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Introduction

Book section

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Reintroducing Knowledge in Context

Sandra Jovchelovitch

Knowledge in Context appeared in 2007 and in the years since its writing and publication, much has changed in psychology, in the world and in my own thinking. I am thus pleased that I can return to the book and this new introduction gives me the chance to reflect anew on the framework and analysis I originally proposed. An engagement with cultural and developmental psychology and empirical research on human development under contextual adversity, has given me some new lenses to look at the issues discussed in the book. Even though this did not change my outlook entirely, my understanding of sociality and social representation as evolved foundations of human psychology has expanded considerably. At the same time, the context and landscape of psychological science has changed. Work on the socio-cultural psychology of representations has developed and a more fine-grained picture of the dynamic, ever changing and communicative nature of representations is available. This work is multiple and heterogeneous and combined it elucidates issues of ethics and dialogicality, social change, identity, cognitive polyphasia and representations and action, all of which contribute to our understanding of knowledge in context (for an overview, see Sammut, Andreouli, Gaskell and Valsiner, 2015). Yet during the same period, psychology, a rich discipline ranging from the biological to the social sciences, has become less heterogeneous and more dependent on the vagaries of methodological determinism and the empiricism that goes with it. There is less space for theory and a stronger emphasis on the production of short, self-contained pieces of empirical research that address a limited, at times narrow, domain. While appreciation of culture and context has grown, the replication crisis has shown how frail and limited is psychology's understanding of its own historicity and contextual determination. Outside socio-cultural strands of the discipline, there continues to be little recognition of the scope and depth of changes required if psychological science is to engage effectively with historical time, cultural context and the majority world (Kagitçibaşı, 1996). Its evidence base is limited, centred as it is on WEIRD populations mainly (western, educated, industrial, rich, developed; see Henrich, Heine, and Norenzayan, 2010).

Part of the problem continues to be the treatment of context as an abstract domain, approached either as a general process or as an unqualified independent variable, carrying little if any theoretical power. Context is poorly if ever defined and the unspoken assumptions that guide the manner in which psychologists study it rarely unpacked (see Israel and Tajfel, 1972; Cole, 1991; Farr, 1996 and Bar-Tal, 2000 for early statements of the problem and Greenfield, 2017 for a more recent assessment). Treating contexts in abstract precludes the analytical steps that enable a theory of context and a more robust understanding of the historical, cultural and political specificity of the various niches in which mind and behaviour evolve. Notwithstanding the theory and evidence amassed by socio-cultural psychologists over the decades, much psychological research treats US-EU contexts and peoples as universals seeing other places and people as 'particular' cultural others. Lack of contextual elaboration precludes a full appreciation of how much this type of psychology is itself dependent on implicit cultural assumptions and the ethical problems entangled in electing, be it unintendedly or out of theoretical naivety, one particular socio-cultural niche as the benchmark against which everything else becomes 'other' (chapter 2, see also Keller, 2017 for a recent view). This debate matters today as it has mattered throughout the history of psychology, because human development does not produce one single pathway that encompasses all of human cognitive and societal capacities; societies, cultures and cognitive processes are adaptive and thus vary historically and geographically. Importantly, there is logic, rationality and wisdom in all local systems of thinking and feeling, and no solid scientific and indeed moral foundation for identifying in the cultural other, the poor and the non-familiar cases of cognitive deficit, deviation and irrationality.

Knowledge in Context sought to settle accounts with this trend in psychological science. My research, as well as my life, in Brazil and the UK reiterated to me over the years that knowledge develops not only as a cognitive construct but also as an emotional, social and cultural process. I set out to demonstrate this claim through the analysis of representation and its relation to culture and public spheres. I proposed to study representation through its extended 'architecture': a triangle of communicative mediations between self-other-object, in time and space, which drew on Moscovici's model of the semiotic triangle Ego-Alter-Object (Moscovici, 1984). My intention was to move the psychology of representation from the lonely mind to a space of relations between minds and between minds and social artefacts. Since then my thinking has been enriched by insights and research on extended cognition and the developmental approach.

Representation as Extended Cognition

A central argument of the book was that the extended architecture of representation underlies all forms of human knowledge and explains its variation in different public spheres (chapter 1). To develop the argument and establish a socio-cultural psychology of knowledge, I revisited debates and exchanges that took place at a time when disciplinary boundaries mattered much less than today. I engaged with pioneers such as Piaget, Vygotsky, Durkheim and Levy-Bhrul, and took the psychology of representations proposed by Moscovici with a very open vista towards other areas of psychology and the social sciences as a whole (chapters 2 and 3). As I discuss in the book, all of these pioneers, albeit in different ways, reaffirm the triadic model of mind and the primacy of intersubjectivity in the study of knowledge. From this perspective, the production, consolidation and transformation of knowledge is not the product of the individual mind alone, but extends into self-other interactions and objects, which exist in a socio-cultural niche that is itself constructed. Humans develop mind through participation in the socio-cultural environment (Vygotsky, 1978). Vygotsky's genetic law of cultural development not only inscribed social interaction in the core of human psychology, it also formulated its primacy: "any function in the child's cultural development appears twice, or on two planes. First, it appears on the social plane, and then in the psychological plane. First it appears between people as an interpersonal category, and then within the child as an intrapsychological category" (Vygotsky, 1997). In this sense, my original proposition that representation is an emergent property of minds in context continues to hold. I see it today as part of a wider research stream that includes various forms of cultural and cross-cultural psychology, situated cognition and communities of practice. Evidence and thinking supporting the view that psychological phenomena are not simply inside the head but are 'extended' into bodies, artefacts, relationships and institutions has increased and diversified.

New research and thinking about the co-evolution of knowledge and the socio-cultural environment shows that for humans, knowing the world is both *being in* the world and *making* the world: our ability to build dialogic representations, and with it, understand others and ourselves is extended in our bodies and builds our communities and public contexts (Perret-Clermont, 2015; Trevarthen, 2012, 2015; Tomasello, 2016). This is in tandem with our evolutionary history. We are cooperative breeders and rely on alloparenting, involving many others in the care of our babies and young children (Hrdy, 2009). Our unique cognitive skills first emerged to solve problems of social coordination (Humphrey, 1976; Tomasello, Melis, Tennie, Wyman, and Herrmann, 2012), we point from a very young age, inviting others to share attention with us and experience the object or situation we are interested in (Bruner, 1983). Of all great apes, we are the only ones who evolved language and culture transforming signs into complex symbolic structures that live on in stories (imagined and real), rules, institutions and artefacts. Intersection between multiple communicative dyads form processes in which community-level cognitive structures emerge and consolidate in institutions and over historical time, enabling us to establish the 'transcendental social' (Bloch, 2008)

that feeds-back and itself becomes a driver of the psychosocial processes that produced it in the first place.

Developmental Lines: Ontogenesis, Sociogenesis and Phylogenesis

Nowhere is the relationship between mind and context more evident than in the development of the child and in *Knowledge in Context* (chapters 1 and 2) I turned to traditions preoccupied with the inter-relationships between the ontogenesis and the sociogenesis, exploring a psychological field that connects the development of children to the socio-cultural evolution of adult society. Human infancy carries us to adulthood through emotional, social and cultural worlds that are much more than a simple preparation stage for the society of grown-ups (Furth, 1996; Keller, 2007; Piaget, 1995); rather, human development shows from the beginning that our human nature makes us interdependent on collective forms of acting and thinking (Duveen, 2013). In this sense, observing the development of knowledge in the socialization of human infants casts light not only on the social and emotional foundations of cognition but also reveals much about how our psychology and evolutionary history shape society and the dynamic of public spheres.

New forms of theorising about evolution (Boyd, Richerson and Henrich, 2011; Franks, 2013, 2011; Gilbert, Bosch and Ledón-Rettig, 2015; Hrdy, 2009; Humphrey, 2012; Semin and Echterhoff, 2010; Tomasello, 2014) coupled with new technologies of research not available to early pioneers have added to the developmental, or historical, approach and complicated my thinking in the best possible ways. Today, more than in the 2000s, I can appreciate the importance of the third line of development considered by Vygotsky and Luria: human psychology relies on ontogenetic, sociogenetic and phylogenetic lines. Linking the ontogenetic, the evolutionary and socio-cultural lines has been the hallmark of socio-cultural psychology and research in both psychology and related behavioural disciplines have confirmed the necessity and vitality of the triadic conversation between micro-psychological, macro-societal and evolutionary processes. The futility of dichotomising nature and nurture and the emphasis on development as an approach to understanding the intertwining history of our bodies, minds and societies in fact integrates the three lines of development Vygotsky and Luria (1993) proposed in their early work. Humans' long ontogeny evinces the social foundations of our biological development and opens the species to pedagogy and cultural transmission, which in turn make us social and historical beings.

In what follows I draw on these central theoretical assumptions to offer a brief reappraisal of the themes I explored in *Knowledge in Context*. I will recast the extended architecture of representation as the basis of our common ground and discuss how change in public spheres relate to transformations in the dynamic of social representations. I will expand my original argument with new research and thinking on these issues focusing primarily on social change, identity and cognitive polyphasia. In the final section of this introduction, I will use this reappraisal to consider the new psychology of the networked public sphere, charting developments that were not at all present when I wrote the book. I will examine the potentials and challenges introduced by the new digital technologies of the participatory web and address the manner in which virtual publics challenge communities of attention, re-draw boundaries between the public and private spheres and pose dangers to the communicative and ethical impetus that forms knowledge, the common ground and, at the extreme, the very core of ourselves.

1. Our Common Ground: Togetherness in mind and community

A major theme of *Knowledge in Context* was the relationship between knowledge and togetherness, which I explored through the conceptual link between representation, community and culture. The focus on community of minds and the communicative action between minds sought to study *societal*

and cultural thinking, a we-type form of extended cognition that goes beyond individual thinking inside the head to conceive a co-constructed system of shared meanings and practices. Importantly, this system comes into being through modalities of interaction and communication that evolve in time (Bauer and Gaskell, 1999, 2008) and are patterned by culture (chapter 3, 4 and 6). Thinking together is for humans a major driver of togetherness itself, a dynamic cycle of mutual constitution in which sociality forms cognition and builds a system of shared meaning that in turn builds the social representations that connect participants and establish specific cultural communities. Thinking together depends on togetherness and the ways in which it is enacted, so that “all higher mental functions are internalized social relationships” (Vygotsky, 1978, p. 74). Human psychology is thus intertwined with the exchanges experienced in public worlds. These exchanges constitute the basic architecture of human cognition and without them there would be no progress in human understanding, learning and cultural transmission.

Understandings of how ‘we’ forms of cognition enable our common ground continue to evolve. New work on shared intentionality and the epistemological and ethical triangle of knowledge contribute to recasting the importance of common ground and the troubles that follow when it is undermined. The notion of shared intentionality, as proposed by Tomasello’s research programme on comparative development and Ivana Marková’s work on the dialogical mind are exciting developments in this direction.

Shared Intentionality

Shared intentionality is a unique feature of human cognition, differentiating humans from their closest relatives *pan paniscus* (Tomasello, 2014). The phenomenon should be of great interest for socio-cultural psychologists studying knowledge in context because it is the result of a system of collaborative action that is at once outcome and driver of social and cultural formation. In this system, which is triangular and compatible with the semiotic triangle of mediations, interlocutors form a dual attention structure with a shared focus on 1) coordinating understanding of their own individual role and of the role of their interlocutors, and 2) building a coordinated representation of the task or the joint goal. Acting together, to put up a tent for example, participants understand reciprocity and reversibility of individual roles so that “I can do one part of the task and you can do another and we can swap roles if needed because we both understand each part of the process from learning from each other. Through our relations, we share the goal of setting up the tent”. Shared intentionality is thus an emergent property of inter-relations between minds, in line with Mead’s original insights on perspective-taking and the socio-cultural traditions of Piaget and Vygotsky. Its systematic analysis specifies the microgenesis of our minds and our common ground as two sides of the same process. Research on shared intentionality adds to all previous triadic models that elaborated on collaborative interaction between minds as motivational driver and causal agent of cognitive outcomes. New, however, is the ability to demonstrate these theoretical insights by combining the ontogenetic, sociogenetic and phylogenetic lines through comparative research on children, culture and non-human primates.

Epistemological and Ethical Triangle

A second important development is the expansion of Marková’s dialogical approach to mind and social representation through the analysis of the epistemological and ethical triangle of knowledge (Marková, 2016). This work foregrounds the interdependence between Self and Alter as the basis of all knowledge and as the basis of our ethical life. Mind of Self and Other are interdependent in and through sense-making and creation of a common cultural ground. Marková (2016) takes this interdependence as the basic tenet to build an argument that is both historical and psychological. For example, the historical development of perspective as a form of symbolic representation culminated in the Renaissance and revolutionised the understanding of the world, from unidimensional and finite to multi-dimensional and infinite. The perception that reality is seen

through multiple perspectives opened up an extraordinary unbounded horizon for human understanding when it first emerged; a historical transformation of the human mind that displaces the idea of a single view by multiplicity of points of view, changes the nature of knowledge production as well as beliefs about the human condition. Evolution may have predisposed us to recognise faces and engage with others but several centuries of historical change were required to build the perspectival representations that make the dialogical mind. Perspectival representation, a coordinated process that occurs in mind, art, knowledge, philosophy and political transformations is historical as well as psychological.

Marková's research illuminates the sociality of mind by zooming on dialogue and the various ways in which the triadic relations between Self-Alter-Object are realised, enabling and, at times disabling, our common ground (Marková, 2017a, 2017b). The analysis of what makes and breaks the epistemological triangle has spearheaded new conceptual and empirical research on the extended architecture of representations and their communicative basis. This work contributes a detailed, fine-grained analysis of Self-Alter-Object dynamic demonstrating the microgenetic processes that pertain the encounter between different knowledge and worldviews as they meet and clash in public spheres. These include understanding more how individuals elaborate representations in the context of relations with institutions and their own communities (Mouro and Castro, 2016), outlining different modalities of communication such as consensualisation and reification (Batel and Castro, 2009) and identifying enablers and barriers to communication such as semantic barriers and semantic facilitators (Gillespie, 2008). Studies on the dynamic of identity and acculturation (Andreouli, 2013; Howarth, Wagner, Magnusson and Sammut, 2013) and the role of imagination and experience in human development (Jovchelovitch, Priego-Hernandez and Glaveanu, 2017; Zitton, 2016; Zittoun and Gillespie, 2016) have shown the implication of identity, imagination and culture in the development of knowledge of self, other and community. Combined, this work adds conceptually and empirically to our understanding of how systems of shared meaning and practice operate in building or undermining the common ground. It shows that rather than direct copy or imitative pedagogical transmission from one group to another or to one generation to another, cultural beliefs, representations and practices are generated, transmitted and transformed by a) linguistic, argumentative and negotiated modes of Self-Other interaction and b) psychologies motivated by identity, imaginations, historical meanings.

Disruptions in Knowledge and Common Ground

A second and central insight of Marková's approach refers to the ethical foundations of our ways of knowing and the dangers involved in the disruption of the epistemological triangle. Marková argues that the meeting between Self-Alter-Object comprises an irreducible ontological, ethical and epistemological unit. The Other, as the Self, is not an 'it' that does not matter. The Other supports and enables the Self, makes a 'call' on Self and demands an ethical stance where Self takes responsibility for how it understands and makes sense of the Other, for how it positions its knowledge and action towards the Other, for how it reflects on itself within the parameters of a moral framework. This ethical and ontological unit of Self and Alter extend into the epistemological triangle of Self-Other-Alter (Marková, 2016). Developmentally, it is not accidental that human children learn about a moral framework at the same time that they begin to take the perspective of the other, understand themselves as selves, and importantly, understand that they share common cultural ground with other members of their community (Liebal, Carpenter and Tomasello, 2013). The ethical, the ontological and the epistemological partake a developmental history, being as they are embedded in the psychology of Self and Other relations. Interactional epistemologies, which are formed through communicative action, are at the same time ontological and ethical units containing trust, responsibility and imagination.

This analysis enables not only an understanding of what makes the common ground but also and importantly, an appreciation of its pathologies and distortions. Marková develops a devastating assessment of how the contemporary domination of markets, bureaucracy and technology undermines the very core of our human psychology and breaks the dialogical triangle. Historical examples such as Nazism and Stalinism (Marková, 2017a), are analysed in conjunction with current phenomena such as bureaucratization and consumerism (Marková, 2017b), in which relations between Self-Alter-Object are replaced by purely instrumental and technocratic relations between Self-Alter-Thing. This work makes clear how these forces break the unit between ethics and epistemology and the connection between cognition, emotion and human goals, challenging the dialogical mind. These ruptures are particularly relevant to consider in today's public sphere, and in the next pages I will draw on this model to assess how new modalities of communication and interaction unsettle the common ground, our ability for social thinking and the very centre of our individual lives: the self.

2. The Psychology of Community and Public Spheres

Another major theme of *Knowledge in Context* was to establish the psychological dimensions of communities and public spheres (chapter 3) as the common ground of our shared human life. I theorised community through the notions of boundary, belonging and lifeworld, created and sustained by social memory and story-telling. I argued that key to community life is the creation of a public sphere, an arena that is visible, open and common to all. I drew on Arendt, Mead and Habermas to propose a social psychology of public spheres as a space in which Self and Other meet, interact and construct representations of themselves, others and issues that matter for their communities. In public arenas, individual actors encounter the otherness of a plural, many-voiced and multifaceted world that presents to them the ineradicable fact that being many and not one inheres our human condition (Arendt, 1958).

At the centre of my argument was the idea that all human communities, in developing specific socio-cultural patterns of living together, build public spheres. Notwithstanding how much I admire and am indebted to Habermas in framing my way of thinking social psychology, I was dissatisfied with his concept of public sphere as unique to the liberal model that emerged in Europe in a defined historical period. I suggested instead that rather than limiting a theory of public life to the European case, we need an expanded theory that encompasses a wider range of human experiences. Public spheres pertain to the universal human rather than to a particular sub-set of humans. They are the spaces in which a community's common ground is build (or destroyed), where communities of attention focus on issues that matter to them and where social actors come to build shared knowledge, i.e, the set of representations, ideas, values and know-hows that configure their culture and common sense. These processes occur in places as diverse as the UK, Afghanistan and the Tikuna tribal community in Brazil; they include social rituals as diverse as carnivals and religious processions and parliaments and social media. In this sense, public spheres are a human universal that presents in all cultures albeit in different forms.

Knowledge in Context's point of departure to explore different forms of public life was to compare social and collective representations in traditional and de-traditionalised communities. I drew on Durkheim and Moscovici's conceptions of how socio-cognitive formations correspond to different types of public sphere. Durkheim's notion of collective representations, described as the 'soul' of the community and the basis of social solidarity, captures the common ground as homogenous and all-encompassing and are the mode of thinking of traditional public spheres; Moscovici's notion of social representations introduces diversity and contestation and are the mode of thinking of de-traditionalised public spheres.

Societal Change: Diversity in the Public Sphere

My understanding of these issues in the early 2000s was very much influenced by the sociology of late modernity and I worked with Moscovici's formulation, arguing in the book that we needed to move away from a conception of excessive homogeneity. A new diversity in worldviews and practices unsettles homogeneity and disrupts the symbolic content of representational systems: collective representations do not go away, but they co-exist with social representations, which are as much about shared and consensual symbolic codes as they are about contradictory and unresolved ones (chapters 3, 4 and 5). A theory that conceived of any one particular public sphere as containing one set of collective or social representations was no longer plausible, given the new regime of societal exchanges and global coordination so well described by the sociologists of late modernity. With the structure of public spheres changing economically and politically, we are bound to observe changes in their social psychology.

Since then, Castro (2012) has taken up Moscovici's typology of representations as polemical, hegemonic and emancipated (Moscovici, 1988) to propose a cycle of societal change based on the emergence, institutionalisation, generalisation and stabilisation of different types of social representation. This model considers social representations in plural societies in terms of their sociogenesis, or developmental history: representations evolve and acquire different forms depending on levels of group cohesion and plurality of views in the public sphere. Its contribution is to show that multiple forms of representation co-exist in public spheres, interacting and changing as a function of social, political and psychological processes. *Polemic* representations, as the name indicates, are highly controversial and normally held by one or more sub-publics. They are consensual within the in-group but not widely shared and generate antagonistic relations between groups in the wider public sphere. Representations of Brexit in the UK exemplify well this kind of polemic representation that divided families and friends to the point that people avoid expressing them outside the in-group.

Hegemonic representations stand on the other side of the spectrum as widely shared and disseminated systems of thinking that achieve the status of taken-for-granted beliefs. Examples of hegemonic representations are taboos, such as representations of female genital surgeries in the West (Shweder, 2003). Hegemonic and polemic representations are both highly consensual, the difference being how widespread they are in a public sphere; hegemonic representations are everywhere, inscribed in institutions and routines as well as social thinking, polemic representations belong to specific sub-publics and lack firm objectification in social institutions and widespread practices. It is interesting to observe that highly hegemonic representations can easily become polemic through the intervention of active minorities and social movements. Stabilising representations into a hegemonic form can take years, even centuries, and can be only fully understood through a historical approach (Hilton and Liu, 2017; Laszlo, 2008) which unpacks the long *durée* of societal thinking.

Emancipated representations are those that 'free' themselves from their communities of origin and circulate in the public sphere detached from the sub-publics that produced them. These representations circulate beyond in-groups and are typical of plural and open public spheres where mass media of communication leverage the distribution of knowledge and make it diffuse across a population of minds. Emancipated representations are enabled by diffusion and by a relatively open political atmosphere where communication enables inter-group exchanges in ways that tend to transform the thinking of in-groups. Emancipated representations operate as thinking resources for open public spheres, in which sub-publics are flexible and pragmatic in drawing from the pool of knowledges circulating at any given time. Castro's model links up macro-processes of emergence, institutionalisation, generalisation and stabilisation of representations to micro-processes of

communication, where the analysis of argumentation and discursive formats in everyday communication is the key entry point to understand how social actors make sense of novel social objects.

Castro's model of social change is enriched by Gillespie's theory of *alternative representations*, which offers further analytical categories to capture how micro-genetic processes of semantic exchange occurring in ordinary language push or block the cycle of representational change. Drawing on Moscovici's original work on psychoanalysis, Gillespie (2008) elaborates social actors' responses to representations they know about but do not believe in or do not identify with through the idea of alternative representations as 'the representation of a potentially competing representation from within a social representation'. He explores the semantic barriers people deploy to avoid destabilising their own worldviews and sub-culture. These semantic barriers can take many forms, which include rigid oppositions, negative associations, prohibitions and taboos, stigma, psychological bracketing and undermining motives. They restrict communication between representations and their alternatives and keep competing representations at bay, demonstrating the elusive sharedness of social representations in contested, diverse societies.

Cognitive Polyphasia

In the 2000s, economic and cultural globalisation, the fast development of the internet, multiculturalism and a proliferation of identity concerns suggested very clearly that a new regime of representations was apace, one that foregrounded difference and cultural otherness. The explorations Self makes of Other and by the same process, of itself, were intensified by immigration and multiculturalism in the physical public sphere and the fast and vast connections of the virtual public sphere (chapter 5). A new regime of encounters between selves, groups and their social representations undermined homogeneity and increased diversity resulting in new forms of emancipated and polemic representations that combine multiple symbolic resources, coming from different cultures and spheres of knowledge (Howarth, Cornish and Gillespie, 2015).

Encounters between different spheres and domains of knowledge became typical of our multi-representational and global world. They frequently entail the contrast between science and common sense, debating the value of one over the other. Lay understandings are predominantly seen as inferior to science, which in time will transform and displace cultural beliefs and religious thinking. *Knowledge in Context* drew on the hypothesis of cognitive polyphasia to argue that it is futile to expect that religion will 'develop' into science and that the mythologies that guide our cultural identities and religious beliefs will be destroyed by the 'education of reason', as the dreamers of modernity once proposed. Human cognitive functioning is polyphasic and combines rather than excludes different systems of representation (Moscovici, 2008). Cognitive polyphasia captures precisely this co-existence of different forms of knowledge and modalities of representation, in which science, common sense, arts and religion lived side by side. I argued that rather than putting different ways of knowing – and the cultures and psychologies they contain – in a hierarchical scale, we should understand that humans build multiple systems of knowledge, which are combined and used adaptively depending on the pragmatics of the situation.

In the last ten years or so corroboration of the phenomenon comes from different disciplines and areas of psychology through a rich and diverse stream of research. Cognitive polyphasia has been reported in studies involving both field and experimental evidence, in domains as diverse as health, identity, environmental policy, urban studies and public understanding of science, by social and developmental psychologists, cognitive scientists and anthropologists (for an overview of this research see Jovchelovitch and Priego-Hernandez, 2015). This work has been integrated and systematised and today we know more about how different forms of knowledge co-exist. Research has shown the co-existence of different dimensions, constituents and levels of contradiction

pertaining to different forms of knowledge, which include conflict about what an object means, how people think and what they feel about a domain of knowledge. We also know more about varieties of cognitive polyphasia such as selective prevalence, hybridisation and displacement (Priego-Hernandez, 2017). Combined, this research shows that human cognitive functioning is flexible and adaptive in making the most of the diversity of knowledges that is typical of the human symbolic landscape. This diversity is a property and an asset of human cognition, whose rationality is better understood in relation to the cultural niche in which it evolves, the pragmatics of the situation to which it responds and the public sphere in which it circulates.

Identity and Representations

The focus of much work in the last decade has been to theorise and specify how representational change relates to the dynamics of identity, discursive strategies and inter-group relations. In many respects, this has been facilitated by a reconnection, long overdue, between social representations, social identity and inter-group relations, rhetorical and discursive theories. A new generation of scholars, blissfully oblivious to the politics of small differences, is combining concepts and research from these fields to produce a wealth of new work that integrates insights from different streams of thinking in social and cultural psychology (Amer and Howarth, 2018; Andreouli and Howarth, 2013; Elcheroth, Doise and Reicher, 2011; Gibson et.al., 2018; Hopkins and Greenwood, 2013, Howarth and Andreouli, 2016a, 2016b). This research articulates with greater clarity a) the impact of representations in inter-group relations and thus social identities and b) the contested and polyphonic nature of personal and social identities in a world of ever-changing, multiple and contradictory representations and c) the argumentative, discursive and rhetorical processes that underlie representations and identities. It has also called attention to the links between identities and representations of the common ground, understood through the lenses of citizenship, cosmopolitanism and nationhood.

This new work specifies the discursive and polyphasic logic of representational change and how contestation and multiple types of representation are elaborated and lived through polyphonic identities. It offers insights on the operations of language and everyday talk in the production of identity and representations, expanding knowledge of the psychosocial processes whereby public spheres open up and close down new meaning. This work adds to the macro-level theory of knowledge encounters that I offered (chapter 5) when examining how in-groups relate to representations and logics coming from different peoples, domains of knowledge and ways of life. The problem of knowledge encounters and the underlying dialogicality or monologicality that supports them has not gone away. If anything, we are witnessing today a potential recrudescence of in-group thinking and a tendency to dismiss and diminish the knowledge and identity of others, be them out-groups, cultural others or just those we disagree with within our own public spheres.

3. From Tradition to Twitter and Back: Common ground and social representations in the networked public sphere

Transformations in the ways of thinking and relating of communities signal a new psychology of the contemporary public sphere and in the final part of this new introduction, I want to consider these challenges, which were not at all present when I wrote the book. In this second decade of the 21st century connectivity and interconnectedness have become ubiquitous; yet, the promises contained in globalization and multiculturalism feel very different today. Authoritarian populism, inequality and the retreat of face-to-face communication have dulled the initial enthusiasm of early advocates of globalisation and the internet itself has moved into a dystopian territory marked by surveillance, algorithm control, political manipulation and monetary use of individual selves. Inequality,

represented as a social ill by the post-war consensus of the welfare state, gradually transformed into the new normal background of societies where individuals act independently of each other, maximise their interests and follow the logic of markets as internalised prescription for individual behaviour (Scharff, 2016). Echo chambers and polarization entered everyday language bringing alive the notion of non-dialogicality and even decline in knowledge encounters. Individual loneliness seems to be the only authentic subjective experience underlying the gloss of permanent connectivity and excessive self-exposure. In private and in public, accuracy in cognition and our representations of 'we' seem to be shrinking as 'fake news', Facebook, Instagram and Twitter take us away from a common 'agora' of dialogue and public debate into separate, isolated in-group bunkers. Contexts of knowledge have changed and today they present new challenges to the self and to processes of social representation. In what follows I will focus on the discontents of connectivity and in particular on the new format of communication enabled by ICTs (information and communication technologies) and social media to consider how it affects the common ground, processes of social representation and selfhood.

The Networked Public Sphere

As Castel (2008) authoritatively argued, the new public sphere is made of networked society and the rise of self-communication. It is predominantly a virtual sphere created around the media system, in which wide horizontal networks of peer-to-peer interaction by-pass traditional centres of expertise, authority and information control. These new horizontal networks greatly disrupt early forms of mass-mediated communication, which relied on centralised and unidirectional spheres of production and reception. Decentred and unbounded from traditional forms of control, they constitute the beginnings of a global virtual public sphere where meaning making is transformed by the availability of open digital content that is free for downloading and re-working. Individuals and organised communities hold a new kind of freedom to self-generate and distribute content, making this virtual public sphere self-determined in ways that the physical public sphere has never been and cannot be. This is because the city and the physicality of its squares, markets and other people, or the political space of institutions and civic face-to-face association do not allow for the self, individual or collective, the same level of control over the production, emission and reception of meaning and information. The materiality of the physical public sphere is locally grounded and face-to-face; it limits what is available, as well as the capacity of self to fully control its responses to others and situations. Networked society in contrast blows open the immediate reciprocity and boundaries of situations, enabling reconfigurations that can be controlled by users and their chosen networks. It takes our human sociality to new levels of connectivity bypassing hierarchies, societal distinctions, cultural distance, institutional domains and the separation between private and public spheres. The question however is what this new connectivity is doing to our relational ties and the format of our public spheres.

New Social Media and the Participatory Web

The growth of the participatory Web 2.0 grew and new media moved network society beyond the simple distinction between traditional and de-traditionalised public spheres. The differentiation between traditional community and modern society exploded in face of a public space that is unbounded and connected, yet more fragmented, lonely and homogenous. Over the last years, much research has focused on the ability of new digital media to either invigorate or undermine the vitality of the public sphere, understood as public debate, citizen participation and interaction between diversity of opinions and information (Rasmussen, 2014; Bruns and Highfield, 2016; Hampton, Livio and Goulet, 2010). Understandably, this assessment has been focused on the ability of the new medium to actualise Habermas' principles of the democratic public sphere. Many believed that the participatory Internet and social media could unleash the unrealised potential of the democratic public sphere enabling inequalities of status to be disregarded and everyone to participate and speak as peers.

Whether this belief was justified remains an open question, as the evidence to this day is inconclusive. Researchers find both an increase in public debate and argumentation and in self-segregation and balkanisation (see Colleoni et al., 2014). A compelling interpretation of these contradictory findings is that new media are open for multiple forms of use, which enable contradictory effects. On the one hand, they leverage the power of community and empower in-groups to act forcefully in the public sphere, contributing to the expression of historically marginalised voices. Connectivity, expanded sociability and self-determination of content enhance social collaboration and agency. This is expressed in a new ability to speak and to be heard that unlocks bottom-up social development and the power of the collective mind (Brundidge, 2010; Bruns and Highfield, 2016; Jovchelovitch and Priego-Hernandez, 2013). Yet, whereas the potential for participation is there and larger than ever before, power inequalities continue to play an important role, pushing segregation and excessive niche construction. Yang, Quan-Haase and Rannenberg (2017) found that debate in the virtual public sphere is mainly controlled by elites and tends to reproduce the exclusions and social dynamics of the physical public sphere. Key players in public debate continue to be companies, experts and news portals. Depending on political cultures, they reinforce partisan views and polarise public debate (Barberá *et al*, 2015; Boutyline and Willer, 2017), undermining dialogue and the exchanges that are required for settling differences and building consensus in the democratic polis (Colleoni et al., 2014;). Importantly, all of these activities are being tracked by third parties who are not interested in watching *per se* but in using the information as a lucrative commodity or a means to achieve political ends or both (Couldry and Turrow, 2014). Harper (2017) has convincingly argued that big data negatively reconfigures the public sphere because it erases the uniqueness of minor publics and amplifies the tyranny of the majority, favouring existing networks of power and enhancing homogeneity. It uses everyday participation, social collaboration and agency to map out human behaviour and sell it to those who control markets and institutional politics.

From Communities of Attention to the Portable Private Virtual Public Sphere

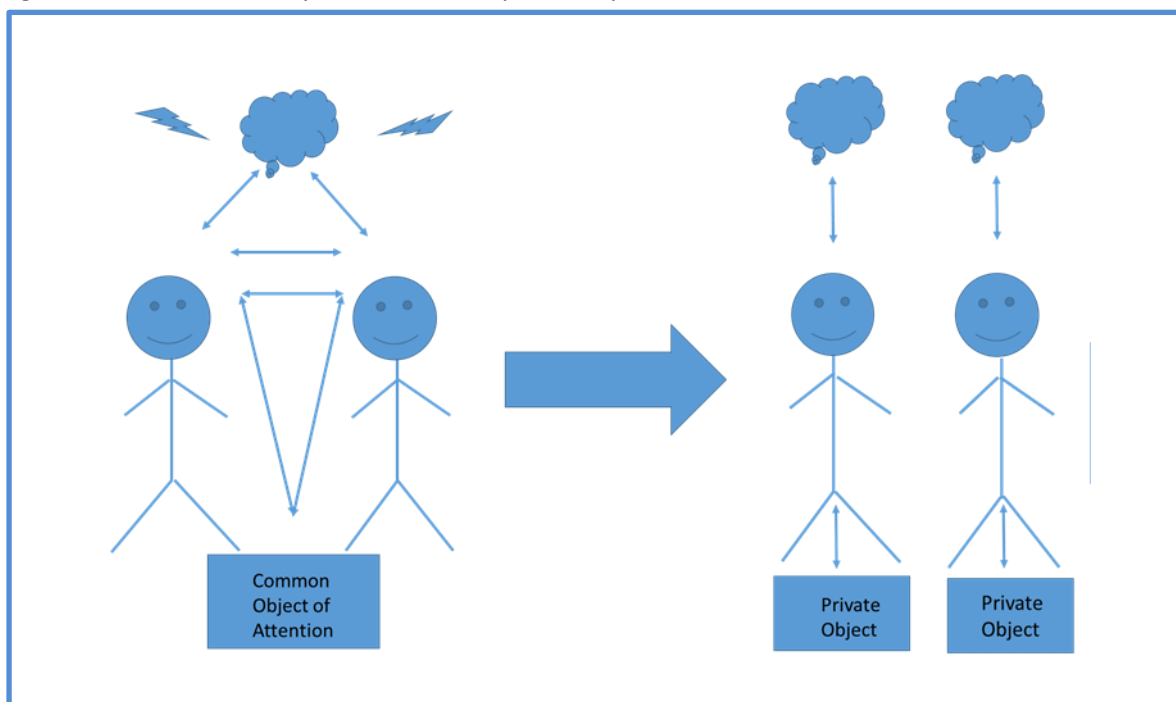
These contradictory potentials of new media are not different from the contradictions identified in earlier forms of mass mediated communication, including printed and electronic media (Habermas and Schewering, 2014). However, for socio-cultural psychologists the question matters because these technologies are tools of the dialogical mind, an extension of mind and behaviour in the public sphere. Humans use tools as mediating artefacts in their interactions with the environment and with other humans, and in so doing they shape themselves, their societies and cultures. Social media and ICTs are mediational artefacts and the new forms of interaction and communication they enable need to be considered to the extent that they unsettle the architecture of the epistemological triangle and with it, the interactions that enable the dialogical mind, common ground and processes of social representation. There is little doubt that they change the content and the process of communication, the logical implication being that they change mind, community and social representation.

From the newspaper, to radio, to television, the consumption of mass media presupposed a community of attention, where minds focused on the same object/topic/material. We can visualise the connection between points of production and reception around families listening to the radio and later watching television together. These early types of mediated communication kept the architecture of shared intentionality intact, connecting users in a classical triangle where there is a community of multiple minds paying attention to a common ground. Watching television even reinforced common ground and community of minds, as media theorists argued in relation to the medium. Silverstone's (1994) now classical argument of television as a potential space captured well its communicative foundations and the potentials of communities of attention to build spaces of shared experience. The agency of audiences in the appropriation of content (Livingstone, 1989) was

clear and between the production and reception of content there was a potential space of lived experience and sense-making that created and sustained communities of shared attention.

Mobile devices and the smart phone in particular, challenge the dialogical format of early types of media and face-to-face communication while overabundance of information distracts rather than concentrate attention. Carried by individuals as private portable territories (Hatuka, 2014), the smart phone enables customising interaction with chosen publics and content. Submerged in this personal portable territory that is paradoxically a virtual public sphere, the individual self alone controls its communicative experience designing what and how it communicates, what wants to know, from whom and where. Through various digital platforms that are open to the emission of content with little checks and controls, it curates its own exposure and what 'engages' with, carefully designing the visibility of its inner, private life and the way it relates to others. In contrast to the triangular model of Self and Other sharing the medium and its content, individuals today inhabit the physical public sphere with their heads deep into their phones, shut down from the immediate environment, moving through communal spaces as if they were in private bubbles. The individualisation and extreme self-determination enabled by new media technologies disrupt the communication between Ego-Alter as well as the shared focus of attention in a common object (Figure 1). The excessive attention on self takes its focus away from the 'here and now' of face-to-face interaction and cuts off the physical and institutional public sphere. As Turkle (2011) argued, what people want most from public spaces is to be left alone to engage with their own personal networks.

Figure 1: From community of attention to portable private territories



The effect is a combined individualisation of the private sphere and a personalisation of the public sphere. Constant self-exposure trivialises intimacy and takes depth away from relationships while throwing into the public sphere material that obfuscates and displaces topics and issues of common concern (Harper, 2011). This displacement of private content from self to public sphere has a negative double effect on both. Privacy is essential to the life of the self (Shwartz, 1968); we are self-conscious animals with an inner life that makes the learning and regulation of the qualia of self-experience one of our most important social and psychological tasks. This only happens if we develop and sustain spaces in which we can be alone with ourselves (Winnicott, 1965; Arendt, 1958). As Humphrey (2007) noted, "we are a society of private selves and the privacy of

consciousness has an evolutionary history and maybe even an evolutionary function. We are exceptionally social but also exceptionally lonely". Regulating our inner qualia is crucial because it contains worlds of its own, which are so immense and powerful in the emotion and experiences they carry that full transparency and disclosure can substantially disrupt and indeed even destroy a public sphere. The psychology of privacy is fundamentally related to the psychology, and indeed very possibility, of a public sphere, thus the management of front and back-stage as necessary rituals of self-presentation in everyday life (Goffman, 1956). The constraints of culture teach us how to regulate our inner private lives to contain aggression and prevent the unconscious from roaming free in our social spaces so that we "make the right (and not violence) the might of community life" (Freud, 1930).

Arguably, cultures of visibility and invisibility offer positive and negative possibilities. Schroer (2014) offered a helpful systematisation suggesting that we differentiate those situations when they are wanted and unwanted. For example, we want to be 'visible', i.e. socially recognised and acknowledged but not monitored and tracked all the time. We may want to be 'invisible', in terms of retaining our intimacy and right to withdraw from public spaces but not disregarded and denied the right to have our identity 'seen' in the public sphere. Today's culture of visibility puts pressure on what is wanted and unwanted, changing the inner and outer life of the self. From the early days of reality shows, when television became a vehicle for 'confessional' forms of personal drama played out to audiences around the world to today's social media, self-exposure has attained a new privileged centre. Constantly connected to a virtual public sphere that enhances its visibility and by the same process undermines its privacy (Hatuka and Tosch, 2016), the self generates large amounts of content that become information and meaning ready to be exploited commercially, politically and psychologically. With a vast number of ordinary people carrying mobile devices that by default record their locations and content emission, connectivity enables immense surveillance operations, by both commercial and political institutions (Horne and Mali, 2014; Margetts, 2017). Location aware technologies and personalisation of content combine to generate big data that algorithms mine for re-shaping how people behave politically, spend money and come together to create social representations.

Such massive commercial and political operations deploy a very simple system of rewards that reinvents operant conditioning and makes sure data keep coming. In a scale that not even Skinner himself could have imagined, reinforcement by 'likes', 'followers' and 'views' rewards connectivity and makes engagement more likely to occur again. In this logic, the unit of measurement is 'engagement' and the optimal result is addiction (Williams, 2018). Teenagers, despite their agency and fluidity in relating to social media, have been particularly vulnerable to conditioning strategies that capitalise on the traps and paradoxes of constant manicured self-presentation and social comparison in the virtual public sphere (Livingstone and Smith, 2014; Livingstone, 2008; Manago, 2015; Manago, Guan and Greenfield, 2015; Manago, Taylor and Greenfield, 2012).

Private and Public Imbalances

Giving the self and individual control a new centrality in public life redraws the boundaries between the public and the private spheres and opens our private and public lives to a new range of challenges. The new self-centred dynamics of the networked public sphere facilitates the formation of in-groups and hinders other-oriented exchanges and exposure to different opinions. On the one hand, it can be empowering but on the other hand, it can compromise communities of shared attention and representation. Decreasing dialogue rigidifies societal cognition away from the plastic energy of identity reflexivity and cognitive polyphasia. Polemic social representations are more likely to occur without reference to a common ground, circulating in the public sphere bounded to their groups of origin and strongly attached to the identity of the in-group. A dynamic of polarisation between polemic representations is more likely to draw on semantic barriers to block alternative

representations and protect group thinking from the destabilising effect of diversity. Representations are more likely to resist the unfamiliar rather than trying to making it familiar. Anchoring relies more on stigma (Kalampalakis and Haas, 2008) and objectification on de-humanising images and metaphors, which unregulated social media content fuel and replicate. Non-dialogical encounters between different representations further undermine dialogue and our collective sense of ourselves retreats into smaller sub-groups supported by self-generated media content that allows selves to stay within their groups of choice. These processes of representation move in tandem with new technologies of selfhood in which portable private territories of meaning support bounded, self-contained universes of representation and opinion (Webster and Ksiazek, 2012; Sustain, 2009). The result is polemic without common ground and selfhood without otherness. In public spheres, the danger is decline in communities of shared attention and shared representation; in private lives, we already observe a diminished attention span and semantic memory, coupled with increased anxiety, depression and disregulation in body image and eating (Frost and Rockwood, 2017; Turkle, 2015).

As much as these developments present in new shades, they are not entirely new and in many respects express tensions that inhere our human condition and therefore will not go away. In the public sphere, they take us back to Habermas' original conception of a re-feudalisation of the public sphere, a tendency he spotted in the middle of the 20th century as mediated communication, spectacle society, celebrity culture and public relations in politics combined to undermine the dialogical potential of the democratic liberal public sphere. Much of what he argued then is in line with Arendt's study of the Pentagon Papers, an account of American decision-making on Vietnam policy (Arendt, 1972). Her devastating analysis shows that image-making and lying in politics are neither new nor specific to the advent of the internet and social media. Post-truth is far from being a phenomenon unique to the twenty-first century; it is a pathology of both symbolic representation and group life, expressed when hyper-representation (chapter 1), that is the severance between representation and its object, breaks the epistemological triangle and enables representation to operate without referents, reference and restraint in the common space that makes human reality.

In Defence of Common Ground

When I wrote *Knowledge in Context*, it was clear to me that sustaining a plural public sphere is essential for the health of community and individuals. Yet, I was also aware that the excessive fragmentation of publics and representations was a real danger and a possibility that lurked in my argument. My distancing from the widespread post-modern interpretations of the time was driven by the fear that diversification without dialogue and interdependence between Self and Alter could lead us into relativism and the concomitant loneliness that it entails.

Today more than ever my position is that humans need a unified common centre that can accommodate multiple sub-publics (or individuals, depending on scale), whose boundaries and inner realities are important to strengthen and to defend. In-group identification and a concomitant level of in-group closure have always been necessary requirements of social identity and political empowerment, and even more so for groups and individuals socially excluded and historically undermined (consider Virginia Woolf's "A Room of One's Own"). They offer belonging and ontological security as well as consciousness of a social identity, which are central for the polis and for the self, and which unfortunately have been successively undermined in the last decades of neo-liberal hegemony. However, in-group boundaries can be flexible and enable contact, clashes and dialogue with other publics and individuals. Indeed, dialogicality between sub-publics and in-groups is equally relevant for building a common ground.

The cohesiveness and sustainability of a plural public sphere lies in the quality of its encounters and its communicative capabilities as well as in its capacity to nurture and defend the reality of its sub-

cultures. Having common experiences and sharing intentionality across sub-cultures makes for both a stronger common ground and stronger sub-cultures. It builds communities of thinking, practice and attention through which we develop as individuals and learn how to cope with the unfamiliar and unanticipated, however challenging these might be. The meeting of different minds in public arenas can be difficult and challenging for our sense of ourselves and in-groups, but it is what triggers the checks and balances we all need for the health of our individual self and communities. Common ground enables us to deal with differences through a political sphere that establishes procedures about how we respond to diversity and disagreements. Psychologically, we need the common ground to balance and contain human emotions, and in particular to control, regulate and sublimate stigma, hate, aggression, resentment and revenge in intergroup relations and individual behaviour. These negative emotions are part of human psychology, a permanent possibility inscribed in our human condition and in the ways in which we relate to each other. Public spheres and their procedures are highly functional to regulate these emotions as we relate to each other and ourselves. Human sociality and culture, with their institutions, rules and procedures contain and constrain our 'dark matter', building pathways to address historical wrongs and consolidate a historical sphere that connects with our individual and collective trajectories so that we can revise what we did and look into the future having learned from our mistakes.

To retain and to protect the triadic relations that link cognition and propositional knowledge to Self and Alter interdependency is central to protect the fragility of our common ground and our accurate knowledge of the world, both hard to achieve but easy to lose outcomes of our evolved human cognitive and cultural capabilities. Socially and psychologically, we have evolved to build a common ground through reading each other's minds, taking the perspective of other people and building deep bonds of attachment and love that carry us through the world with ontological security and a healthy sense of society and ourselves. The evolutionary foundations of our human nature are cooperative to the core; however, the question we need to ask is why are they constantly undermined by our own human ways of relating to each other and organising our societies? Why do we develop contexts of knowledge in which 'dark matter' takes us away from cooperation and mutual interdependency? I doubt that any one scientific discipline will alone produce the answer to this question and trust the future to adjust the over-specialisation that has firmly defined the scientific outlook of this early 21st century.

I hope that new and old readers of this book will share my confidence and optimism on the future of psychology as a social and cultural science connected to human goals, communities and public spheres. What we see and experience today may well nurture a thousand retreats from the affairs of the polis but psychology's long past – if not its short history – can help, as can social psychology's insight that true innovation always comes from the work of active minorities.

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