Network relations between polycontextual environments

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Abstract
In this paper, I present a case study on a warehouse employee developing a professional portfolio in order to obtain a vocational qualification. Given that professional portfolios have been widely expanded, there is a need to study the literacy practices generated out of this new writing genre. The main questions addressed is the extent to which the literacy practices drawn upon at the workplace and those followed when working on the portfolio overlap or differ, and how their interrelation results into new literacy practices and affects the employee’s changing identity. The result of such a research suggests that, on the one hand, the portfolio development was considered by the employee an easy task when drawing upon familiar literacies and discourses and, on the other hand, the employee was faced with difficulties when addressing issues he had not encountered in the past. When he attempted to overcome these difficulties, then new literacy practices emerged and a consequent shift of identity took place.

Keywords: literacy practices, identity, portfolios, national vocational qualifications, activity theory

1. Introduction
Recent workplace ethnographies have shown that a great variety of literacy practices has been emerging as a result of the highly demanding ‘new work order’ (inter alia: Hart-Landsberg and Reder 1997, Hunter 2004). Vocational qualifications and professional portfolios, as part and parcel of this new order, involve multiple literacy tasks, and the purpose of this paper is to trace these newly generated literacy practices and understand the value and meaning employees give to them, as well as the extent to which employees’ identity is influenced by them. In addition to the portfolio literacies, I will also look at literacy practices drawn upon in the workplace and examine the interrelation of the two and how these are perceived within the ‘new work order’.

2. Theoretical framework
This study follows the theoretical framework of the New Literacy Studies. Research within this framework has challenged theories that found cognitive differences between oral and written societies and has focused on literacy as a situated practice, which can be examined only in the context within which it is applied. This new way of
approaching literacy has given rise to a new discipline of studies wherein researchers apply ethnographic approaches to study literacy in context in a variety of communities. Some of the most influential works of this early period were conducted by Heath (1983), Scribner and Cole (1981) and Street (1984). Following this research paradigm, ethnographic work such as Barton and Hamilton’s (1998), Barton, Hamilton and Ivanic’s (2000), Martin-Jones and Jones’ (2000), amongst others, has shown the richness and diversity of literacy in various domains of individuals’ lives and has insisted on the significance of the study of context in order to interpret literacy in people’s lives.

Another useful context analysis theory used here is Activity Theory (AT). This framework sets out to describe and interpret social actions among networks of people. These networks are called activity systems and are best understood as “collective, artefact-mediated and object-oriented” activities (Engeström 2001). In this paper, I concentrate on a research participant who acts between two activity systems, that of his workplace and that of the vocational qualification. AT allows me to study the development of portfolios as a joint activity and to understand the strategies used by the research participant in order to move from one activity system to another, as well as the effects of such shifting.

3. Derry’s case study
The focus of this case study is Derry, one of the key informants in my research. I met Derry during my visits in the warehouse. At that time, Derry was working towards the completion of his Business and Administration National Vocational Qualification (henceforth NVQ) level 2. Being an administrator and at the same time an NVQ candidate, Derry is the subject of two distinct activity systems, that of his workplace and that of the qualification procedure. In what follows, I discuss aspects of each one of the activity systems and then I go on to show how the two interact. The data that is presented in this section is derived from a one-hour interview with Derry, a forty minutes observation of his meeting with his tutor James as well as from extracts from Derry’s portfolio.
3.1 The workplace activity system

3.1.1 Derry as the subject of the workplace activity and his objects

Derry was a man at his early forties working in the administrative branch of the warehouse. The duties in his post were multiple but his main role in the company was to receive faulty products (mainly clothes and shoes), returned by retailers or individual customers to the warehouse, and to assess their faults. This was an administrative post with many responsibilities as he was constantly mediating between the interests of the company and those of the retailers. Derry had been in this post for seventeen years. So far he had not obtained any qualifications or degrees as he entered the world of work straight after school.

Leontiev (1978) has described the object as the key to understanding an activity and has argued that the object of an activity is driven by people’s needs. These needs can also be identified with what Kaptelinin (2005) describes as the ‘motive’ of an activity as opposed to the object. Derry’s motivation for getting a job was the need to cover his financial needs. It was this motive that led him to look for a job right after school and the same motive that made him apply for a position in this particular warehouse seventeen years ago. Some secondary motives could have been the need for creativity, socialising, etc.

Derry’s objects at his work can vary from his daily work targets (e.g., updating his department’s information boards) to monthly targets (e.g., learning how to use new software) and even to yearly targets (e.g., increase the speed and quality of the product assessment procedure). In this case, the object becomes synonym of Derry’s work duties.

3.1.2 Mediating tools

The semiotic and symbolic tools within an activity system mediate between the subjects and their object. When examining the mediating tools of the workplace activity system, a rich inventory of literacy practices emerges. A major part of his work tasks involved correspondence. When receiving the faulty products he read the accompanying letter in order to find out the alleged problem. If he agreed that it was a valid return, then he had to credit the retailer or the consumer in the system. If he found it to be an invalid return, then he had to process a letter on his computer with his comments and then match this letter with the correspondence that came with the product and return it altogether to the retailer.
Other than correspondence, Derry worked with specialised computer software wherein he logged all his actions regarding the received products and the discrepancies. Software was also used when processing the stock that was returned to the warehouse and also in order to communicate internally with other branches or with the central offices of the company.

3.1.3 Contradictions and expansion in the workplace activity system

The identification of contradictions within an activity system is a very important aspect of analysis. Engeström described contradictions as: “historically accumulating structural tensions within and between activity systems” (2001: 137). Contradictions are seen as having a positive impact on activity systems as they are often the cause for transformation and progress.

A basic contradiction in this workplace activity system was between Derry and the mediating means used to accomplish his work objectives. When new working systems were introduced in the company, Derry had to learn from scratch how to use them. However, this contradiction lead to expansion as Derry got to grips with the new system and in that way his knowledge was broadened. When asked about the difficulties he had with picking up the use of a computer, he said:

“I wasn’t fully in to it to start with and you’re just learning a lot of things when you’ve done them a few times you start to remember and you pick it up and you get into…and then once you get into it you get more speed up and you get more quicker and more confident in yourself, whereas at first you had been, well I was a bit slower and methodical cause I don’t want to make a mistake, there are many things you can…you know, so I…you know…experience means a lot really”

(Derry 150-157).

3.2 The Qualification Activity System

3.2.1 Derry as the subject of the qualification activity and his objects

In this activity system, Derry is again the primary subject since he is the person studying towards completing a level 2 NVQ on Business and Administration. The interview that I had with him took place after he had completed the portfolio and was waiting for its validation.
A second important subject in the qualification activity system is Derry’s tutor and internal verifier, James. James has been working as an NVQ tutor and assessor for the past twenty years and has therefore very big experience working with similar qualifications. James’s role in this activity system was to assist Derry complete his portfolio and assess his work and his progress. He visited the warehouse approximately every fortnight and met two or three candidates each time.

In order to understand the object in the qualification system it is useful to employ again the distinction between the motive and the object of an activity as discussed by Kaptelinin (2005). In the following extract, Derry gives a complete description of both the motive and the object of this activity system:

“My NVQ, I plan to… I can apply for positions that before I couldn’t apply for. You see, quite often you see jobs advertisements in the newspapers, it’s all about themselves, what the work involves and then at the end of it perhaps it might say must have NVQ level 2. So obviously if you don’t have an NVQ then the description you can’t apply for that job because it’s put in a direct straight way. Whereas I’ll get my NVQ and I’ll see an advert that says an NVQ must have an NVQ level 2, well I’ll have one therefore I can apply for the job and go along and have an interview and perhaps I might be fortunate and get the position, whereas if I didn’t have the NVQ I wouldn’t even go that far. So it’s another string in my bone so to speak”.

(Derry 116-132).

3.2.2 Mediating tools

In order to obtain an NVQ, Derry had to develop a portfolio demonstrating prior knowledge of his job tasks and responsibilities. This portfolio was the primary mediating artifact between Derry and his object of obtaining an NVQ. For the portfolio he had to complete two mandatory units and three optional ones. The mandatory ones read: “Carry out your responsibilities at work” and “Work within your business environment”. The three optional units were chosen out of a total of twenty-four units. Derry explains that he chose the units that corresponded more closely to his job role. The three optional units he chose are: “Manage customer relations”, “Store, retrieve and archive information” and “specialist of bespoken software”.

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Derry was given a logbook with a page for each unit, which he had to arrange in a folder using dividers. For every unit he had to provide evidence for a set of performance indicators as well as for a set of knowledge criteria. In the following extract, Derry described some of the texts he had to produce as evidence for his portfolio:

“He asked me to do various documents and print-outs and screen dumps of my daily working tasks, inspections, response system, demand system so I had an illustration and then do a little write-up about it, a little caption of what err, both diagrams, meetings, saying that this is what I’ve processed, functions, defective goods, etc. And then do a brief statement about it and then after I did all these captions…then I did story boards of my job, how I’m doing retails, how it’s processed, how the goods are coming in, inspecting them, processing them on the system, doing correspondence if it’s been refused, etc…step by step guide really, putting into texture that somebody can read, get the gist of what I’m…I actually do on a day basis”.

(Derry 468-482).

In this extract it can be seen that the role of literacy as a mediator for the portfolio development is central. Derry got involved in numerous literacy events in order to produce documents that he would use as evidence in his portfolio.

Oral interaction was also a very significant mediating tool. Before working on each unit Derry had a meeting with James who took him through the unit, they discussed the criteria and he clarified any uncertainties: “…and we went through the literature and…we went through it together and each time…each section by section we stopped and had a little discussion about it and what we need to do” (Derry PD1 454-457). One reason for the increased role of oral communication is probably the fact that there were not any clarifications accompanying the logbooks. Therefore interaction with the tutor was the only way that Derry could make sense of what was required of him as well as answer any possible questions he might have had.

When asked whether he found it easy to compose written statements describing his job tasks, he answered:

“Yes, it was a new style of writing for me and…it wasn’t so difficult, because explaining something that I’ve done and I know so well […] I’m fully aware of what I’m doing, inspections and other things, so when I come
to actually writing down what I do, this is what I do. Yeah, you just flow it, I was OK at doing that I was quite...quite good. I did make several notes first of all...I did little notes of what I did and then read through it all and then altered one or two little sentences around, so that it sounded better when actually reading it. I altered it around a little bit, I took my time over it”.

(Derry 492-510)

When the evidence for each unit was collected, Derry met with James and filled in the ‘evidence summary’ table, a sample of which is provided in Figure 1.

**Figure 1. Evidence summary table extracted from Derry’s portfolio.**

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Process information</th>
<th>Retrieve information</th>
<th>Archive information</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1.</td>
<td>RESPOND SENSIM</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.</td>
<td>ADDITIONAL</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4.</td>
<td>UNDERTAKING</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5.</td>
<td>Ongoing</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>6.</td>
<td>RESEARCH</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>7.</td>
<td>PAPER</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

In this table, Derry included a description of the evidence he had produced and assigned it with a number. He also clarified the type of evidence by using the initials provided underneath the matrix (e.g., if the evidence is a statement then he wrote ‘CS’). The numbers on the top horizontal cells correspond to the performance criteria of the unit. What Derry had to do was log off those criteria that he had covered with each piece of evidence. So for example, the first piece of evidence is described as a ‘respond
system map’ and is included in 19 pages (1-19). By providing this evidence, Derry has covered performance indicators 1, 3, 4, 5, 7, 9 and 10.

3.2.3 Contradictions and expansion in the qualification activity system

The strongest contradiction in the qualification activity system lies between Derry and the primary mediating tool: the portfolio. I showed that Derry found the evidence collection an easy task. Being very familiar with his job role he did not encounter any difficulties when bringing it into paper. On the contrary, the same did not happen when Derry was asked to describe situations outside his job routine. Towards the end of the portfolio development, he moved on to the last mandatory unit entitled ‘Work within your business environment’. For this unit he had to provide evidence for criteria such as ‘Interact with other people in a way that is sensitive to their individual needs and respects their background, abilities, values, customs and beliefs’. In this case an important contradiction took place within the activity system since Derry was not sure of how to approach the evidence collection:

“I would say things like team working and communication is relevant to my work, we should write about, but the other aspects, especially diversity and stuff, it’s not in the day to day, in the job tasks, I’m doing story boards about something not being fully aware of it”.

(Derry 807-811).

What is interesting to note is that Derry, a man with such a long experience in the world of work, was most probably familiar with concepts such as respect for other people’s beliefs, race, gender, etc, and this was evident from his behaviour to his colleagues and me. The point I am making is that even though Derry argued that he was not familiar with the criteria set in the final unit of his portfolio, his behaviour in his workplace proved the opposite (at least for some of them). Therefore, one underlying contradiction can be argued to exist between Derry’s belief about his lack of familiarity with certain standards and his actual experience and knowledge. The reason for this contradiction could be that the portfolio standards drew on a discourse outside his workplace, the discourse of vocational qualifications, which did not allow Derry to recognise the meaning of concepts otherwise long known to him.

In order to meet the demands of this unit, Derry decided to look for help outside his job:
“…on the last couple of units I have done a bit of revising and looked for a bit of help from library books. [...] Yes I decided to, because I thought struggling all on my own weren’t any… I wasn’t putting it probably in any good context, you know, professionally it’s not good, so I did a little bit of studying and looked and made a few notes.

(Derry, 623-630).

Derry decided that the library was a good place for him to work because he did not have a computer at home. He visited the library twice a week and said that even though it was time-consuming, he preferred working that way because he concentrated better. He read books on management theory and copied extracts out of them to include them in his portfolio. His eagerness to “work professionally” on his NVQ led him to the decision to buy a computer and a printer to use at home:

“…and then I decided to get my own pc, I’ve got my own pc now so the going to town stopped and now I can do it in my own luxury, you know, I’m home, get a cup of tea, come home from work and I do it on the pc now, I type it home and I found I’m doing more work now because I’ve got more access to it, I give a little bit more time”.

(Derry PD1 586-592).

Derry found it difficult to complete a unit that was not directly relevant to his job tasks and referred to library books to get some help. Engeström (2001: 137) argues that expansion within an activity system is accomplished when “the object and the motive of the activity are reconceptualised to embrace radically wider horizon of possibilities than in the previous mode of the activity”. Derry believed that his work experience was not enough in order to complete a certain task and moved forward, outside the boundaries of the activity system, into a new setting, that of the library, in order to find new mediating means to address his object. And when he realised the importance of the computer as a complementary mediating means, he decided to buy one, even though he was not sure if he was going to use it again in the future. Within the qualification activity system, not only the setting and the means, but also his object changed, from simply obtaining a qualification to doing a professional job and learning:

“…because I’ve studied things and looked up and revised things a little bit, it’s given me more knowledge, you see, it improved me as a person and then
I’ve done a storyboard on why communication is important and diversity and stuff like that, so each single subject has given me some knowledge of it”.

(Derry 614- 618.)

3.3 Derry’s changing identity

In the beginning of this paper, I argued that one of the reasons for using AT as an analytic lens is the focus on the collective rather than the individual. This is particularly important when studying identity, as my intention is not to focus on Derry as an individual isolated from any kind of context, neither to study the societal structure without taking into consideration the subjects that act within it. As Wenger (1998) argues, the focus of analysis when studying identity should be on the mutual constitution of community and person. Derry undergoes a continuous negotiation of his identity as he moves across the two activity systems and as his literacy practices and therefore his knowledge expand. Changing identities is a significant aspect of the network relations between two or more activity systems (Roth et al. 2004) and it is this formation and reformation of identity that takes place when subjects act within a polycontextual environment that I am interested in examining here.

Individuals become subjects of an activity by working and interacting with other members towards the completion of a common goal. Ivanič (2006) argues that identity is discoursally constructed and therefore we need to focus on subjects’ interaction in order to understand their changing identities. She goes on to distinguish three ways with which people are discoursally constructed:

- by ‘address’ – the way we are talked to by others
- by ‘attribution’ – the way we are talked about by others
- by ‘affiliation’ – the way we talk like others

( ibid: 13)

Derry’s discoursal construction of identity by ‘address’ in his workplace, ascribes him with the quality of an ‘expert’. His colleagues looked up to him and addressed him with esteem due to having an administrative post. In his correspondence with the retailers it can also be seen that he was addressed with respect as it was his judgment only that would define whether the company had to take responsibility for the faulty products or not. This highly valued way of being addressed in his workplace had a
direct impact on the construction of identity by ‘address’ in the qualification activity. His line manager was very supportive towards him and offered him help with his portfolio if he ever needed it. Similarly, his tutor let him decide on the units that he considered closer to his job role and relied on him to compose his portfolio with very little help.

There is no indication of how Derry was talked to by others in his workplace. However, having a highly-ranked administrative post, it is very possible that he was considered belonging to the ‘first floor of the warehouse’, that is the administrative sector, and therefore discussed by others in this quality. This attribution penetrates into and is reinforced by the qualification system. In an interview I had with his tutor, James, he explained that because Derry had an administrative post he was expected to type his statements, not to have any spelling mistakes and to take responsibility for the compilation of his portfolio. It is evident that in the qualification activity system Derry was also talked to by his tutor as someone belonging in the administrative team of the warehouse and therefore ascribing him with certain qualities and roles. This is further reinforced by the fact that James said that the same responsibilities and roles would not be expected by a candidate who works in the warehouse.

So far the identities that Derry has been taking up stem from other members of the activity systems, by the ways they address him and the qualities they attribute to him. Identity construction as ‘address’ and as ‘attribution’ are very close to what Gee (2001) has described as Discourse-identity as an ‘ascription’. He describes Discourse-identities as existing on a continuum depending upon “how active or passive one is in recruiting them”. ‘Ascription’ lies in the passive end of the continuum whereas ‘achievement’ lies in the active end. Identity as an achievement is actively sought and sometimes imposed by individuals and coincides with Ivanič’s third way of discoursal construction identity, that of ‘affiliation’. Constructing one’s identity by affiliation means identifying with a specific group of people we want to be seen as belonging to and behave and ‘talk’ like they do. Identification has been described by Wenger (1998: 191) as: “the process through which modes of belonging become constitutive of our identities by creating bonds or distinctions in which we become invested”. It is clear that affiliation or identification is closely linked with the notion of belonging.

For the past seventeen years, Derry had been a member of his workplace activity and had been accustomed to its tools, community, rules and division of labour. He belonged to and identified with his administrative post in the warehouse and this was evident
throughout the interview I had with him when he took pleasure and pride to talk about his job. I also discussed earlier that Derry found it easy to write statements describing his job role since he was so familiar with it. In this case, while acting within his qualification system, Derry identified with the kind of writing he did for his workplace and therefore had no difficulties in printing documents, creating screen-dumps, writing reports, and other related literacy practices. On the contrary, he encountered difficulties when asked to produce texts that were outside the remit of his workplace and with which he did not identify. Ivanič (2006: 21) argues that when participating in an activity “it will make a massive difference whether a person does or does not identify with the sort of people who are its ‘subjects’, and whether they take to themselves its ‘objects’”. I argue here that it is also the familiarity and the identification with the mediating artefacts that plays a significant role on the attitude that the individual will adopt towards the activity.

Finally, through this fundamental contradiction in the qualification activity system between Derry and the mediating means, an expansion took place where Derry took a step forward, towards learning and familiarising himself with the literacy practices required from someone doing a level 2 Business and Administration NVQ. He went to the library, he bought a computer and a printer and he successfully managed to complete his portfolio and consequently his NVQ. Therefore, through the expansion of the activity system, Derry’s identity was also transformed. From someone identifying almost exclusively with his job role he had now learned to identify himself with a successful NVQ candidate and with the use of literacy practices such a role entails.

4. Conclusion

In this paper I have described Derry as a subject acting in two distinct networks, or else two activity systems, namely his workplace and the vocational qualification process. For both these activities, Derry is drawing upon literacy tasks as a mediating tool in order to reach his goal. Some of these literacy practices are common and used in both activities for different purposes (e.g., emails written to customers also included as evidence in his portfolio). Inner contradictions within the activity systems lead to expansion and hence to the creation of new literacy practices. For example, Derry learned how to use new computer software for the purposes of his work and bought a computer in order to complete his portfolio. Finally, in this paper I showed how Derry’s construction of identity has been achieved as the result of the interaction of the two
activity systems of which he has been the primary subject. First, the identity that was
ascribed to him in the workplace system had an impact upon his ascribed identity in the
qualification system. Second, the identity he adopted for himself was directly influenced
by his role and mediating tools in the workplace, with which he had long been familiar.
However, the expansion of this system had as a consequence a shift in Derry’s identity
who now identified with both activities and their involving literacy practices.

References
Routledge.