, for active communication, for experiments with different environments and their combinations, as well as for physical activity.

At primary school age, a children's playground makes it possible to actively try independent movement which contributes to motor competence if active "overcoming" the environment and materials when almost every object of the area is used in a certain way (for example, they do not play in the house but climb on it and watch out from the top, etc.).

In adolescence, a children's playground sometimes becomes the only available place for adolescents to communicate freely, to try and improve their physical abilities, and to demonstrate them to others.

Thus, for each age a children's playground is a space that creates the conditions for spontaneous (as this term was understood by L.S. Vygotsky), independent learning.

The principle of high play value.

One of the main criteria for selecting objects for a particular playground is the assessment of the play value of each object or element of the landscape. The play value of the object or material is the diversity and the duration of possible play activity that can be made with the aid of it. Unformed multifunctional objects and materials — sand and other bulk materials, water, paper and its derivatives — have the highest play value. Such materials are open to a variety of children's actions. On the playground these are sandboxes, something for pouring out pebbles or chips, water objects, climbing equipment.

The landscape of a children's playground itself has high play value, particularly complex landscape. In comparison with the specific play objects (houses, slides, etc.), the elements of the landscape (hills, hollows, water pools, shrubs and trees) provide a unique opportunity for their infinite variable use in a game. Well-designed game landscape may substantially increase the play value of a playground and make it more environmentally friendly.

The principle of transparency of objects.

A playground's environment and its equipment offer visitors an active interaction with its elements, "openness" of a particular object and the whole space of the playground for various activities. A visitor (first of all a child) needs to be able to determine himself what he will do and in what way, what he can with the object or on the playground in whole, rather than desobjectify the designers' narrow ideas.

As was noted above, the openness indicator is used for the analysis of toys [12]. This indicator should be used when analyzing and designing playgrounds. Objects that allow a wide variety of actions to be made with them are "open". A simple example of an open object: a house that enables a child to carry out many different actions: to play (to start a variety of game themes, both individual and collective ones), to climb on, to communicate, to experiment, etc. "Closed" objects involve a single way of using them or a limited range of action. An example of a "closed" object: a carousel, mechanically-sprung swings. They involve one type of motion (motion in circle or swinging) [details see: 5].

Differences in ages mean different needs for the quantity and quality of open and closed objects. Thus, for an early age, we see a greater need for closed objects with very clear logic of use. While for pre-school and early school age, the need for open objects is greater. For adolescents, when communication is a priority, this need is not so relevant.

The principle of permissible risk.

When designing playgrounds, risk is a topical issue that is being actively developed in international practice. In recent decades, it has been generally agreed to separate the two concepts — "risk" and "danger", where the latter is understood as a potential source of harm the consequences of which are difficult to predict, and the former — as an action of a person in a situation of uncertainty. For a long time it was thought that risk referred to something unnecessary, negative, something to avoided at all costs. However, the ability to control a risk situation as well as the ability to assess one's own resources are very important for present-day people. These skills may only be obtained out of actual experience, when getting in real risk situations or in specific game situations where a child gets an opportunity to experience overcoming "what if" situations. A playground in its potential is not dangerous, though risky. In this case, risks for children of different ages are not the same and depend on many factors, primarily, on the motor activity development and self-control levels.

It seems to us that, when discussing the issues of risks on a children's playground, it is advisable to use the "testing" concept introduced by B.D. Elkonin [14]. Test action is risky due to its openness and incompleteness. A playground should be the environment where children can take risks but at the same time control risk situations.

A children's playground needs to be safe; however, it needs to have space for risk. The opportunity to take risks is an important condition for the existence of children's games. One of the main requirements for the game that adults are able to create is making a balance between the need to offer risk and the need to protect children from severe injuries.

In the International Safety Standards EN 1176: 2008 "Safety of gaming equipment" and its Russian translation, it is emphasized that experiencing risk is one of the basic human needs [9]. In order to learn to overcome his fear, a person in childhood should have an opportunity to try out different options for risk-taking behaviour in a controlled, secure environment. Playing facilities should be designed in such a way (especially playing equipment

for climbing, lifting) that every child can climb them. The level of complexity should be regulated by the player himself, which prevents dangerous situations.

The principle of recording visitors' activity levels.

A playground should take into account the possible degree of activity of its visitors and offer the opportunity both for dynamic actions, joint actions, and privacy, observations "from the side", and resting.

Invitation to communicate — the principle of dialogueness.

Objects on the playground should invite visitors to a dialogue with them, with each other and with the surrounding space. Some objects can be used mostly by two or three children, and some, such as water pumps (to be started up only by fathers, grandfathers, elder brothers) involve in the game and in the space a part of the target audience that usually remains uninvolved on children's playgrounds and make it possible to establish inter-generational interaction.

These are the psychological principles that we propose to use when designing play environments. Similar criteria are applicable to the psychological and educational inspection of a children's playground, namely: identification of the play value level of different objects, appropriateness of the play space with the tasks of the age, detection of the opportunities for a child or a group of children to be engaged in different activities (communication, experimenting, motor activity, action-oriented and story games, calming rest, privacy, relaxation, etc.).

As our analysis shows, closed objects and very poor landscape are the predominant features of modern playgrounds in Russia. To have open objects and complex play landscape is obviously not enough. This makes the psychologists' participation in design and assessment of children's playgrounds particularly relevant. This work has already been started. It should be noted that architects and landscape designers are interested in cooperation with psychologists. This collaboration resulted in the children's playground in the Neskuchny Garden (Moscow) and the theme amusement park "Sochi-Park" (Sochi), in the city park in Dolgoprudny, courtyard areas in new housing estates in Novosibirsk and Mytishchi.

In conclusion, it should be emphasized that the conceptual apparatus of cultural-historical psychology may be used both in order to explain the laws and consistent patterns of children's mental development and for the analysis of object related conditions, and spatial conditions of their life. The design and inspection of children's play environments are parts of the process for practical application of cultural-historical psychology and activity theory.

Financing

The study was carried out with the financial support from the Russian Foundation for Humanities (No 15-06-10627 Psychological and pedagogical analysis of children's play environment of the modern city).

References

1. Asmolov A.G. Kul'turno-istoricheskaya psikhologiya i konstruirovanie mirov [Cultural-Historical Psychology and design worlds]. Moscow: MPSI, 1996. 768 p.

2. Geil Ya. Goroda dlya lyudei [Cities for People]. Moscow: Al'pina Pablisher, 2012. 276 p.

3. Gibson Dzh. Dzh. Ekologicheskii podkhod k zritel'nomu vospriyatiyu [An ecological approach to visual perception]. Moscow: Progress, 1988. 464 p.

4. Glazychev V. L. Urbanistika [Urbanistiks]. Moscow: Publ. Evropa, 2008. 220 p.

5. Kotliar I.A., Sokolova M.V. The Attractiveness of Street Children Playgrounds. An Empirical Study. *Psikhologicheskaya nauka i obrazovanie* [*Psychological Science and Education*], 2014. Vol. 19, no. 4, pp. 54—63.

6. Kotliar I.A., Sokolova M.V. Ploshchadka priklyuchenii kak primer realizatsii prava rebenka na igru [The platform adventure as an example of the child's right to play] [Elektronnyi resurs]. *Psikhologicheskaya nauka i obrazovanie psyedu.ru* [*Psychological Science and Education*], 2014. Vol. 6, no. 2, pp. 81—90. Available at: http://psyedu.ru/journal/2014/2/Kotlyar_Sokolova.phtml (Accessed 07.02.2016). (In Russ., Abstr. in Engl.).

7. Kotliar I.A., Sokolova M.V. Approaches to psychopedagogical examination of game playgrounds [Elektronnyi resurs]. *Sovremennaya zarubezhnaya psikhologiya* [*Journal of Modern Foreign Psychology*], 2016. Vol. 5, no. 1, pp. 5—15. doi:10.17759/jmfp.2016050101. (In Russ., abstr. in Engl.)

8. Leont'ev A.N., Rozenblyum A.N. Psikhologicheskoe issledovanie deyatel'nosti i interesov posetitelei Tsentral'nogo Parka kul'tury i otdykha imeni Gor'kogo [Psychological research activities and interests of the visitors of the Central Park of Culture and Rest of Gorky]. In Voiskunskii A.E. (eds.) T*raditsii i perspektivy deyatel'nostnogo podkhoda v psikhologii: shkola A.N. Leont'eva* [*Traditions and perspectives of the activity approach in psychology: A. N. Leontev`s School*]. Moscow: Smysl, 1999. 429 p.

9. Oborudovanie igrovykh ploshchadok. Chast' 1. Osnovnye trebovaniya bezopasnosti i metody ispytanii [Equipment playgrounds. Part 1: General safety requirements and test methods] [Elektronnyi resurs].*FGPU "Standartinform"*. Available at: http://www.standards.ru/document/4191103.aspx (Accessed 05.09.2016).

10. Rubtsov V.V. Sotsial'no-geneticheskaya psikhologiya razvivayushchego obrazovaniya: deyatel'nostnyi podkhod [Socio-genetic psychology developmental education : the activity approach]. Moscow: MGPPU, 2008. 416 p.

11. Smirnova E.O., Abdulaeva E.A. Usloviya stanovleniya prostranstvennogo obraza "Ya" v rannem vozraste kak pervoi formy samosoznaniya [Conditions for Development of the "Self" Spatial Image as the First Form of Self-Consciousness in Early Childhood]. *Kul'turno-istoricheskaya psikhologiya* [*Cultural-Historical Psychology*], 2009, no. 3, pp. 16—24.

12. Smirnova E.O., Salmina N.G., Abdulaeva E.A., Filippova I.V., Sheina E.G. Psikhologo-pedagogicheskie osnovaniya ekspertizy igrushek [Psychopedagogicalbases expertise toys]. *Voprosy psikhologii* [*Questions of psychology*], 2008, no.1, pp. 16—26.

13. *El'konin B.D.* Intermediary Action and Development [Mediation action and development]. *Kul'turno-istoricheskaya psikhologiya* [*Cultural-Historical Psychology*], 2016, no. 3, pp. 93—112.

14. Elkonin B.D. Proba kak konstrukt obrazovatel'noi sistemy [Trial as a construct of the educational system]. Materialy 9 nauchno-prakticheskoi konferencii*Pedagogika razvitiya: kliuchevye kompetentnosti i ih stanovlenie* (g. Krasnoyarsk, 25—27 aprelia 2002 g.) [Proceeding of the Ninth Scientific and Practical Conference *Pedagogy development: key competences and their formation*]. Krasnoyarsk: Publ. KGU, 2003, pp. 122—132.