Re-thinking the diversity of knowledge: Cognitive polyphasia, belief and representation

Sandra Jovchelovitch

ABSTRACT

Traditionally, knowledge has been seen as an epistemic form opposed to belief. Whereas for the external observer knowledge carries the possibility and the promise of truth, belief rests on the uncertainties associated with the bias of subject, society and culture. In this paper I would like to problematise this view by proposing knowledge as a more encompassing term that can comprise different epistemic forms and ultimately different rationalities. Knowledge, I argue, is a plural and plastic form that needs to be understood as an action grounded in the network of relationships from which it emerges and in which it becomes possible. This argument rests in the analysis of representation, how it works and the functions it aims to fulfil. In order to capture diversity in knowledge it is crucial to capture the constituents of representation and its social psychological functioning: Once we understand that the aims of representation can be diverse and related to the different objectives and functions of a form of knowing in social life, the over-sharp distinction between knowledge and belief collapses. I shall expand this argument by suggesting that different forms of knowing need to be assessed in terms of what they want to represent and how the desire to represent shapes the process of constructing knowledge. Based on this conceptualisation I shall introduce a typology of forms of knowing which I hope can help to dismantle classical views that see knowledge in terms of a hierarchical scale where lower forms progress towards a higher, better, and more « civilised » form of knowing.

INTRODUCTION

In this paper I draw on the concept of cognitive polyphasia to challenge the distinction between knowledge and belief and to reconsider the notion of knowledge. Traditionally, knowledge has been seen as an epistemic form opposed to belief. Whereas for the external observer knowledge carries the possibility and the promise of truth, belief rests on the uncertainties associated with the bias of subject, society and culture. I want to use the concept of cognitive polyphasia to counter-act this trend and to propose instead that knowledge is as a plural and malleable phenomenon that can comprise different epistemic forms and ultimately different rationalities. Central to this conceptualisation is the analysis of representation, its mode of production and the functions it aims to fulfil. Indeed, I argue that it is the social psychology of representation that conceptually clarifies the plurality and variability of knowledge.

In order to develop my argument I shall proceed in two steps. First, I shall discuss the notion of cognitive polyphasia in relation to debates related to the rationality of knowledge. I locate the origins of the concept and retrieve the work of Piaget and Vygotsky in psychology and Durkheim and Levy-Bruhl in sociology/anthropology in order to delineate the main elements in the inter-disciplinary dialogue that took place between these pioneers. I show that the central problem underlying this dialogue was the link between the rationality of knowledge and the social context of its production.

Second, I shall relate the above discussion to the concept of representation. As a social psychological process representation is dependent on macro-categories such as context, culture and history. Representation, therefore, varies and in so doing it precludes the closure of knowledge; keeping it open and susceptible to the ruses of the context from which it emerges. All knowledge thus is exposed to the possibility of bias because all knowledge starts from somewhere, it is held by someone and it refers to something. To understand this bias is central for any social psychology of knowledge because the problem of « bias » is in fact the problem of the symbolic register. It poses questions related to the endless variation of representation and to the « how», « why» and « what for » of the representational process.

This framework has a twofold consequence: first it provides analytical categories to understand and identify different forms of knowing, and second, it allows us to escape from classical views that see knowledge in terms of a hierarchical scale where lower forms progress towards a higher, better, and

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more « civilised » way of knowing. Rather than dividing up epistemic forms in those which represent reality well, those which represent it less well and those which do no represent it at all, we need to understand the aims of representation and its social psychological functioning in the production of knowledge. This, I seek to show, is at the centre of the theoretical corpus of the theory of social representations and it is a dimension found throughout the approach Moscovici sought to develop.

COGNITIVE POLYPHASIA AND THE RATIONALITY OF KNOWLEDGE

The notion of cognitive polyphasia is particularly apposite to discuss issues related to the nature and dynamic of knowledge. It was introduced by Moscovici in his seminal study about the reception of psychoanalysis in France (Moscovici, 1976) to describe the socio-cognitive heterogeneity of the representational field he uncovered. Definition of the concept can be extracted from La psychanalyse, son image et son public (1976), in particular from chapter ten, part four, entitled « L'intellect collectif: Tour de Babel ou diversite bien ordonnee? » There Moscovici discusses the problem of different cognitive styles co-existing in the same individual or group. He was careful enough to present the concept as a hypothesis but the data provided ample evidence for suggesting that different types of rationality were involved in the construction of representations about psychoanalysis. « The coexistence of cognitive systems should be the rule rather than the exception», he wrote (Moscovici, 1976, p. 285, my translation). And further: « The same group, and mutatis mutandis, the same individual are capable of employing different logical registers in the domains they relate with perspectives, information and values that are distinctive to each. [...] In a general way, one can say that the dynamic coexistence - interference or specialisation - of different modalities of knowledge corresponding to specific relations between man and his social context determines a state of cognitive polyphasia» (Moscovici, 1976, p. 286, my translation).

These different modalities of knowledge were dependent on the context of their production and intended to respond to different aims. The striking finding, however, was that contrary to well-established interpretations of cognitive phenomena, the different forms did not appear in different groups, or different contexts; on the contrary, they were capable of co-existing side by side in the same context, social group or individual. People would draw upon one form of knowledge, or another, depending on the particular circumstances they found themselves and on the particular interests they held in a given time and place. Cognitive polyphasia thus refers to a state in which different kinds of knowledge, possessing different rationalities live side by side in the same individual or collective.

In developing the notion of cognitive polyphasia and using it to make sense of his data Moscovici was positioning himself within a particular tradition of thought and debate. The concept expresses Moscovici's engagement with a debate that fired the imagination of the social sciences in the beginning of the 20th century and he first came across as a young student of Piaget: the debate about the link between knowledge and social context and how this link shapes the rationality of knowledge. Indeed, Moscovici's work has been deeply marked by concerns related to the rationality of knowledge and in particular with the rationality and status of common sense. In psychology, as Moscovici (1998) himself pointed out recently, the problem of reason was pervasive. Both Piaget and Vygotski, not to mention James and Freud, grappled with the problem of consciousness, its formation, development and the rationality it produces.

In order to understand his specific contribution to the investigation of the link between knowledge and context it is important to trace the origins of the debate on the diversity of knowledge and the key issues that are involved in it. This will also allow us to link the problem of difference in forms of knowledge with the problem of representation.

Knowing in context: revisiting ancestors

The attempt to understand and explain how social context intersects with knowledge is not a new concern. Indeed, the problem has a long history in the social sciences and it has been at the heart of
psychological, sociological and anthropological debates related to difference in forms of knowing. The theory of social representations as a whole has developed in a direct relationship with the early debates about the rationality of knowledge conducted by psychologists and anthropologists from both sides of the Channel. These debates, which were deeply influenced by phenomenological traditions, sought to explain how the rationality of knowledge intersects with the concrete social conditions of its formation. To establish that to each form of knowledge there corresponds a fundamental set of social relationships was central to the work developed by the intellectual ancestors of the theory of social representations. Piaget, Vygotski and Freud in psychology, Durkheim, Mauss and LeVey-Bruhl in sociology/anthropology struggled over the problem of context and its relations to knowing.

In the developmental psychologies of both Jean Piaget and Lev Vygotski there is a clear understanding of the social nature of logic. Both research programmes have demonstrated in detail the manner through which society shapes the development of logical structures in the child and how different types of relationships lead to different ways of knowing. Piaget, in *Les opérations logiques et la vie sociale* (1967), discussed the problem extensively. There he stated that once we acknowledge the founding role of social interaction in the formation of logic, the problem is not the impact of the social anymore, but which kind of social interaction is prevalent and to which logic it leads. The analysis of constraint and cooperation - the two extreme types of interaction Piaget studied - provided further support to the claim that different kinds' of social interaction produce different logics.

Vygotski's and Luria's study in Uzbekistan and Khirgizia sought to determine whether the huge cultural differences between the two regions had an impact both in the basic form and content of people's thinking (Luria, 1979). They were clearly influenced by Durkheim's ideas that mind originates in society and well aware of the debates between Levy-Bruhl and W.H.R. Rivers. Their study was important not only because it compared how different cultures lead to different thinking processes; it was in fact unique because it was conducted under conditions of extreme social change afforded by the Russian revolution. The findings were unequivocal: changes in the organisation of thinking are linked to different types of activity and specific social structures. Besides, these changes can occur in a relatively short period of time. Thanks to these path-breaking studies today we can state that both knowledge and the corresponding mentality of the knower are organically bound to the social context in which they are produced.

Variation in knowledge: hierarchy, exclusion or co-existence of difference?

From the proposition that knowledge is bound to community/social context, it follows the almost obvious derivation that knowledge varies. There is an infinite number of different social formations, which produce an infinity of different forms of social knowledge. And that is where the real problem begins. If there is an infinity of social knowledge, how do they compare? To acknowledge variation in, and difference between, social knowledge is not the end of the story. In fact, it is only the beginning. The problem, I would contend, is not so much that of understanding that psychic and cognitive structures change as social conditions change. The problem is the old problem of modifiability, the very centre of an enlightened rationality: how lower forms progress towards higher forms, and how these higher forms, once established, displace the «lower» forever.

Variation in forms of knowing thus raises the crucial issue of how to conceive of this variation and what are the explanatory frameworks that we are going to use in order to make sense of the difference embedded in the variation. How does knowledge change from one form to another? Is there a progressive scale whose overall framework encapsulates the development of all knowledge from lower/primitive/simpler forms to higher/civilised/complex forms? To put it in other words: is the knowledge of a child a primitive form of the knowledge of an adult? Or is the knowledge of cultural others (primitives or "inferior peoples" as the literature of the 19th century called them) a rudimentary form of the logic to be found in Western, civilised societies? These questions suffice to demonstrate why these issues continue to be our contemporaries. The idea of a progressive scale leading to one, more developed, and better way of knowing that stands as the norm to all others, is pervasive. Not only it is so in the scholarly traditions of psychology and other social sciences. It has also found its way into
applied settings in areas ranging from health promotion, to development initiatives in non-Western societies (Campbell and Jovchelovitch, 2000), to the clashes between science and lay understandings in contemporary public spheres (see for instance debates on biotechnology, vaccination, environmental issues, agriculture, etc.).

In Durkheim and Piaget it was a matter of course that higher forms of knowing, to be found in adults and «civilized» peoples, were bound to displace lower forms, found in children and «primitives». Knowledge progresses towards a full mastery of the objective world based on logical operations that leave behind all that is myth, belief and superstition. Piaget’s paper on logical operations and social life argues that socialisation or the internalisation of society's rules by the child, is the *sine qua non* condition for the emergence of logic and the «education» of reason. However, he notes, not all socialization has the power to produce logic. Primitive societies, whose socio-centricism is analogous to the egocentrism of early childhood, fail to produce the type of social bond that is required to the achievement of rational knowledge. It is only in societies where individuation and argumentation prevail that reason proper can be fully achieved.

Lévy-Bruhl (1910, 1975) and Vygotski (Vygotski & Luria, 1993) problematised this view, but they did not escape completely from the idea of progress. Even Lévy-Bruhl, who turned these issues upside down, was not completely immune to the notion of progress. While examining the functioning of pre-logical mentality (chapter 3 of *How Natives Think*) he stated that logic is the necessary condition for the liberty of thought and «the indispensable instrument of its progress». The Vygotskian research programme was not as explicit as Piaget's but sustained a very similar concern. Socialism was to produce a society based on science, capable of leaving behind myth, superstition, belief and common sense. Comparing the knowledge of peasants in Central Asia, who were considered to be the bearers of irrational and backward beliefs, and the new rational subject produced by the novel societal conditions of socialism, was meant to show how social engineering of one particular kind could produce rationality.

Intrinsic to the work of these pioneers is the unwritten assumption that de-traditionalised public spheres based on argumentation, science and the weakening of tradition are the sites *per excellence* of all possible rationality. They alone produce knowledge, a knowledge that tends to progress towards the full mastery of the objective world based on logical operations that leave behind myth, belief and superstition. The obvious question then is to ask: What about «other» kinds of social organisation? Can they produce logic and rational knowledge?

As much as Lévy-Bruhl may have valued logic, this did not prevent him from developing one of the most devastating critiques of the very idea and re-setting it in a completely novel fashion. His work on «primitive» mentality constitutes, in my view, one of the most important moves towards the decentration of worldviews, and there can be no doubt that it was from him more than from Durkheim, that Moscovici drew inspiration to propose his «state of cognitive polyphasia». Lévy-Bruhl dismantled the dominant conception of his time; which sustained that there was only one type of rationality, and any evidence to the contrary was nothing but a set of early, underdeveloped stages, which were destined to progress towards the «one type». He showed that logic itself is a malleable category and that different logics are no less logical than one's own. Indeed, all the attempts to frame different logics with logical categories of our own show nothing but the limitations of our views. He also demonstrated that different logics are not mutually exclusive and do not operate under the imperative of replacement. When comparing the so-called pre-logical mentality of «primitive» (sic) peoples with the logical mentality of developed ones, he was adamant that «logical thought will not entirely supersede pre-logical mentality». That is the case because logical thought cannot fulfil the functions it excludes and a certain portion of pre-logical thinking will subsist. Lévy-Bruhl's insights into the relationship between cultural patterns and modalities of knowing helped to illuminate the genesis of the semiotic codes that shape how human communities make sense of the world and behave towards it.

There are many parallels between Vygotski's notion of development and the views proposed by Lévy-Bruhl. While Vygotski was critical of Lévy-Bruhl in various aspects of his work they coincided in the more fundamental notion that transformation in knowledge is discontinuous and that there is no replacement in forms of knowing but co-existence (Vygotski & Luria, 1993). Rather than conceiving
the development and transformation of knowledge within a progressive linear scale that replaces lower with higher forms, they saw each form of knowledge as an entity in its own right. Forms of knowledge can relate to each other but they are not contiguous. They need to be understood in relation to the context in which they are used and in relation to the functions they fulfil. Forms of knowledge that are different co-exist and can be contradictory, but this is not a problem if you step out of formal logic and duality in conceiving opposites to adopt a dialectical approach (Markova, 1983).

Moscovici was strongly influenced by these insights (Moscovici, 1998, 2000) and the notion of cognitive polyphasia corresponds to a continuation, this time within social psychology, of a debate that had started much earlier and of which Lévy-Bruhl proved to be one of the most important sources of inspiration. The hypothesis of cognitive polyphasia, Moscovici argued, could open up new perspectives in social psychology as it leads us to study not only the correspondences between social situations and modalities of knowledge, but also the transformations and the trade-offs between different modalities of knowledge.

In my view, the key theoretical proposition underlying the concept of cognitive polyphasia is to ground the social psychology of knowing in the dynamics of social interactions and cultural contexts. The concept allows for recasting the problem of knowledge: knowing is an activity that can only be understood in relation to a context from which it derives its logic and the rationality it contains. Knowledge thus must be seen as a dynamic and continuously emerging form capable of displaying as many rationalities as required by the infinite variety of sociocultural situations that characterise human experience. People draw one form of knowing or another depending on the requirements of the social setting and the social psychological configuration of a field. These different forms can co-exist rather than exclude each other; instead of leaving behind forms of knowing socially treated as «backwards », «primitive» or «childish», human communities continuously draw on the resources different knowledges offer. In addition to classical studies in social representations, recent research has solidly corroborated this fact, showing that the social knowledge held by human communities is made by a co-existence of science, belief, religion, ideologies amongst other forms (Wagner et al., 1999, Wagner et al., 2000; Gervais & Jovchelovitch, 1998; Jovchelovitch & Gervais, 1999).

THE PROBLEM OF REPRESENTATION: UNDERSTANDING MEDIATION IN KNOWLEDGE

Central to the above conceptualisation is the problem of representation. The last step of my argument is an analysis of the representational form and its mode of constitution. The variability of knowledge and its relation to context becomes clear, as we understand that all knowledge is constituted by a desire to represent. Understanding «how», «why» and «what for» knowledge seeks to represent allows us to identify the multiple logics of which it is capable.

The notion of representation is central to the theory of social representations and to, any epistemology or theory of knowledge. It is also central to political theory and any theory of democracy and citizenship. The notion has been controversial from its inception and it is not my intention here to map out its philosophical trajectory or how it is used in different strands of the social sciences. In psychology it is certainly the case that representation has had a turbulent history and its crucial, indeed constitutive, role in the formation of the psychological subject has not always been seen in a consensual way.

The problem of representation starts with the non-immediacy of the existing world for humans. When referring to the existing world, note, I am not referring to some « outside », external reality that is independent of human knowledge. I am referring to everything that is there for people, including their own selves, others, physical objects, social and cultural artefacts, accumulated knowledge of all kinds, in short, everything. Following the developmental psychology of Piaget (1977, 1975, 1969) and Winnicott (1988, 1971) I shall call this everything the «object world». The object world does not give itself to humans perfectly and we are not equipped to just conform to it. The object world can only become knowable to us if we take the trouble of representing it. This takes both time and hard work,
involving a passionate and intensive process of co-construction between infant, caretaker and object world (Duveen, 2001, 1997; Valsiner, 2000).

Representation is a mediating structure between subject-other subject-object. It is constituted as labour, that is to say, representation structures itself through the labour of communication and action that links subjects to other subjects and to the object world. In this sense it is perfectly plausible to say that representations are embedded in communicative action (Habermas, 1987): it is communicative action that forms them as it constructs in the same and single process the participants of the communicative process. Communicative action involves language as it involves action of non-discursive kind; these are manifested in everyday practices, institutions of various kinds and the informal structures of lifeworlds (Habermas, 1998).

The communicative work of representation produces symbols whose force rest in their capacity to produce meaning, to signify. Representation works by putting something or someone in place of something or someone else: this displacement of objects and people that gives to each and to all a new configuration is the essence of the symbolic order. It shows clearly that creation and construction are at the very basis of the symbolic register, since the operations of the symbolic are ontogenetically linked to, and involve residuals of, the ability for pretend-play developed in early childhood. It also demonstrates the connection between the construction of symbols and the production of art and culture, since the latter is the accumulation of meanings and symbols that stick over time.

This conception of representation as a mediating structure belonging to the «between» is depicted in Figure 1:

![Diagram of the process of representation](image)

Fig.1. The constituents and mode of production of representation.

This model represents a slice of the representational process in time. Bauer and Gaskell (1999) project the above figure in time and propose the «Toblerone Model» which adds the crucial dimension of project to the representational process. As they note, « to this basic triangle a time dimension, both past and future, is added to denote the implied or espoused project (P) linking the two subjects and the object» (p.170). The problem of time, which corresponds to the vital problem of history, is thus clearly integrated into the representational process. We have thus subject-subjed-object-project-time-context-communication-action as the foundational categories that comprise the overall phenomenon of representation.
Knowledge thus involves effort and desire to re-present. Understanding «how», «why» and «what for» knowledge seeks to represent allows us to identify the multiple logics of which it is capable:

(i) The «how» of representations rests on communication and interaction. Representations are always produced in communicative action but not all communicative action is of the same kind. Face-to-face communication in conditions of everyday life differs from large communication systems and the mass media of communication have radically redefined the production, circulation and transformation of symbolic systems in social life. To understand the «how» of representation involves understanding the old and new dynamics of interaction between producers, mode of production and products of the representational process;

(ii) The «why» of representations indicates the rationality of meaning: it is expressive of self, identity and project. The rationality of a representational system not always conforms perfectly with: accuracy in cognition; it can be based on commitment to the knowledge system itself, and this is the case with most belief systems, specially religious ones. The «why» of representations is directly linked to the «what for» knowledges seek representation;

(iii) The «what for» of representations indicates the function they fulfil in social life. I identify at least five functions for the representational process: identity, community, memory, institutionalisation and ideology. To frame thinking and action, to express identity, to allow communication and social integration, to create a memory of the history of a social group, to impose domination and to institute projects, these are all functions representations seek to fulfil depending on the objectives of types of knowing in social life.

It is here that the distinction between knowledge and belief collapses. Belief is knowledge, except that it is knowledge of a particular kind. Its alleged irrationality, its link with «superstition» and traditional societies rests more on value judgements linked to the predominance and power of knowledge systems such as science than on the evaluation of the function and aims of belief in social life. As any other form of knowledge belief seeks to represent aspects of the world while providing meaning, identity and directives for a group of people. Its presence in social thinking is not exclusive of traditional societies and far from being displaced by science, it has re-emerged as one of the key dimensions of social life in conditions of globalisation and late modernity.

Knowledge in this sense is a system of symbolic representations organically linked to the social psychology of contexts and entangled productively in a way of life and its culture. Variation in knowing corresponds to variation in the forms of social relating that constitute both knowledge and community. As a heterogeneous and malleable form whose rationality and logic is not defined by a transcendental norm, knowledge must be assessed in relation to the social, psychological and cultural context of a community. Empirically the locus of enquiry on knowledge moves from an apparently «finished» and «closed-off» final product to the fundamental relationships that constitute the «between» of knowledge formation. These relationships and their empirical actualisation as community/context become the focus of the investigative effort.

CONCLUSION

In this paper I have argued that rather than juxtaposing belief to knowledge, belief is knowledge of a particular kind. I have retrieved Moscovici’s concept of cognitive polyphasia to discuss the variability of knowledge and the role of representation in this process. After locating the concept in classical debates about the rationality of knowledge, I have suggested that cognitive polyphasia permits recasting the problem of knowledge as a plural and malleable phenomenon that can comprise different epistemic forms and ultimately different rationalities. I have shown that it is representation, as a mediating structure, that supports this conceptualisation. Indeed, the analysis of the representational form, its constituent elements, mode of production and aims clearly shows that knowing is an open and variable process. Rather than evolving from one form to another in a linear progress, different forms of knowledge co-exist. This plurality is a resource which communities and individual people use to make sense of the world and orient themselves in it.
By retrieving the contextuality of all knowledge and recognising the legitimacy of its diverse logics and forms we can contribute to the processes of dialogue taking place between different knowledges in a variety of contexts. The acknowledgement of the diversity of logics embedded in worldviews, and above all, the acknowledgement of the co-existence of different rationalities in the same group of people erases much of the deforming effects of Euro-centric constructions and provides us with a wiser concept of reason, a reason capable of understanding its internal difference and establishing a dialogue with its other.

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