The role of professional learning communities to support teacher development: A social practice theory perspective

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In this article I discuss the potential of professional learning communities (PLCs) within the South African education context using a practice theory lens. PLCs are presented by the Department of Basic Education (DBE) as collaborative learning communities that are fundamentally social and should be established in all schools (DBE, Republic of South Africa, 2015). In order to consider how PLCs could be used within the current South African schooling context to support teacher development, the article provides an exposition of practice theory that is exemplified by a discussion on how PLCs can support teachers’ pedagogical practice. Drawing on practice theory that states that the world is constructed and ordered by social practices rather than individuals and their attitudes, behaviour, or choices, the article suggests that the conceptual framework of social practice theory provides a productive way forward in conceptualising the social nature of teachers’ pedagogical practices and consequently ways in which sustained improvement in teaching and learning can be analysed and understood as a social and individual phenomenon.

Keywords: practice theory; professional learning communities; South African schooling; teacher development; teacher pedagogy

Introduction

In this article I discuss the current Department of Basic Education (DBE) initiative to establish professional learning communities (PLCs) in all schools and consider this initiative using Schatzki’s theoretical practice theory tools. PLCs are not a new concept and have been researched internationally in schools since the 1980s (see Stoll, Bolam, McMahon, Wallace & Thomas, 2006). More recently, within the South African school context, PLCs have been presented by the DBE as collaborative learning communities that are fundamentally social and should be established in all schools with a view to involving all stakeholders in the improvement of school teaching and learning (DBE, Republic of South Africa, 2015). In order, therefore, to consider the role of PLCs in supporting teacher development within the current South African schooling context, I provide an exposition of practice theory as a framework for discussing the role of PLCs as a teacher development initiative to change or improve teachers’ pedagogical practice.

Green (2009:49) states that changing or improving teacher practice needs to “interrupt or disrupt the routinization of practice … [the] habits and patterns that, by their very nature, are both self-perpetuating and (relatively speaking) unmonitored; that operate below the ‘radar’ of consciousness or awareness.” This conceptualisation of what is required to “break into, and out of, routine” (Green, 2009) supports both the international view of how PLCs can support teacher development (see, for example, Darling-Hammond, 2013; McLaughlin & Talbert, 2006) and the DBE’s ideal that the social and collaborative nature of PLCs can “interrogate and re-invigorate … practice rather than to recycle old ideas” (DBE, Republic of South Africa, 2015:5). I suggest that if teachers’ pedagogical practices are conceptualised as socially situated and socially formed, then changing or adapting teachers’ practices should take place through social engagement and collaboration as a shared or collective responsibility for student learning.

On key features of professional practice, Kemmis (2009:23) describes practices as “embedded in sets of social relationships, as meaningful activities … [that are] always embodied (and situated) – it is what particular people do, in a particular place and time.” Drawing on social practice theory that frames practices as the property of the social site I use practice theory as a heuristic for analysing and understanding the potential role that PLCs can play in developing teachers’ professional practice by considering the constitutive phenomena that (re)produce aspects of teachers’ pedagogical practices. Schatzki (1996) refers to understandings, rules and teleoaffективity as the articulated features or phenomena of social practices. I discuss these elements as a way to understand the social nature of teachers’ pedagogical practices and, consequently, the role that PLCs can play in supporting teacher development and improved teaching practice within the current South African school context.

I start by giving an account of the post-apartheid educational landscape to present an understanding of the current South African educational field. Included in this section I discuss the recent DBE initiative that introduces the idea of PLCs “to increase the capacity of the school to achieve sustainable improvement in the learning that takes place in the school” (DBE, Republic of South Africa, 2015:5). I then provide an overview of practice theory as a framework for understanding the role of PLCs in supporting teacher professional development, after which I employ practice theory as a lens for understanding how the social and collaborative nature of PLCs can support teacher development and change in teachers’ pedagogical practices. I conclude the article by suggesting that the theoretical framework of social practice theory is productive in conceptualising the
social nature of teachers’ practices and consequently ways in which sustained improvement in teaching and learning can be analysed and understood as a social and individual phenomenon.

South African Education
Since 1994 South African schooling has witnessed a series of educational policy changes to redress the inequalities and injustices caused by apartheid education. Following a number of curriculum policy reforms, the Curriculum and Assessment Policy Statement (CAPS) was finalised and implemented from March 2011. The CAPS, described as a back-to-basics approach, is based on a curricula model that includes specification of content knowledge, strong classification, sequencing and pacing (Bernstein, 1975). CAPS is criticised for being a pre-packaged curriculum that restricts teacher autonomy and professionalism (Fataar, 2015; Msibi & Mchunu, 2013; Ramatlapana & Makonye, 2012). The emphasis on the use of workbooks, textbooks and a scripted curriculum that was designed ostensibly to improve the educational quality of teaching in schools (Spreen & Vally, 2010), has produced an educational regime that demands uniformity in curriculum implementation across South African schools, which is strictly monitored by government officials. Msibi and Mchunu (2013:25) note that this “teacher-proof” approach towards curriculum implementation severely restricts teacher autonomy and de-professionalises teaching by “reduc[ing] the work of teachers to mere technicians … [which] is not only dangerous in that it makes teaching simple work, it is also dangerous for failing to be more realistic about changes required to improve the education system in the country.”

PLCs were first presented in the Integrated Strategic Planning Framework for Teacher Education and Development in South Africa 2011–2025 (ISPFTED) (DBE & Department of Higher Education and Training, 2011) as an initiative to strengthen teacher professionalism. The ISPFTED, which was published at the same time that the CAPS was implemented, contains a set of recommendations to determine and support teachers’ professional development. PLCs are one aspect of the plan for teacher development. In May 2015, the DBE published a document entitled Professional Learning Communities – A guideline for South African schools. This document provides guidelines for the establishment and support of PLCs as a way to support “authentic, timely and relevant” teacher professional development and states that “[t]he ISPFTED aims for the wide establishment of subject-based and issue-based PLCs by 2017” (DBE, Republic of South Africa, 2015:4). In discussing the establishment of PLCs the importance of “collegiality … discussions of professional challenges and shared undertakings” are recognised as an integral part of teachers collaborating as professionals, and, although much of the wording still remains instructional in discussing the manner in which teacher professional learning will be directed via PLCs, teacher practices and teacher professional development are placed as collective and social enterprise at school level (DBE, Republic of South Africa, 2015:12).

The concept of PLCs in school communities is not new. PLCs have, over the past decade, gained widespread recognition within the international teaching context as a supportive and organising structure for achieving substantive improvement in teaching and student learning outcomes (see, for example, Darling-Hammond, 2013; McLaughlin & Talbert, 2006). Literature on PLCs situates them as a subset of communities of practice (CoP) and as such the learning that takes place in these CoPs is considered a joint enterprise negotiated by the participants involved (Lave & Wenger, 1991). Thus, learning in a CoP or a PLC, is collaborative and interactive and progresses towards agreed-on goals of the community.

The distinguishing feature of PLCs is the focus on professional learning (Brodie & Borko, 2016). Professional learning can be described as learning that draws from a knowledge base specific to a particular profession and which supports an individual in becoming more confident and competent in their professional endeavours. In PLCs learning is fundamentally social, collective, and situated within teachers’ daily practice in schools, which is constitutive of the education profession. Teacher learning and development in PLCs focuses on collective reflective inquiry into becoming better practitioners as well as teachers “being able to talk more substantially about their practice, and justifying their thinking, decisions and actions in relation to their knowledge base” (Brodie & Borko, 2016:9). The role of PLCs as joint enterprises in school contexts is therefore aimed at creating networked communities which provide ongoing support for teachers to transform the quality of their pedagogy through systematic enquiry into their current practices.

Given the social and collaborative aspects of PLCs, as discussed in the literature, I now discuss practice theory and the elements contained in practice theory as a conceptual framework for understanding the possibilities of PLCs for teacher development in the South African schooling context. Included in this section is a discussion on Schatzki’s (1996, 2002, 2006) three constitutive elements of social practice. These elements are presented in the discussion section in relation to PLCs and the South African schooling context.

Theoretical Framework: Practice Theory
Practice theory in its broadest sense refers to the epistemological tradition that concerns itself with how things get done, and is based on the premise
that the world is constructed and ordered by social practices rather than simply individuals and their attitudes, behaviours, and choices (Lloyd, 2010). Practice theory has its roots in the work of philosophers such as Charles Taylor (1985) and Wittgenstein (1958), and that of sociologists such as Bourdieu (1990) and Giddens (1984). There is no unified approach to practice theory, however, what they have in common, is that practice theorists place practices at the centre of understanding and analysing society with a specific interest in the everyday and lifeworld practices of individuals.

Practice theory has been used in a variety of fields such as science and technology studies, geography, media studies, and design and consumption studies. In a number of recent studies practice theory has been used as a framework for understanding or analysing educational issues (see Brennan, 2017; Kemmis, Wilkinson, Edwards-Groves, Hardy, Grootenboer & Bristol, 2014; Reid, 2011; Wilkinson & Kemmis, 2015). Reid (2011:299) suggests that practice theory in the educational context “provides an alternative to the forms of social theory that place the individual as the producer of human behaviour.”

Practice theory is based on the premise that the world is constructed and ordered by social practices rather than individuals and their attitudes, behaviours, or choices. According to Reckwitz (2002:249) practices are routinised types of behaviour that consist of several elements that are “interconnected to one other: forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge.” Thus, beliefs, attitudes, and values of individuals can be thought of as arising from, and being cultivated within, social practices (Strengers, 2012:228). Based on this premise, individuals as bodily and mental agents act as “carriers” or “performers” of a practice through patterns of bodily behaviour and certain routinised ways of understanding, knowing how, and desiring (Reckwitz, 2002:250). Nicolini (2012:2) states that:

[the appeal of … a practice-based approach lies in its capacity to describe important features of the world we inhabit as something that is routinely made and re-made in practice using tools, discourse, and our bodies. From this perspective the social world appears as a vast array or assemblage of performances made durable by being inscribed in human bodies and minds, objects and texts, and knotted together in such a way that the result of one performance becomes the resource for another. Thus, practices include an intersubjective dimension that facilitates the manner in which shared understanding and skills are developed among groups of individuals. Schatzki (2002) describes practices as being prefigured and states that this prefigurement is produced through social interaction that over time creates layers of meaning in relation to social practices and their activities whereby different elements or phenomena “form an immense, shifting, and transmogrifying mesh in which they overlap, interweave, cohere, conflict, diverge, scatter and enable as well as constrain each other” (Schatzki, 2002:155–156).

According to Schatzki (2002:89) practices generally consist of three key inter-related elements or phenomena that hold them together or link them in certain ways: practical understanding, rules, and teleofaffective structures.

**Practical understandings**

Practical understandings involve the complexity of know-how and the understanding of the actions that constitute a practice (Schatzki, 2006). Practical understandings inform the actions of an individual, i.e. what makes sense for a person to do within a particular time-space context. Within the education setting, practical understandings include tacit or embodied pedagogical knowledge (how to teach) and subject knowledge and skills (what to teach).

**Rules**

Schatzki (2002) refers to a second element or phenomenon of practice, namely rules. Rules include explicit directives of how to do things, what is allowed and what is not, as well as admonishments and instructions that individuals who take part in specific practices will observe or disregard. Schatzki (2002:79) describes rules as “explicit formulations, principles, precepts, and instructions that enjoin, direct, or remonstrate people to perform specific actions.” Within a school context an example of rules is found in the mandated educational policies and curriculum procedures from the Department of Education, explicit instructions and requirements of specific schools, as well as broad applications or “rules of thumb” that relate to both organisational and pedagogical practices of a school site.

Practice theorists define rules in different ways. Giddens (1984:21) refers to them as “the rules of social life” such as “techniques or generalizable procedures applied in the enactment/reproduction of social practices.” Bourdieu (1990:64) uses the notion of a social life as a game of practices which involves a form of both implicit and explicit “rule-following.” He does, however, distinguish between rules and regularities:

You can use the analogy of the game to say that a set of people take part in a rule-bound activity, an activity which, without necessarily being the product of obedience to rules, obeys certain regularities … Should one talk of a rule? Yes and no. You can do so on condition that you distinguish clearly between rule and regularity. The social game is regulated, it is the locus of certain regularities. (Bourdieu, 1990:64)

Strengers (2012) suggests that rules should not always be thought of as institutional forces that are
interjected into practices, but rather as common understandings or norms that emerge out of practices. The types of rules that are referred to within the educational context most clearly resemble what Giddens (1984:21) calls “formulated rules” or “codified interpretations of rules” that are “those that are given verbal expression as canons of law, bureaucratic rules” and Bourdieu’s rules of the game analogy.

**Teleoaffective structures**
Teleoaffective structures are a combination of teleological and affective dimensions that relate to the practice of being goal-orientated (teleological orderings) and emotive or intuitive (affective), where the goal is directed by normative views, and includes purposes, beliefs, and emotions. Instead of governing activity, teleoaffective structures provide the collective understanding for an activity, i.e. what it makes sense to do within practices at a social site. Schatzki, Cetina and Von Savigny (2001:60) suggest that teleoaffective structures play a key role in organising a set of “doings” and “sayings” as a practice. They define the teleoaffective dimension of the organisation of practice as “a range of acceptable or correct ends, acceptable or correct tasks to carry out for these ends, acceptable or correct beliefs … given which specific tasks are carried out for the sake of these ends, and even acceptable or correct emotions out of which to do so” (Schatzki et al., 2001:53). Thus, “teleaffectivity describes why things are done and takes into account the values, beliefs and hopes which influence the way in which a practice proceeds” and includes how it is thought about within a collective practice (Lloyd, 2010:249).

As a way to exemplify the potential role that PLCs can play as a collective and communal enterprise, I now turn to an exposition of practice theory as a framework for understanding teaching and learning within the South African school context.

**Discussion: Practice Theory as a Framework for Understanding the Role of PLCs in Supporting Teachers’ Pedagogical Learning**
As discussed earlier in the article, the role of PLCs to support teachers’ pedagogical practices is strongly supported by an extensive range of research studies (see Brodie & Borko, 2016; Darling-Hammond, 2013; Feldman & Fataar, 2014; Opfer & Pedder, 2011). In this section I discuss practice theory as a lens for understanding the potential role that PLCs can play in supporting and developing teachers’ pedagogical practices within the current South African school context.

Schatzki (2012:13) defines practices as “an organized constellation of different people’s activities.” Accordingly, practice theory states that practices are enacted through the actions of individuals but are never simply the actions of an individual. Lloyd (2010:251) notes that practices provide meaning-making among people in similar cultures or settings, which in turn leads to the production and reproduction of identity, ways of interacting, and how practices are routinely enacted. In the education context, teaching as a form of social practice involves a type of behaving and understanding that is common to individuals within similar school contexts. This behaving and common understanding then forms the practices that are carried out by the teachers. Kemmis (2006, in Lloyd, 2010:250) suggests that practice as a property of a group is “shaped through histories and traditions that locate practices in such a way that they are ‘inherited’ already formed, by contemporary practitioners, who in their turn, become custodians and developers of practices.” Therefore practices within, for example, an educational setting and discourse, are understood, organised, and conducted in a particular way over time, which in turn, characterise and shape that particular educational environment. In this manner practices emanating from a specific school site are formed, interwoven, and sanctioned through a dialogic intra-group process over time, and individual performances of teachers within a specific educational site, using a practice theory lens, is understood as part of an on-going collective practice.

In the South African school environment, given the social and historical context of post-apartheid education, specific forms of practices within schools have been developed over time and place, and interwoven in teachers’ practices as implicit and culturally specific ways of knowing and being. Consequently, these forms of practices frame teachers’ pedagogical practices and discourse within their teaching context. Nicolini (2012) states that practices and discourse are made durable through their repeated enactment over time, and in this manner become inscribed in our bodies, minds, objects, and texts. As posited earlier in this article, teaching is a social practice. Thus, a social practice theory lens, that sees practices as embedded in and through routinised actions in social contexts, provides a productive framework or lens for understanding, firstly, the manner in which teachers’ pedagogical practices are prioritised and repeated within a shared or social setting, and secondly, the work of PLCs, as a shared and collaborative enterprise as a potential structure in a school environment that allows “prefigured” (Schatzki, 2002:156) pedagogical practices at a school to be interrogated. I now use Schatzki’s (2002) three key inter-related elements or phenomena of practice, namely, practical understanding, rules, and teleaffective structures to discuss the role that PLCs can play in supporting teachers’ pedagogical learning.

According to Schatzki (2002) “practical understanding” comprises a form of conscious action and semi or deeply embedded understanding and knowledge that will unconsciously (or without re-
flection) continue to (in)form one’s practices unless actively reflected and acted on. Thus, what makes sense for a person to do in any given situation (such as schools and teaching) is, to a large extent, informed by what they have always done (Schatzki, 2002). In education, teachers’ practical understandings will therefore be informed by their own schooling experiences, their training as teachers and the school contexts in which they have taught (Feldman & Fataar, 2014). In this way, teachers’ practical understandings, as an embodied form of knowledge, actions and practices, provide the knowings, doings, and sayings of their practice.

Bourdieu’s concept of habitus, which he describes as “a set of acquired characteristics which are the product of social conditions and which, for that reason, may be totally or partially common to people who have been the product of similar social conditions” (2005:45), provides us with an understanding of the embodied aspects of one’s dispositions. By this, one understands that embodied knowledge, although individually experienced, is a product of socially shared and culturally similar conditions, experiences, and practices. In the education context, embodied practical understandings and pedagogical knowledge can be regarded as a teacher’s accumulated history of experience within educational contexts, which is produced and reproduced by teachers as a socially accepted pedagogical practice (that includes norms, conventions, traditions, and common sense in the practice of teaching) with other participants in socially similar contexts. Seen through a practice theory lens, teachers are carriers or performers of beliefs, attitudes, and values that have become socially accepted pedagogical practices – the way things are done – in particular school settings. “Teachers’ pedagogical practices are exceptionally difficult to shift, despite the optimism of policy pronouncements” (Feldman & Fataar, 2014:1526). One-off workshops might be inspiring or thought-provoking, but often do not focus on specific student or teacher needs or are structured in isolation from the complexity of the teaching and learning environment in which teachers work (Opfer & Pedder, 2011:377). Therefore, in the education field, recognising the complexity and embodied nature of teachers’ practical understandings as an inter-related element of phenomena that holds or links teachers’ pedagogical practices together, it can be argued that the ongoing and collaborative and dialogue of PLCs holds the potential to capacitate teachers’ pedagogical adaptation and change (Fataar & Feldman, 2016; Feldman, 2016, 2017).

The second phenomenon that Schatzki (2002) refers to, namely rules within the educational environment in South Africa is found in certain mandatory policies that are explicitly given to schools to govern the manner in which schooling takes place. However, schools have some autonomy in terms of how day-to-day schooling practices take place. Pedagogical rules often become embodied within a school context as practices or a form of procedural knowledge, i.e. how things are done. These ways of knowing are implicit and usually culturally specific, and rely on a common way of understanding the world, and thus teachers’ pedagogy, or how things are done, are interwoven through practice within a specific school site.

Giddens (1984) suggests that certain rules, both formulated or bureaucratic rules or rules of the game (Bourdieu, 1990), become solidified in schools and these rules then become governing or structural expectations of schools, or schooling, in general.

Lloyd (2010:248) notes that “[e]ngaging with the site means engaging with the social, historical, material and political knowledge domains … [that] are prefigured and through their heritage give the site its shape and character.” As noted above, individuals operating within specific sites become carriers of certain practices and while rules often emerge from explicitly stated or mandated policies, repeated practices can also become implicit rules which can contribute to or govern the configuration of a practice and its continuation. Consequently, in school settings, it is through certain rules of practice that constructions of procedural knowledge, such as directives regarding how things are done are enabled or constrained and produced or reproduced. In school contexts, interrupting or changing norms and routines should not be considered inconsequential. Thus, PLCs that support the collaborative and ongoing learning of teachers in their school contexts are well-situated to facilitate conversations that enable schools and teachers to reflect on and adapt or change rules that have become ossified in the school pedagogical process and/or school structure. The focus of PLCs within school contexts is on professional and collaborative teacher learning with the aim to prioritise the learning needs and outcomes of the learners they teach. As such, PLCs provide a platform for teachers to work together to support pedagogical change in order to respond to the challenge of continually improving their practices.

The third phenomenon that Schatzki (2002) refers to is teleoaffective structures. Within a school environment, teleoaffective structures provide the collective understanding for the activities that take place. For example, teleoaffective structures within the South African context would include, among others, school codes of conduct and policies such as uniform or discipline policies, award criteria for learners, and learner behavioural conduct valued by the school. Each of these within the school context is established on a particular collective and/or cultural normative view and is goal orientated, i.e. established to achieve a particular goal or outcome, and is connected to the affec-
tive (values and beliefs) dimension of teaching and learning in the school. These practices are not individually formed practices but collective norms, values, and beliefs of the collective social practices that are enacted at the school site. While they may include a spatial-temporal component in that they have become embodied over time by individual teachers from similar social-cultural backgrounds, they are, according to practice theory, considered practices of the social site and not of the individual.

An example of such a practice is a school’s homework policy. The homework policy in a school guides the collective practice of the educators at a school site by expressing a range acceptable practices with respect to the homework, which can be considered a teleaffective structure. Individual teachers may have autonomy to make their own decisions with regard to homework, but these must fall within the homework policy of the school. Thus, the routine act of giving homework expresses a teleological (goal orientated) and affective (purposes, beliefs, and emotions) dimension that governs a teacher’s actions within the collective norm of the school’s policy structure. In other words, routine activities in a school, such as homework activities, as a form of teleaffectivity, “describes why things are done and takes into account the values, beliefs and hopes which influence the way in which a practice proceeds,” and includes how it is thought about within a collective practice (Lloyd, 2010:249).

As part of an ongoing, and often contentious issue in schools, a school’s homework policy is a good example of an aspect of teaching and learning that could form the focus of a PLC conversation. Many schools and teachers regard homework as part of the pedagogical process, however, Pfeiffer (2018) notes a difference of opinion about whether homework should form part of the learning process. As part of the pedagogical learning process, therefore, a school’s homework policy, as well as how the policy is enacted in different grades and classes, is an example of an educational teleaffective procedure that can be productively discussed in a PLC. Deciding what aspects to change or adapt within teachers’ pedagogical practices takes time and often a considerable amount of dialogical engagement (Fataar & Feldman, 2016), and PLCs provide teachers with a professional learning space and the opportunity to debate and develop strategies on an ongoing basis to respond to the needs of their particular learners.

Teachers, therefore, within the social setting of schools, co-produce practices as carriers or performers of dispositional or corporeal professional practices through their (re)production of specific practices (Shove & Pantzar, 2007:156, in Strengers, 2012). Over time, these professional practices or pedagogic performances become embodied as social conventions of pedagogy, i.e. the way in which things are done. What this means, in practice theory, is that teachers’ embodied ways of being and performances are not solely the attributes of the individual teacher, but also part of the practices found at the school site, i.e. the school. Thus, in analysing teachers’ practices with a view to developing professional development programmes, the social setting in which teachers’ professional practice takes place cannot be ignored. Furthermore, given the understanding that teachers’ practices are inherently social in nature, changing the manner in which teaching and learning takes place, one can argue, is best accomplished through collaborative efforts where teachers jointly assess and find solutions to respond to educational issues encountered at the school site.

Conclusion
Using a practice theory perspective I discuss the role of PLCs to support teacher development within the current South African school context. Arguing for the collaborative role that PLCs can play in strengthening teacher professionalism in schools (DBE & Department of Higher Education and Training, 2011:14), and drawing on practice theory, I frame teachers and their practices as socially situated and (re)produced. What this means, is that many routine or habitual practices in the social settings of schools are derived from the collective organisation of the different inter-related elements of the social site, and not the individual (Schatzki, 1996).

Discussing aspects of teachers’ practices using social practice theory, I discuss how individual teachers, embedded in a specific social school context, act as carriers of practices. Schatzki (2005:472) argues that practices are organised by the different elements that compose a nexus of actions that “express the same understandings, observe, contravene, or ignore the same rules, and pursue ends and projects included in the same structure of acceptable and enjoined teleologies.” Consequently, I suggest that changing or adapting teachers’ practices must take into account the social and organisational structures that have become embedded as features of the social (school) site, which, I suggest can be productively accomplished through the ongoing collaborative dialogue within the work of PLCs. Traditional approaches to teacher professional development tend to target the individual. In contrast, learning in PLCs is collaborative and social, and invites participants to engage with one another with regard to how the social, cultural, and physical structures in schools work towards stability and change in teachers’ educational practices.

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References


