

Interrelationship between the Concepts in J. Piaget and D. Uznadze's Theories

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Abstract

The article reviews the psychological concepts of 'centration', 'decentration', 'subjectification' and 'objectification', developed within the framework of different psychological theories, from the perspective of Set Theory. In particular, it examines the specificity of these phenomena, their place, function and interrelationship within the adaptation process.

An emphasis is made on the possibility of using J. Piaget's theoretical approach for the elaboration of the issues relevant to D. Uznadze's theory, as well as the possibility of the interpretation of J. Piaget's concepts and psychological mechanisms from the perspective of Set Theory.

An attempt is made to prove the productivity of this approach through viewing resources in both theories as mutually complementary and demonstrating the possibility of a synthetic use of these resources for the analysis of the processes and mechanisms involved in adaptive activity.

Key words: *Subjectification, centration, objectification, deccentration, adaptation.*

During discussion of objectification issues (ნადარეიშვილი, დ. უზნაძის „ობიექტივაციის“ ცნების ზოგიერთი ასპექტი, 1922), it was noted that due to adaptation needs the environment is reflected in a preferential way, i.e. some part of the environment is 'identified' as situation (D. Uznadze). Situation involves only those objects that are significant in terms of the actual adaptation needs and have a certain valence which is determined by relatedness of the objects to the subject's needs. D. Uznadze regarded situation as part of the environment enabling need satisfaction. At the same time "the need that exists in the subject develops into a concrete, specific need only after objective situation clarifies itself in a specific form, which creates the possibility of satisfaction of the given need" (Uznadze, Works, 1977). 'Development into a specific need' should be understood as a permanent process during which a dynamic feedback takes place between the situation and the subject and through which both need and object are simultaneously 'specified'. When analyzing the above quotation, it should be taken into consideration that reflection might be subjective just because of such a close link with the need and the necessity of its satisfaction, i.e. instead of the 'identification of the objective situation in a concrete form' (straightforward and clear identification of the objective situation), the existing environmental givenness is qualified as an object required for the satisfaction of the subject's need¹, i.e. interpreted in a subjective way (assimilative illusory reflection) or 'identified' in a preferential manner.

When discussing the existence of such a subjective approach and its effect we should take into consideration that the reflection of environment is not affected only by the state of need. It is equally

¹ The present document does not deal with categorization issues.

affected by primary (unspecified) form of need (as the subjective factor bringing about initial set-based modification) and even 'diffuse'² (D. Uznadze) situational and/or fixed mental formation emerging from the primary (unspecified) environmental information (objective factor of set). What has been stated above can be also described using different terms. For example, for the purpose of analysis we can differentiate within the integrate (psycho-physical) state of set (a) readiness for response/behavior, and (b) readiness for reflection (ნადარეიშვილი, განწყობა და მოლოდინი, 1993). Reflective readiness implies that the subject is first of all ready to reflect in the environment what is related to the need already reflected in his/her set or diffuse set with the initial structure evoked by this need. As already said, this relatedness is established only with those objects in the environment which are potential satisfiers of the realization of need/set or the objects with valence. It is clear that here we deal with the well-known fact of selective reflection which, as understood by the Uznadze school (D. Uznadze, Sh. Nadirashvili), is considered specific of impulsive activity, which implies fragmentary reflection of the environment and is mostly explained by relatedness with actual need. It is also clear that the emphasis on the impact of need (rather than set) on the formation of situation is based on the assumption that set does not yet exist at this stage, because its necessary constituent (the situational factor) has not been formed, yet. But it seems that the sequence of stages of set formation, mentioned in the section, should be also taken into consideration. At this point of set formation 'unspecified' need and the object evoke a primary modification of the psyche – diffuse set, on the basis of which the further relationship with the environment and its development into situation takes place. When discussing set as 'the state of the psycho-physical readiness for behavior' (D. Uznadze) or as a complete and whole mental formation, it is important to decide which dimension of set needs to be emphasized: 1) Modification of psyche only by need, as a state; 2) Modification of psyche only by situation, as a state; 3) The state of readiness for reflection³, or 4) State of readiness for behavior. The above issues need to be elaborated with the consideration of set formation as a process consisting of a number of phases (stages), and, correspondingly, existence of different types and forms of set (e.g., 'diffuse' and 'differentiated' sets mentioned by Uznadze). (Note: A detailed elaboration of this issue goes beyond the immediate purpose of the current research.)

If we assume that the purpose of objectification is the participation in the preparation of preconditions for the reflection of objective, reliable and complete information, then the subjective approach described above can be hardly understood as a contributor of something positive to the solution of the task in hand, because instead of ensuring objective data about environment, it deals with 'subjectified', altered, deformed, and illusory data. It is advisable to use the term 'subjectification' to describe the above state of affairs.

D. Uznadze reviewed 'subjectification' in terms of its relatedness and contrast with 'objectification'. 'It is not a true objectification because the subject has received something in advance, is expecting something here and is trying to discover that something. So, we are not only dealing with the act of pausing, as it would be the case with real objectification, but rather with a preliminary firm set, the subject is trying to discover and confirm. That is why in such a case the subject has frequent illusions: she/he sees something which does not actually exist' (Uznadze, Notebook with Comments. 1989). What is meant here is the assimilation effect of set. Other versions related to assimilation need to be described when at the initial stage, the following takes place: 1) a) Actualization of the contours or the sketch of the object implied in the general directedness at the need satisfier (unless we consider initial relatedness of the need and its object, when they define each

² Analysis of D. Uznadze's text leads to conclusion that the term 'diffuse' concerns the initial stage of the formation of fixed set. In our opinion, the term 'diffuse' should be generalized also to the initial stage of the formation of situational set.

³ (a) expectancy, as reflective readiness, (b) expectancy as a stage in the formation of set, and (c) type of set formed on the basis of predicted or prospective expected givenness (ნადარეიშვილი, განწყობა და მოლოდინი, 1993).

other); b) During need specification, refinement of the model of the object, which is considered a potential satisfier of need or a possessor of desirable and expected characteristics, or 2) Development of the model already reflected in the diffuse set and formed with the use of preliminary, raw material into a more concrete and better differentiated imaginary object. At the next stage the above models are transferred to the current or future external space, are placed within that space (or the model is used for the construction of its original version) and are further enriched with the existing, but less relevant or totally illusory data. It is clear that if such a formation is used as a factor of set formation, this will surely result in adaptation errors. It is also clear that stemming from the adaptation task it becomes necessary to search for (or create) a complete, specific, real object corresponding to the model used for set formation, instead of the object emerging from incomplete data with the characteristics partially ascribed by the subject in an arbitrary way.

In the current context we will use the terms 'exteriorization' (Мещеряков, 2003) and/or 'objectivization' (Shavinina, 2006) to differentiate from Uznadze's 'objectification' as the terms without a strict meaning. These terms have multiple meanings, but they seem to be suitable for the description of the state of affairs described above, which implies the development of an ideal image/model out of the preliminary data and the transference of such an inner structure or the product of mental activity to the outer space, its embodiment in the environment and endowment with the form of existence relatively independent from the subject. The described process can be understood as objectification. In this case, the meaning of the term 'objectification' is different from the concept used by Uznadze. If we take into consideration that the placement of an inner product in the external space implies its placement not only in the current (present), but also in the future space (which implies the replacement of the objective regularities of the development/progression of events with subjective probability of the occurrence of these events and unjustified feeling of confidence), it becomes clear that in the case of subjectification the human being is expecting the occurrence of this type of object 'here and is trying to discover that something.' If we assume that expectancy is the state preceding occurrence of the event (ნადარეიშვილი, განწყობა და მოლოდინი, 1993), in which a permanent relationship channel is created with a potential need satisfier, predicted and modelled future object, the image 'permanently present' (Uznadze) in experience, we might think that what we have as a result of subjectification makes possible multiple reflections, more intense concentration on this givenness (Uznadze points to the existence of relationship between any kind of attention and expectancy, which is a plausible idea), feedback and correction, which creates an illusion of obtaining a maximum amount of accurate information. We would like to note that here we speak about the differentiation of the factor of set during which the object becomes more concrete. The primary product of subjectification is objectified and develops into a relatively complete object which becomes useful for the 'confirmation' of set and through the use of which the set (i.e. the set the subjectification of which initially produced the object) undergoes further differentiation until its quality is good enough to serve as a basis for behavior. It should be noted that the process described above illustrates an increase in the relationship between objectification and subjectification rather than increased adequacy of reflection.

As said above, being in the state of expectancy, the product of subjectification serves the creation of favorable conditions for the further objectification process (permanent presence of the object in the experience with the preservation of relative sameness necessary for objectification). However, we have to remember that it is the already existent subjective information that dominates in the above product rather than the additionally obtained objective information (ნადარეიშვილი, დ. უზნაძის „ობიექტივაციის“ ცნების ზოგიერთი ასპექტი, 1922). The same problem is also observed in the case of 'objectification' as given in Uznadze's texts (Ibid.), which should logically imply that it is just objective information which has been searched for. There is also another difference which needs to be emphasized: When objectification takes place independently from subjectification, the object, despite being inadequately reflected, still exists, which creates a possibility for obtaining additional objective information, whereas in the case of subjectification, the

object is mostly a product of the subject's mental activity, an ideal construct created through imagination as a result of the compilation of the set-based information.

According to the existing assumptions (Ibid.), the purpose of objectification is the creation of conditions for a further meticulous examination of the object, for obtaining maximal and most accurate information about the object so that it is used as an adequate factor of set and ensures its further differentiation. The above interpretation of the relationship between subjectification and objectification enables us to preserve Uznadze's idea that 'in the case of objectification the attributes in relation to which the corresponding set needs to be formed are searched for', whereas in the case of subjectification 'the attributes that need to be used for the justification of already existing set' are searched for (უზნაძე, შენიშვნების რვეული, 1989), which should be understood as: (a) creation of a new set and an attempt of its further differentiation, and (b) preservation of the existing set and an attempt of its further differentiation. Therefore, if viewed from the perspective of an ultimate function, both subjectification (which Uznadze calls 'as if objectification' different from objectification and by doing so emphasizes its inability to ensure the existence of objective information) and objectification serve one and the same purpose: an attempt to obtain relatively objective and complete information⁴ to further differentiate set and ensure the purposefulness of behavior.

To get closer to the above described context of obtaining objective and adequate information, here we give some definitions in the form of short reminders. According to one of the definitions, egocentrism is 'cognitive shortcomings that underlie failure, in both children and adults, to recognize the idiosyncratic nature of one's knowledge or subjective nature of one's perceptions.' Inability to recognize 'that alternative perceptual, affective and conceptual perspectives do exist.' (Olivola, C., Pronin, E., 2016) 'Inability to change the initial cognitive perspective in relation to the object due to concentration on personal interests despite the existence of information contrary to the personal perspective/experience which is caused by unacceptance of other contrary opinion' (Карпенко, 1998). In J. Piaget's works, egocentrism, considered, for example, at the stage of preoperational thinking, is prevalence of assimilation over accommodation, and, stemming from this, is related to errors, distortions and illusions in the reflection and processing of information (Piaget, 1960, p. 160), '... the tendency to perceive the situation from one's own perspective, believing that others see things from the same point of view as oneself ...' (dictionary.apa).

For the purpose of the current article, we will still consider a specificity of the unconscious: non-existence of a clear separation of the subjective and the objective, its selectiveness and the subjectivity in reflection and reaction which is explained by the specificity of set-driven reflection (ნადარეიშვილი, დ. უზნაძის „ობიექტივაციის“ ცნების ზოგიერთი ასპექტი, 1922).

A phenomenon considered in relation to egocentrism is 'centration' which is the 'tendency to attend to one aspect of a problem, object, or situation at a time, to the exclusion of others' (<https://dictionary.apa.org/centration>). For J. Piaget, centration is the concentration of attention⁵ on the most salient aspect of a situation and, at the same time, neglect of other, possibly relevant aspects (Флейвелл, 1967, p. 211). As already mentioned, such selectivity is determined by need and set, but, in this case, we mean the identification of individual objects based on a single attribute/characteristic of the object which is directly linked to the need and the set, rather than selectivity understood as singling out certain environmental objects that could be identified as situation. The mental

⁴ Unless we consider interrelationship between subjectification and mental abnormalities emphasized by Uznadze. According to the proposed approach, if subjectification, expectancy and further objectification are viewed as the stages of a single process, subjectification can be regarded as a phenomenon also characteristic of normal individuals.

⁵ The difference between paying attention and concentration of attention needs to be taken into consideration.

formations and behavior based on this kind of reflection, creating, at most, the possibility of assimilation, cannot be purposeful and cannot meet adaptation needs.

The approach used in the current article implies that no matter what meaning the concept of centration has, whether it is understood as 1. concentration on individual objects in the environment and their identification as situation; 2) concentration on individual characteristics of an individual object and, consequently, a) an illusory reflection of other dimensions; b) prediction of other characteristics, attributing subjective probability to these characteristics and the expectation of their realization (ნადარეიშვილი, განწყობა და მოლოდინი, 1993), it always points to selective and fragmentary reflection of reality. It also points to the fact that it is determined by operation of complex/composite (need and environment) situational and/or fixed mental formations rather than an individual need. To better clarify the above said we need to remember that in the Theory of Set a fixed set is reactualized through the operation of the constituents (or similar constituents) related to either need or situation that initially participated in its formation and this reactualized set is directed at and participates in the repeated reflection of the object (Note: reflection causing reactualization is of a primary character). In other words, individual, possibly non-attributive/secondary, but similar characteristics of the fragmentary reflected object (fragmentary reflection may be caused by time limits or other limitation) cause the reconstruction of the constituents of the fixed set and unjustified attribution of the characteristics of the fixed object to the current object which is actually different from the object fixed in the set. For this reason, the information about the object obtained in this way, given its 'subjective' character, can become the source of its illusory perception, erroneous categorization and, consequently, maladjustment.

As for the relationship between centration and situational set, we assume that the reflection of need in the psyche entails initial modification of the psyche resulting in diffuse situational set which actualizes the relevant fixed sets, experience (in a simplified form) and based on this experience defines the realm of potential need satisfiers. The subject addresses environment on the basis of situational set, which uses information about fixed sets and searches for the objects with the above characteristics. The primary data (may be erroneous or partial) obtained at this stage, affects the set in its turn and under the influence of the initial assimilation effect of the object⁶ represented in the set (which is also caused by the tendency to satisfy the need in the simplest and fastest way) is identified as corresponding to the object or desirable characteristics, as a proof of its/their discovery or existence. The object which has been 'proved and discovered' in the above way, becomes more and more concrete and develops into a complete, fully defined object. It is differentiated from other possible objects as well as the objects actually existing in the environment and results in the feeling of confidence in finding the right object which has been searched for. In other words, set ensures exteriorization or objectification of the searched object, formed on the basis of preliminary data/characteristics, in the environment, which should be understood as an analogue to 'subjectification'. The factor of set formed in this way causes repetitive⁷ differentiation of set and due to the attribution of nonexistent characteristics to the object augments the subjectivity of every further reflection, which makes the subject more and more confident in the existence of the desirable

⁶ For more information about assimilation see (ნადარეიშვილი, ფიქსირებული და სიტუაციური დისპროპორციული ფსიქიკური წარმონაქმნების ურთიერთმიმართება, 2020, p. 133). As for the relationship between contrast illusion and decentration (the concept of decentration will be discussed below), this issue needs special examination. It has to be also taken into consideration that in Piaget's work the correction effect of the above multiple centration (shifting to adequate, decentralized reflection) can be only explained from the perspective of contrast resulting from the excessive assimilation which violates the 'latitude of assimilation'. (ნადარეიშვილი, განწყობა და მოლოდინი, 1993). Otherwise, multiple assimilation observed during centration would entail a contrary effect, i.e. even a bigger error and a more inadequate reflection instead of a correction effect (find below) which is described in the given section.

⁷ For the formation of a 'channel' for valence exchange between the object and the subject see (ნადარეიშვილი, დ. უზნაძის „ობიექტივაციის“ ცნების ზოგიერთი ასპექტი, 1922).

object. What has been described and interconnected in the above section of the text is the following: 1) Subjectification – a selection of the characteristics of the potential satisfiers of the need construed in the initially structured set (a) is ascribed to an environmental object, or (b) an ideal image/models construed on the basis of the given selection are projected into the environment, and 2) Centration – (a) concentration on some of the objects having only desirable/searched dimensions of the subjectified givenness (i.e. forming ‘situation’ out of the entire environment), or (b) concentration only on individual characteristics of the object.

As already said, according to Piaget, a problem with centration is a one-sided reflection of the object, its viewing from the perspective of its single dimension, and, therefore, its incomplete reflection (Piaget, J., & Inhelder, B., 1956). Therefore, reflection cannot be adequate in most cases, cannot provide full information, and, consequently, ensure successful adaptation. This means that mental formations developed on the basis of deficient information cannot ensure purposeful activity, which results in the impediment of behavior. According to Uznadze’s theory, when behavior is impeded this arises necessity of ‘objectification’ which will be briefly defined as follows: ‘The function of objectification is the formation of an object (used for a further, additional reflection) from an initial material obtained through unconscious/set -driven reflection” (ნადარეიშვილი, დ. უზნაძის „ობიექტივაციის“ ცნების ზოგიერთი ასპექტი, 1922). Further reflection is naturally expected to provide qualitatively superior information for adaptation purposes.

One of the mechanisms for obtaining complete information and solving the above mentioned adaptation problem related to centration is ‘decentration’, which is ‘...the ability to consider many aspects of a situation, problem, or object’ (<https://dictionary.apa.org/decentration>). Decentration implies consideration of other additional aspects, which makes it possible to compensate for the deforming /misleading effect caused by centration on a single attribute, only (Флейвелл, 1967). ‘But although ‘centralization’ thus causes distortions, several distinct centrings correct one another’s effects. ‘Decentralization’, or coordination of different centrings, is consequently a correcting factor.’ (Piaget, 1960, p. 72).

The above quotations show that in Piaget’s theory decentration implies a complete, multi-aspect reflection of the object (however, Piaget’s works provide a special context which implies escaping from the distortion of perception, from illusions, which is the way to a full, adequate reflection of objects). According to Piaget, due to decentralization relative objectivity is achieved compared to perceptual errors, which is a result of transition from general egocentricity to intellectual decentralization (Ibid., 72-73). Here, as in the case of objectification, arises a necessity of putting cognitive processes into operation. However, we need to point to the difference between the two concepts: ‘Objectification’ in Uznadze’s works serves the provision of a suitable object for the operation of cognitive processes, for the solution of problem with their help, whereas ‘decentration’ is a result of the operation of already involved cognitive processes. It sounds plausible that to define the limits and functions of objectification and decentration, which, according to Piaget, depends on the theoretical perspective of this or that school of psychology (Ibid. p.79), it would be useful to view objectification and decentration as stages of one, single process. Also, decentration as the movement away from the centered, egocentric vision can be viewed as the progression from the undifferentiated stage of existence of the subjective and the objective (specificity of the unconscious) to the stage of their separate existence. This means that decentration involves the elements of objectification and vice versa, that is objectification, in its turn, involves decentration. Such a mutual complementarity, when these two are viewed as constituents of a single reversible process, can be understood as natural if understood as the continuity of the process of obtaining adequate information and an increased involvement of conscious resources in this process.

It seems plausible that unclear differentiation of objectification from the stage where cognitive processes are put into operation, which is considered typical of the decentration stage, is caused by the existence of many types and aspects of decentration. We can assume that an adequate process of

decentration involves several components. Only some of them will be discussed in the current document. In each of them consciousness is involved to a different extent:

- a) Reflection of an object from different perspectives, different dimensions, in the case of which the information already reflected by set becomes the target of an additional, set-driven (unconscious) reflection and the source of additional information;
- b) Participation of a specific cognitive process – thinking, when apart from the present givenness it becomes possible to reflect the interrelationship between phenomena, the regularities of the development of events, and, stemming from this, create a time perspective which implies viewing from the past and future perspectives and its use for the purpose of decentration;
- c) The ability to view the socium from the perspective of others.

Let's discuss the latter version. It is well known what role socialization plays in overcoming centration by decentration. For Piaget the main problem with centration is inability to consider other people's viewpoints to correct personal point of view and form an accurate reality image. As mentioned above, the given issue is discussed due to the necessity of differentiation between objectification and decentration. This stems from the fact that in Uznadze's work the content similar to the decentration process is included in the context of the objectification process: 'Objectification is mainly reduced to the establishment of relationship between the impressions affecting an individual, to their reduction to the experience of pausing. This creates a condition for experiencing the impression that affects us as something objective, as something existing not only for myself, but also for others.' (უზნაძე, განწყობის ფსიქოლოგია, 2004, p. 287). Then Uznadze adds that 'when manipulating objectified objects and events we are not led by these objects' individual, separate attribute, which has no practical importance for me, but by a number of their objective characteristics, which are related to my personal or other people's future needs... you are freed from personal and current needs ...' (უზნაძე, განწყობის ფსიქოლოგია, 2004, p. 288). Although the given excerpt concerns the objectification process, it still enables us to distinguish all the components of decentration mentioned above:

- a) Adequate reflection is not restricted to the environmental information selected because of its relatedness to the actual set or need, and, therefore, having a fragmentary character;
- b) What is reflected is the object's or environment's general characteristics;
- c) It is important that in the context of objectification Uznadze describes 'manipulating objects and events', which should mean that different cognitive processes are put into operation after objectification and decentration have already taken place. By applying this type of analysis to objectification, centration and decentration, we would like to emphasize that here we deal with one, single process, an ultimate purpose of which is the evocation of a purposeful behavior, which is achieved through the construction of factors adequate enough for the formation of set;
- d) As said above, the participation of conscious processes creates preconditions for decentration and distancing oneself from the present, which is possible thanks to the development of time perspective and the ability to view things from the future perspective. It should be noted that the objectification need emerges from current problems as well as future, possible problems. For illustrative purposes we suggest the following interpretation of the causes of different types of objectification distinguished by Sh. Nadirashvili (ნადირაშვილი, 1985, p. 123): In case of 'social influence' and 'Self' objectification, development of events is predicted and those potential future events have a negative impact on present activity (including inability to form and realize set). This implies the necessity of considering potential internal and/or external (social) sanctions when planning a voluntary behavior, which would be impossible without preceding processes of objectification and decentration. The described case proves the necessity of synergic operation of expected future givenness (used for the purpose of decentration) and the social factors mentioned by Uznadze in the context of objectification,

i.e. the possibility of regarding decentration and objectification within a single adaptation context.

Conclusion

1. Issues related to selective reflection of environment, possible inadequacy of such reflection and (relatively) objective reflection need to be dealt with the consideration of specificity of set formation as a process involving different stages/phases (e.g., reflective readiness and behavioral readiness), as well as the specificity of different types and forms of set (e.g., Uznadze's 'diffuse' and 'differentiated' set);
2. 'Centration' (as well as 'subjectification') resulting in inadequate, subjective reflection and deficient adaptation is caused not so much by need as by (a) situational set, and (b) fixed set;
3. 'Subjectification', i.e. transferring subjective, set-driven formation to the external space implies an attempt of its placement in the objective reality, which creates the possibility of contrasting and correcting subjective and objective givenness. Therefore, despite the possibility of subjectivity related errors, in some cases subjectification and objectification (could be also influenced by 'subjectivism') participate in the solution of the same adaptation task: obtaining relatively objective information, which implies the creation of preconditions for the differentiation of the factors of set, resulting in the differentiation of set;
4. Expectancy formed on the basis of subjectification and/or prediction, which implies 'permanent presence' of the object in experience by preserving its identity, is a factor contributing to objectification;
5. Objectification and decentration are interrelated and mutually complementary stages/phases of a single process of obtaining complete and adequate information;
6. Analysis presented in the given text enables us to conclude that despite their close interrelatedness, the processes of objectification, subjectification, centration and decentration could hardly be placed within the concept of 'objectification'. By considering these issues from the perspective of approaches and findings in Uznadze's works, which point to the relationship and mutual complementarity of these processes, we can create vast opportunities for a further elaboration and development of Uznadze's theory of objectification as well as the general Theory of Set.

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