

To travel is to learn - the knowledge bus

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The 8th Interdisciplinary Perspectives on Accounting Conference

Cardiff, Wales, July 2006

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1. Introduction

This paper seeks to take further some reflections developed over the past two decades concerning the nature of accounting, both as textual form and mode of practice, and how it has the specific and powerful effects that it manifestly has today across organizational and institutional settings and also (and relatedly) within selves. Indeed we shall particularly focus on the latter set of effects here.

The paper therefore continues a critique already advanced in a range of papers that the authors have been involved in which have argued in a number of ways against the view of accounting as mere technical or secondary support technology (e.g. Ezzamel, Hoskin & Macve, 1990; Frandsen, 2004, 2005; Hoskin & Macve, 1986, 1988, & 2000; Ezzamel & Hoskin, 2002). It also advances what we see as an increasingly necessary critique against insufficiently theorised views of accounting (or other managerial technologies such as strategy) as ‘practice’. Too often, in our view, ‘practice’ is treated as designating primarily ‘what people do’ and/or as ‘social’ practice in a given present, while these surface forms of doing things, individually and socially, are not linked systematically to any ‘theory of practices’ which links action in the present and its concurrent relations or contexts (i.e. a focus on the synchronic), to action in the past and the relations and contexts constructed out of and translated from that past (i.e. a correlative focus on the diachronic).

At the same time, the paper attempts to advance these critiques through indirection, through what we hope is a positive tactic of focussing on accounting as such, i.e. as a practice with a particular set of current relations and contexts to other practices in the present, but as practice which always bears within it relations to its past and past contexts of its operation. In what follows we therefore reflect upon the interplay of the diachronic with the synchronic, in order to engage with accounting as practice today. Furthermore, as already signalled, we want to consider accounting as practice implicated in what Michel Foucault in his late work referred to as ‘the care of the self’ – more specifically to consider how accounting shapes and forms ‘the way in which the subject experiences itself in a truth game in which it has a relation to itself’ (Florence/Foucault, in Gutting, 1994, p. 316).¹

We shall begin at the level of the diachronic, with a reflection first upon what accounting has, in our view, always necessarily been, as necessarily *textual* mode of practice (necessarily therefore generating a certain distinctively textual discourse), since its invention. Here we seek to identify two correlative aspects of accounting. First we offer a set of observations on what is *constant* in accounting, i.e. what has, from its first emergence, remained constant across time and space in terms of accounting’s structure, process and content, and what is therefore constantly repeated in its effects on the external world and internally, in terms of the ways we humans may engage in truth games in relation to our selves. But, as a diachronic analysis, this is not some story of universal structures or anthropological universals, as if we live in an eternally frozen present. Its focus, in relation to our pasts, presents and possible futures, is on how whatever is constant has also always been subject to constant change, whether small (and so what is often called ‘continuous’) or large (when it has been called

¹ The designation Florence/Foucault refers to the fact that the article from which this quotation is taken was an entry on Foucault’s work in a *Dictionnaire des Philosophes* edited by Denis Huisman (Presses Universitaires de France, 1984) written under the nom de plume Maurice Florence, which it is now known was written in collaboration with the editor by Foucault, shortly before his death.

‘discontinuous’), at the level of the *particular* structures, processes and contents through which it is manifested and embodied.

Part of our reflection therefore is on how accounting, arguably always from the moment of its invention powerful at the level of what is constant, has become more powerful as it has become more complex and sophisticated and discovered new alliances with other practices to have its effects on our external and internal worlds and ways of living. Both aspects of this kind of diachronic analysis, we suggest, are necessary if we are to advance our understandings of we have arrived at, and now dwell in, a world where accounting is so powerful, and so constitutive of our selves, in terms of our self-caring and internal truth games, and of the organizational and institutional settings in which our selves find themselves.

Following on from that reflection we then turn to consider how accounting operates synchronically in the present era of our globalised world, focussing on one particular setting in the world of transportation, to trace how both the constancy and change aspects of the diachronic now play out. As one recent paper has observed (Ahrens & Campbell, 2006, forthcoming), 1-3), even though we have an increasing number of studies of accounting in synchronic contexts:

‘the emphasis on accounting as a social and not equally strategic and commercial technology has left an important gap in our understanding of the interconnections between accounting and other organisational practices’.

We hope we may help close that gap in our understanding here, but in the process attempting to trace the intersection between the diachronic and the synchronic, and with the way in which both manifest aspects of constancy as well as the inevitable marks of change.²

To do so, we propose to work with the idea that accounting is and has always been a special and specific kind of space, time and value ‘machine’ (Frandsen 2004). It is such a machine from the moment of its invention, and it is in certain of its characteristics as such a machine that we detect certain constancies. At the same time, like all special and successful machines, it does not remain embodied in only one form or as just one machine. Its history is one of constant revision, expansion, extension and innovation, so that the space/time/value machines of today are both more extensive and more powerful than ever before in human experience. Further they continually extend their scope and purchase, so that today accounting has become a machine where certain experiences get established for and internalised by a wide range of people through the associations the machine constructs and produces between numbers, words, and forms of ‘valuing’ that operate across external and internal space and time. These associations are then anchored in the everyday movements and experiences of work, through what Latour (1998) describes as a process of translation which links together

² In this respect we find it difficult to concur in the thesis of Ahrens and Campbell that a way to closing that gap can be found through the adoption of some form of practice theory along the lines articulated in much sociologically informed work, both in and beyond the study of accounting (e.g. Schatzki, Knorr Cetina & von Savigny, 2001; Schatzki, 2002). Practices may be understood as ‘organized human activities’ and as an ‘organized, open-ended spatial-temporal manifold of action’ (Schatzki, 2005, cited Ahrens & Campbell, p9) but then they can only be understood as such in terms of how they came to be in the first instance, their regularities, their idiosyncrasies, their apparent current immutability and continuing mutability. We therefore the assertion puzzling that ‘Practice theory does not need higher-level aggregations above practices and practice arrangement bundles’, for without such aggregations, of a diachronic kind (though not certainly entailing any relapse into old social and sociological categories), the very idea of practices as bundles having efficacy on and within selves and across social settings makes no sense.

and maintains (for the time being) the chain of associations between space time and value engineered by the accounting machine. Furthermore the chains produced by this accounting machine arguably now prove so powerful, or difficult to resist, that they increasingly produce and reproduce a way of living in space and time that goes beyond work as well.

That last observation is perhaps almost a commonplace within the critical accounting literature. At the same time we hope we may explain here, both at the diachronic and synchronic levels, how such chains become so powerful, while also indicating their provisionality and fragility (both in terms of the past and how they and we got here, and in terms of the present that leads into the future). Not least because, as we shall try to show, the accounting space-time-value machine is necessarily not just operating externally but internally, where it plays, from the moment of its invention, a key role in the way in which humans can henceforward prosecute and play out what we shall, drawing as we note upon the late work of Michel Foucault, analyze as ‘truth games’, both in relation to others externally and in their internal relations to their selves. This is in the first instance because the accounting machine always requires an operator or driver. And as anyone who has operated or driven a machine will know at the level of experience, the machine becomes an extension of the driver.³

But furthermore, as what is always (as we shall show in our third section) a *textual* machine it shares that special facility for shaping the *objectivization* of the subject that any form of textual signification has, through the way it gives determinate name (and in accounting’s case number) to the objects of thought that the subject articulates (and so intensifying the interplay of objectivization with subjectivization). So not only does it penetrate inside the human subject who operates it, it has special and specific effects as it does so: which in turn are translated and disseminated in the external world, on those external Others who are also the objects of its textual signification. Even where they are not operators of the accounting machine, and so not subject to the particular knowledgeable interplay of subject and object that such operators encounter, are still subject to its effects, certainly at the level of action, and increasingly in the modern world, at that of thought too.

At the same time, accounting is not ever everywhere, in everything, a panoptic ubiquity. There are always other times, spaces and values beyond accounting, whose continued existence we need to acknowledge too. In this paper we shall, at the synchronic level, attempt both things through a series of four contemporary episodes that we will present concerned with the activity taking place within the sphere of transportation. The first three of these episodes will focus on a particular institutionalised mode of transportation, a bus and tram company, and how the accounting machine penetrates the identity of different actors undertaking the activity of inhabiting in various ways the machines we call buses and trams.

In the first episode we consider how a new constellation of space/time/value dynamics is being extended to (or imposed upon) drivers through their participation in a new kind of training via the ‘Knowledge Bus’ of our title, a training which articulates a new kind of objectivization of the subject *as* driver, who is now delineated as a customer-facing

³ Those who have learned to drive a left-hand-drive car or bus in a country where you drive on the right will perhaps recall the experience of driving for the first time a right-hand car or bus where you drive on the left. Most of physical vehicle may now extend to your left, but the implicit, sensed vehicle still extends to your right, which can have a catastrophic effect on kerbs and parked cars until or unless you develop the necessary coincidence between the physical and the sensed. Of course, experience, being warned in advance, or prior virtual practice can all speed that process up.

professional as well as a technically competent driver. The issue in this episode is how that objectivization of the subject is put into interplay with the driver's mode of subjectivization through a range of techniques, particularly the pedagogic practices of training and the imposition of a new examination in the relevant skills as a precondition for holding a bus driver's licence going forward, but how also the accounting machine takes on a new function and significance, as new practices of accountability are brought into play, focussing on tracking the acquisition and demonstration of this new professional identity. Within this transport world, it therefore becomes difficult to resist the desired re-making of one's identity as bus driver (except by quitting the job).

But this new constellation is only an extension and refinement (improvement?) of an existing accounting machine which we can observe at work, in our second episode, in the everyday process of driving the bus, both through analysis of drivers' actions and through talking with them about their activity and what they think about as they undertake it. Here accounting can be seen as already defining how one acts as a driver to ensure that you and the bus or tram are in the 'right' place and the 'right' time and how one simultaneously acts as cashier or account-holder in relation to the collecting of revenues (i.e. fares), in a process where the subject is accountable not only for ensuring that the 'right' fare is exacted from each passenger, but for doing so in a way that does not disrupt the continuing requirement to stay 'on time', and so be in the right place at the right time all the way along the route.

As a complement to this episode, our third episode considers how a passenger finds her/himself also engaging with this existing machine in the process of deciding to take the bus or tram, and then going through the experience of being a passenger in various aspects, for instance in relation to paying the fare for riding, aiding or impeding the vehicle's punctuality, and contributing to the success of its passage through time and space towards its destination, e.g. through being a 'good' passenger or a difficult or disruptive one (which as the previous episode suggests may be through ignorance or forgetfulness as much as any wilful action).

In all these episodes, we arguably see the exercise not only of power but of knowledge. Hence we have chosen the 'Knowledge Bus' as our motif. For while in the first episode our reference is to a particular bus that was involved in the training programme and labelled the 'Knowledge Bus' for that purpose, more generally all buses in modern transportation systems are 'Knowledge Buses', carriers of key knowledge techniques that enable them to function effectively as modes of transportation, and in terms of the modern business equation of transport, not just effectively but efficiently and economically. This is why, arguably, we 'naturally' find accounting at the heart of the Knowledge Bus, as a key form of knowledge enabling and regulating its circulation, both at the level of the individual bus and at every level beyond that up to the bus fleet as a whole.

Finally our fourth episode which will offer a counter-narrative through considering how the same journey can be executed away from the bus, travelling by bicycle, and how in that case the traveller escapes the purchase of the space/time/value interplays set up by accounting and operates instead outside the purview of the Knowledge Bus, in a zone where one does not have to be concerned for punctuality, having the right fare, being a 'good' passenger or otherwise, and where consequently other ways of thinking and acting may have free play, and occupy the traveller's mind without intrusion by Knowledge Bus concerns.

We will return to these episodes shortly. But first we turn to consider more closely the question of this machine, in its constancy and difference, across time and space,

diachronically, as our prelude to our analysis of what happens at the everyday level of timing and spacing, synchronically.

2. How the Accounting Machine operates (and is operated) in the ‘care of the self’: a return to Foucault

Perhaps the key to understanding that is by beginning from the relation we have to our selves in terms of that most human and interior and personal activity, our relation to truth. Here again we draw on Foucault’s reflections as Foucault/Florence, and the agenda that is described by Foucault, in that author-function guise, as being what Foucault had always been pursuing (and which is now left in his legacy for others to pursue). The analysis begins (Florence/Foucault, 1994, 314-5) from the idea that a critical history of thought must begin from the relation of (human) subject to object and how the subject becomes the ‘legitimate subject of one type of knowledge or another’, which is therefore a ‘matter of determining its mode of “subjectivization”’. But the relation of subject to object will not simply be of pure or unitary human subject to external object, because an integral aspect of thought is the thinking of one’s self as object of thought. So the question for the subject is equally one ‘of determining its mode of objectivization, which varies, too, according to the type of knowledge involved’. The project that therefore emerges is tracing the interplay of this objectivization and subjectivization, on the basis that ‘it is from their mutual development and their reciprocal interplay that what we might call “truth games” arise. From which it follows that the ‘critical history of thought.... is the history of the emergence of truth games’ (315), and the diachronic task becomes one ‘of knowing how various truth games have taken shape, truth games in the course of which the subject has become an object of knowledge’ (316). This can then, in one direction, take shape as a ‘history of “subjectivity”, if by that word is meant [in the words we have already quoted] the way in which the subject experiences itself in a truth game in which it has a relation to itself’.

How those truth games take place is, as the piece then continues to show, via the engagement of the subject in practices that in being engaged in are also constitutive of the subject.⁴ But what are the practices that can have such purchase on the self? We may suggest that certain conclusions follow from Foucault’s methodological principles as set out in note 4.

⁴ Foucault/Florence then proceeds (317-8) to outline certain methodological choices that such a study observes: first ‘a systematic scepticism with respect to all anthropological universals – a scepticism that we also espouse as indicated above in terms of our approach to diachronic analysis. Second, ‘it is also necessary to overturn the philosophic procedure of moving back toward the constitutive subject.... what is required, on the contrary, is to return toward the study of the concrete practices by which the subject is constituted in the immanence of a domain of knowledge’, and in that way ‘to bring to light the processes proper to an experience in which subject and object “form and transform themselves” in relation to and as functions of one another’. At which point he re-emphasizes the significance of the potentially fraught ‘P’ word, as he goes on (p318). ‘From this a third methodological principle follows: that of appealing to “practices” as a domain of analysis, of approaching one’s study from the angle of what “was done”.’ Whence comes the apparent sanction for the synchronic surface study of ‘what people do’. But what Foucault/Florence then sets out as ‘Michel Foucault’s approach’ is never just that, as its carefully worded specification signals. For he studies ‘the practices – ways of doing things – that are more or less *regulated*, more or less *conscious*, more or less *goal-oriented*, through which one can grasp the lineaments both of what was constituted as real for those who were attempting to conceptualize and govern it, and of the way in which those same people constituted themselves as subjects capable of knowing, analyzing and ultimately modifying the real’ (emphasis added). As the reflection concludes (p318): ‘These “practices”, *understood simultaneously as modes of acting and thinking*, are what provide the key to understanding a correlative constitution of the subject and the object’ (emphasis added).

First such practices will of course have to operate synchronically, in the here and now, to have purchase. But they will equally operate diachronically, first through emanating from a historically given and so determinate elsewhere, the social and cultural past and the practices established as part of that past and so operating in the present. Second, as more or less regulated, conscious and goal-oriented, they cannot simply be the actions engaged in by the subject, either in a pure internal relation to itself or in a relation that draws in some other or others. They will include what is sedimented and circulated in that time and space as rules of action and thought, more informally 'accepted' ways of doing things, and the practices involved in forming objectives, whether explicit or tacit. Third and finally, they must therefore necessarily involve an interplay between what we may designate as certain *primary* practices of doing and thinking, which are engaged in purely in the synchronic, as the focus of caring for the self, and other *secondary* practices which operate in the synchronic dimension beneath the surface of the practices undertaken in the here and now, and which act diachronically to set up and maintain the framing of the specifically given rules, accepted ways of doing things, and tacit and explicit objectives accepted and internalised by subjects and articulated in the practices undertaken in the here and now.

The identification of these secondary practices and the tracing of the way in which they shape the interplay of objectivization and subjectivization is, we suggest, a major methodological issue to be set alongside the three set out by Foucault, in the sense that it is difficult to see how the study of "practices" can develop an adequate theoretical base without it.

Inspection of Foucault's own late work on the care of the self suggests that, for him, there are three particular kinds of secondary practice which operate in different forms in different eras, but with a certain regularity across eras. Separately, but even more so together, these practices all are involved, to a greater or lesser degree, in articulating and circulating rules, accepted ways of acting and thinking, and goals or objectives. These are the practices of writing, of pedagogy, and of valuing. Such practices will be context and culture specific, and we have to be careful to avoid anachronism in talking of them.⁵ But Foucault's analyses in his late writings, particularly volumes two and three of *The History of Sexuality* and in other papers, finished and unfinished, show that he identified practices of this kind as operating to constitute a certain form of objectivization of the subject that could then be (and manifestly was) taken on as the basis for the truth games that set and keep in motion the interplay between objectivization and subjectivization within the subject.

Those volumes focus on ancient Greece and Rome in what Foucault proposed would have been a series of studies leading back towards the present, and our contemporary truth games in relation to the self.⁶ In these ancient worlds Foucault traces how writing, pedagogy and

⁵ So for instance a practice of alphabetic writing requires living in an era subsequent to the alphabet's invention, i.e. post 750BCE or at an extreme post 1500 BCE, and within a culture where it circulates, a practice of formal examination requires living in an era subsequent to that invention, i.e. post 400 CE in cultures within the Chinese sphere of influence, post 1150 CE in those within the western European sphere.

⁶ Foucault had begun his study of the care of the self the practice of self-confession and the truth brought into the light from below the level of consciousness in his *History of Sexuality volume 1* (1979) whose object of analysis was the Freudian practice of conversational therapy (with the therapist and with oneself), and how it drew upon the older form of Catholic examination of the self, confession, and translates it to discover or construct a qualitatively new truth game below the level of intention (the major object of concern in the religious form of confessional truth-game from the medieval period). We may now see, of course, that a study of modern subjectivization/objectivization interplays games should equally have one object of analysis the truth games that circulate around the 'calculable self' that was an object of analysis in *Discipline and Punish*. The practice of putting numbers on selves, as developed in academic examinations in Europe from the 1760s on (Hoskin, 1993), has now been translated into various extremely powerful modes of objectivization (performance targets,

modes of evaluation already interplay, as secondary support or supplementary practices, to construct ways of objectivizing the subject that can then become part of one's subjectivization. Writing for instance plays a key role through such techniques as *hypomnemata* – notes written by oneself to oneself noting activities to be practised and others to avoid. More generally, writing plays a central role as the medium in which all the pedagogic texts counselling how to live an ethical life are conveyed, as in the works of the Stoic and Epicurean philosophers. Pedagogy in turn plays more than one role, first as the means by which the objectified proposals for self-care contained in these advice texts are to be taken within the self, but second as an integral feature of the lived experience necessary to become an ethical self. For one becomes ethical only by putting one's self in a learning relation to a worthy pedagogic other, the philosophical master, whose most famous example is Socrates. Then one must engage in a life-long pedagogic practice in relation to one's self, internalizing the pedagogic voice that points the way to ethical action.

Finally, there must be a constant work of evaluating and appraising, both of the recommendations made in writing and of one's conformity with what pedagogic practice and the pedagogic voice within counsel. Foucault goes into considerable detail concerning ancient evaluative practices in chapter 2 of his *History of Sexuality* volume 3 (*Le Souci de Soi*). Entitled '*La Culture du Soi*', the chapter describes (1984: 75-9) a tripartite set of procedures for testing or evaluating the self ('*procédures d'épreuve*'), including first exercises of self-denial, second an 'examination of conscience' ('*l'examen de conscience*') undertaken morning and night and third a 'continual filtering of one's mental pictures' ('*un filtrage permanent des représentations*'). The second and third of these are key modes of evaluation, in particularly the second. The kind of practices involved are set out in detail in Seneca's account of the 'examination of conscience' in his *de Ira*, which Foucault cites at some length (Foucault, 1984b, 77-9). One needs (*de Ira*, III, 36) to 'render an account' (*rationem reddere*), 'question' (*interrogare*), be 'the inspector and secret censor of one's self' (*speculator sui censorque secretus*). Further, I should 'state my case at the bar of myself' (*apud me causam dico*), 'scrutinize my whole day' (*totam diem scrutor*) and 'remeasure my acts and words' (*factaque...dicta mea remetior*). This is a meticulous set of objectivization procedures, including translations from legal practice, but more significantly from our viewpoint here practices of accounting and such related activities as banking and/or stewardship (the remeasuring is the kind of checking undertaken in weighing coinage, but it is the mark of the good steward).⁷

So the accounting machine is already hard at work, in the ancient Roman world, contributing to the objectivization of the subject and to its modes of subjectivization. It arguably does so even more effectively today, when it can combine with a practice of examination that was (see note 8) as yet absent from that world, and with that feature of modern examining practice, the putting of numbers on people. However, even that is not all that needs to be said concerning accounting and its power, if we are to understand precisely how it operates as a

accountability systems, intelligence tests), all of which gain much of their power to become part of our subjectivization from the way that naming certain qualities and putting numbers on them confers on the evaluations thus made a status of 'objective' truth.

⁷ For a fuller discussion of Foucault's analysis see Hoskin (1990). Incidentally one point made there (Hoskin, 1990, 37-8) is that Foucault himself engages in an unfortunate anachronism in translating what Seneca says, by frequently substituting the French term '*examen*' for Seneca's terms. Arguably the usage of 'examination' is acceptable as a general substitute term so long as we do not therefore see this practice as like modern forms of examination and note that extant Latin literature hardly uses the term '*examinatio*' at all. But it is important to note that Seneca's world simply did not name its evaluation practices with the term to which we have such 'natural' recourse today, as Seneca's own choice of terms reveals.

space/time/value machine, in different modes in different eras and cultures, but with a certain constancy across them all.

3. The Invention of Accounting and the Constitution of the ‘Constant Machine’:

Accounting can now be seen as one of the most decisive human inventions, thanks to the work of Schmandt-Besserat, as summarised in her *Before Writing* (1992). As she argues, there develops around 8000 BCE, probably in Mesopotamia, a new communication device consisting of man-made clay artefacts, or tokens, each of which is formed into a different shape (cones, spheres, etc) and which is then used both to *name* and to *count* items. *Ipsa facto* this constitutes the first known form of accounting. A first consequence of this technological breakthrough is the successful and sustained shift in the human way of living from hunter-gathering nomadic culture into the static, place-based mode of agriculture. Then around 4500 BCE there is a shift from small separate agricultural communities to the more integrated or coordinated mode of the city, and the city-based state (whose survival is based on an extension of accounting, as form of determining and extracting the tax or tribute required for the maintenance of the state’s central leadership and administrative elite). Finally, she argues that, within this city-state world and around 3200 BCE, the first systems of ‘writing’, i.e. the first systems made up of distinct and separate linguistic signs and numerical signs, are developed directly out of this earlier token-accounting system.⁸

This of course is typically taken as the moment of human breakthrough into ‘civilization’ given the shift in human communication and thought into ‘literacy’ made possible by these visible sign systems. As Walter Ong puts it: ‘writing restructures consciousness’ (Ong, 1982, ch 4), through establishing “autonomous” discourse...which cannot be directly questioned or contested as oral speech can be because...(it) has been detached from its author.’ It is not just that it establishes a stable text that constantly says the same so long as it survives unmutated or unchanged, it is that:

‘...there is no way directly to refute a text. After total and devastating refutation it still says the same as before.’ (Ong, 1982, 79)

Additionally writing is an artificial practice, ‘governed by consciously contrived, articulable rules: for example a certain pictogram will stand for a certain specific word’ (1982, 82). But to say that it is artificial, Ong continues, is to praise it. Artificiality is natural to humans, and this form of it ‘heightens consciousness’. It brings us to a world of silent meaning (even though in many cultures real reading has been taken as reading aloud, restoring the ‘living’ word of the author). For the text stands silent, and penetrates in its silence into our interiority,

⁸ Her particular argument on this breakthrough is that from around 4,500 BC, the practice began of impressing the simple-shaped tokens into the damp clay before enclosure (and then similarly, of incising versions of the complex ones with a stylus), thus in each case producing enduring surface representations of what was inside. Then, later still, impressed and incised representations came to stand as signs in their own right, at which point the clay envelopes became clay *tablets*. The resultant texts were at first still purely accounts, made up of linguistic-numerical signs; but, from around 3,300 BC, the *impressed* signs in some tablets can be deciphered as functioning as purely *numerical* signs; so, ‘while retaining their primary meaning, for example as grain or land measures and as animal count, (they) acquired a secondary meaning as numerals’ (1992, p.193). By 3,100 BC, *incised* signs have begun to function as purely *linguistic* signs. Within a few centuries, the accounting provenance of the linguistic and numerical sign systems of Mesopotamia had faded from memory, to remain buried until the last few years.

where it brings things that may be distant into a proximity where the images of those things conjured up by the silent signs may be ‘imag-ined’ and where we may then carry on ‘an increasingly articulate introspectivity, opening the psyche as never before not only to the external objective world quite distinct from itself but also to the interior self against whom the objective world is set’ (1982: 105).⁹ And this is not a bad form of alienation – indeed Ong argues that ‘alienation from a natural milieu can be good for us and indeed is in many ways essential for a full human life’. Instead it foregrounds a necessary interplay in our action and thought between the near and the far, spatially, and the past and the present, temporally. For

‘to live and understand fully we need not only proximity but distance. This writing provides for consciousness as nothing else does.’ (1982, 82)

We buy into this kind of analysis of the transformative effects of visible sign systems. What scholars such as Ong, and also Derrida, then argue is that as we move forward in time from writing’s invention into subsequent – or as Derrida would say ‘supplementary’ (see further below) – scripts these effects intensify, particularly with the breakthrough into the alphabetic script. That script breakthrough was probably developed in ancient Greece around 750 BCE (although this remains an issue of contention among historians of writing, depending upon how the alphabetic breakthrough is defined – Ong is one who argues for earlier Semitic ‘syllabaries’ being fundamentally alphabetic). It enables the apparent mirroring of speech in writing for the first time, by being able (apparently) to break the infinity of sound into a set of between 20 and 30 elemental letters out of which syllables, signs and narratives can then be constructed (so long as the letters, syllables and signs are properly combined to convey the signification desired). Knowledge (as in Plato) can then be seen as being constructed on the alphabetic model, and understanding as being reached on the basis of analysis down into elements and their reconstituting synthesis into new wholes. A whole new range of things can be easily articulated and so circulated to be thought and added to by others via this technology (which is never to say that other sign systems cannot articulate and circulate complexity and newness – they manifestly can – the power lies in the ease of articulation and of that articulation’s decoding by others). That kind of intensification of things articulated and thought is then further intensified in medieval Europe with the first combination of alphabetic script with the arabic numeral system incorporating the zero, to form what is often now described as ‘alphanumeric’ writing, with all the consequences that are now familiar to us in terms of the again extended range of things that get articulated and thought and circulated as forms of knowledge in the centuries since, in what is an ever-intensifying expansion of knowledge and its dissemination down into the present.¹⁰

⁹ We note here the closeness in formulation to Foucault’s above, except that in the latter case the idea of the self as object as well as subject sets off the analysis of the interplay between the modes of objectivization and subjectivization within the self.

¹⁰ The essential characteristic of both breakthroughs is the ‘zero’ principle. Just as arabic numerals with the inscription of a sign for zero ‘0’ enables the use of place value and the articulation of complex mathematical statements (and the articulation within the alphanumeric frame of further sign systems, algebra as a mix of letters and numerals, logarithms, the calculus, and all the various notation systems in modern mathematics), so is the alphabetic breakthrough dependent on the inscription of a ‘zero’ sign. In this instance it is not so much the invention of vowels as the designation of certain signifiers as consonants, silent signifiers which can only be ‘sounded with’ the supplement of a vowel (try saying ‘t’ or ‘d’ without some vowel or aspiration). That separation of certain letters as ‘sounded with’ or ‘con-sonantal’ is what enables the reduction of the number of signifiers to between 20 and 30 while enabling a far closer tracing of what is articulated in any given language phonemically. It is economic, efficient and effective, and of course thereby relatively easy to learn in comparison with non-alphabetic scripts (cf Havelock, 1976; Harris, 1982).

All of that we agree with, and we see it as a necessary framing to what we are seeking to say here about accounting. But what we may now argue is that everything that applies to writing and its effects on what and how we know and think applies equally to the breakthrough some five millennia before writing into accounting. For this token-accounting technology already constituted a first visible sign system, in the strict Saussurean or Peircean senses (see Ezzamel & Hoskin, 2002), the only difference from writing being that its naming-and-counting signs always *combined* linguistic and numerical signification. [Indeed on this argument the ‘breakthrough’ into writing only consists in translating the existing accounting signs into signs that make that separation into two types.] For this system of manufactured tokens – through being shaped spatially (first in three dimensions though later in two) in such a way that each token-sign was decodable as different by the viewer or reader – already functioned as a set of signifiers that have the indexical quality (as Peirce would have it) of designating and repeating a particular signification within each shape. Equally each of the signs was, in Saussure’s terms, a signifier/signified double, and signification was produced and maintained out of the difference between them.¹¹

The breakthrough to this first visible sign system, the invention of accounting as something beyond previous human experience, marks the constitution of what we describe as the new form of space/time/value machine. It is a machine in the strict sense of the Greek *mêchanê*, an artificial device for doing something that is not doable before its invention or without its presence. It also already has all the key characteristics and effects of writing. Its signs, and the accounts formed with them, constitutes the same kind of “autonomous” discourse that is detached from its author, and is open to reading by anyone else who has the skill and competence to decode the signs. So long as it survives unchanged, it not only ‘speaks its truth’ but cannot be refuted directly. Working with token-accounting is equally an artificial practice governed by consciously contrived rules. The each constitution of any particular token account depends first on the deliberate spatial shaping of the signs as different, next on their deployment in relation to each other and as a whole spatially so that they designate what is being named and counted in an accurate and stable manner. The tokens must then be collected together and maintained as a collection, to be added to or subtracted from only to mark changes in the account. The account is therefore a text made up of signs, in just the way that all forms of writing are. And as a visible-sign text it puts into circulation a new and distinct and newly powerful form of knowledge, the content of silent text that in its act of naming and counting not only privileges what is named and confers value on it through the double action of naming plus counting it, but also excludes and ‘de-values’ what is not named and counted. Accounting, like all the forms of writing that come after it, is therefore not just descriptive, prescriptive and even inscriptive, but also ascriptive (and arguably aggressive too in that what gets ascribed a name is made into a significant presence as result of being signified, both in the external world of action and in the internal world of thought).

It therefore puts in play the same relation between proximity and distance, externally and internally. In the external physical world the space of the account must therefore remain stable, in which case time is frozen as the necessary condition of the event(s) recorded remaining as a record (until change needs to be marked, at which point time is unfrozen as the account is ‘updated’, and so frozen anew). Equally it alienates from the natural milieu, since what is in the signs (the supplementary inscription of events being recorded) becomes for the keeper of accounts and the planner of future activity (who may or may not be one and the same) the primary focus of attention. The accounts ‘tell’ whether there is surplus or deficit,

¹¹ This sign system differs from earlier visible marking systems such as tally sticks, which perform a counting function but without naming what is counted (cf Ezzamel & Hoskin, 2002).

and what needs doing and when. Therefore in a range of ways this accounting mobilizes new kinds of space and spacing, time and timing, and value and valuing as integral parts of human action and thinking.

Furthermore, once invented, this new form of space/time/value machine becomes a constant of human existence. For thereafter accounting always names and counts, always utilizes visible signs whose ability to signify depends upon a principle of the signifier shapes being different, is always laid out in some bounded spatial lay-out that enables accurate and stable counting, and constant possibility of updating through re-inscription, and therefore always, as the basis for its distinctive quality of constantly updatable stability, deploys the tactic of freezing and unfreezing time within its space.

At the same time, this constancy is (as in the case of the writing that comes after it) manifested in constant change and updating, precisely because accounting as first visible sign system is the quintessential 'supplement', in the sense articulated by Derrida in his *Of Grammatology* (1976). Like writing but before writing, accounting is the supplement to speech which supplants the world of pure orality. It supplants the world as lived in before agriculture by making possible the two things required for running and maintaining a successful agricultural economy – the stewardship, regulation and allocation of the resources named and counted in the accounts, and the coordination of activity involved in utilising those resources, according to a rhythm and timing imposed by what the accounts 'say'. In this way accounting makes possible a mode of living within what can then become a settled and continuously cultivated space – what the Greeks called the home or *oikos* – as it simultaneously constructs a rule for the allocation – in Greek *nomos* – of the resources involved in successful cultivation of the 'home' land: in other words it constitutes the first 'oiko-nomic' way of life, supplanting the hunter-gathering way, and redefining those who live outside the world of the *oikos* and its economy to the status of 'nomads', as Deleuze and Guattari have noted.

But the second characteristic of the Derridean supplement is of course that it supplements itself, not frequently, but often decisively, so that the initial supplement gets supplanted, in a series of further developments. Perhaps one may draw, as Latour has so successfully in recent years, on the ideas of Gabriel Tarde on imitation and invention to understand this process in the case of accounting more clearly. The token-accounting system, once invented, spreads from Mesopotamia, eastwards into India and westwards to the Mediterranean littoral. Here the basic system is imitated, in the Tardean sense of being appropriated and put to one's own particular uses. [Hence imitation, as Tarde stresses, is not a process of identical replication but of creative appropriation, therefore deploying its own principle of difference.] So we see the constant machine being used to designate different objects and its signs carrying different significations, as it penetrates new cultures pursuing different forms of agricultural life in different oral cultures with different languages.

Then every so often there is a creative imitation/differentiation that makes a decisive difference, as with the shift posited by Schmandt-Besserat (see above note 1) to putting tokens in clay envelopes and then impressing the tokens on the outside, so generating two-dimensional signs and the new separate linguistic and numerical sign systems. The token-accounting system dies out, but the constant machine goes on, now operating with the new separate linguistic and numerical signs to prosecute its 'naming and counting' form of valuing. As it does so, it generates, as a further supplement to itself as the process of Tardean imitation proceeds, 'money of account', which is the first money (cf Ezzamel & Hoskin,

2002). It continues to deploy its internal spacing and timing technologies but now utilising the monetary supplement to define and circulate value. At the same time, that supplement takes on a life of its own, structuring and regulating exchange and contractual relations, discovering the 'time value' of money that gets expressed as interest, enabling principal-agent relations to be enacted and regulated to mutual acceptance (whether via agreement or imposition). The power of the monetary supplement is then supplemented further with the invention of coinage (c 800 BCE), and further still with the development of the written supplements to coinage in the early modern world (e.g. bills of exchange, discounted notes, banknotes) and further again with the supplementary monetary instruments of today's financial markets.

Meanwhile accounting follows its own supplementary path, particularly when it develops in medieval Europe into that qualitatively new kind of space/time/value machine, the double-entry system, which it does (cf Hoskin & Macve, 1986), through drawing on the new alphanumeric form of sign system to do its naming and counting, and adopting the new techniques for the spatial lay-out of texts pioneered by the medieval scholars populating the first universities to develop the double-entry format. Finally the machine takes on its modern power and significance as humans, in the nineteenth century, extend the boundary of what gets named and counted within accounts to include on a systematic basis, human activity and performance. The constant machine finds what is still its dominant manifestation, as the whole series of accountings and accountabilities carried in financial and management accounts, and the whole series of performance measurement and financial analysis textual practices that have supplemented those accounts in turn.

So accounting, we conclude, is a space/time/value machine from the moment of its inception or invention, with certain constancies that obtain even as the initial form of this machine has been imitated, supplemented and supplanted many times over. But there is one more observation that we must make about the nature of this machine before we close this section. The machine as *mêchanê* or artificial device never invents itself. In its inception it was the product of human invention, and thereafter is the product of human intervention. Accounting practice, as a textual practice involving the inscribing of signs in space and time, always entails an authorial function, along with its necessary complement, the reading or decoding of the text produced. The operating of the machine therefore always implicates a human intervention, an authoring of the signs that trace the events, actions or transactions recorded and translated into accounting knowledge in the accounting text. The machine also becomes part of the human, remaking how humans engage in the objectivization of the self, and hence its subjectivization too.

Perhaps the earliest sign of this is the emergence, around 7,000 BCE, of the cylinder seal. Schmand-Besserat notes (1992, p167) that this device surfaces in sites which contain token-accounting, and functions as the first known device for designating ownership (whether of objects, land, etc). The seal is therefore a marker to others of the self as objectivized identity, with exclusive rights of use of some asset, and to the self itself that objectivized statement of its power becomes a significant feature of one's subjectivization, as powerful person.

The kind of power that accrues to knowledge is more generally what the keepers of accounts can begin to claim. Those who author and read accounting's signs have an exclusive kind of powerful specialist knowledge through knowing the state of resources and on that basis proposing appropriate action. In the first city-states the power that accrues to knowledge intensifies as those who keep the accounts become the ruler's closest confidants, not infrequently combining that power with a priestly role. That power arguably then recedes in

favour of those who are more expert in the supplementary writing sign systems, particularly where accounting is reduced to the status of 'mere' bookkeeping. However, in the modern era, as accounting has become a professionalized pursuit with its own credentials, the power conferred by understanding accounting knowledge is supplemented by its professional status.

But if the power that comes with the sign system is most intensively developed within and cultivated by those who are most expert in its use, equally accounting's signs and texts implicate all those who live within the circuit of its operation, even where they cannot read its significations. Within that early agricultural *oikos* its rule as *nomos* for allocation and regulation of the use of resources shapes how all the members of the *oikos* live and experience space and time. The *oikos* becomes a place in Tuan's sense, with its own familiar rhythms of activity: but those rhythms are now defined by what the accounts 'say', as translated for the *oikos* by the knowledgeable specialists. Time becomes defined in terms of regulated cycles (the annual cycle of agricultural tasks) and differentiated moments. The sense of the 'right moment' to do something, the *kairos*, gets defined by what is translated from the accounts. So this is a machine that operates both on the external world and internally within selves – in varying ways but with real effects on our own senses of space and time, and inducing us to accept its forms of valuing as our own.

This power of accounting has only intensified as it has changed and extended itself in line with what Derrida called the 'logic of the supplement' (1976, p7) – something that is, on the one hand, a mere afterthought, indeed a superfluous addition, which could always apparently be replaced by something else, but which is simultaneously something extra and unique, a non-substitutable offering which fills and supplants a void, and so after the event proves central. Accounting's ability to get inside us today is unprecedented – not least we suggest because it operates at two levels. First, it has a direct impact as the means through which economy, efficiency and effectiveness are calculated and then prescribed, in the targets that form such a central feature of modern work and life. But second, it gets inside us through indirection, since the norm of modern life is to be literate, as the result of an education which privileges writing, examining and grading.

The argument has been made elsewhere that the modern form of accounting which implicates the constant grading of human performance in the measurement of value is an application or translation of those pedagogic practices into accounting discourse which therefore only takes place once that set of pedagogic practices has been put together, in the latter half of the eighteenth century (e.g. Hoskin & Macve, 1988; 2005). If the force of that argument is accepted we may see a particularly intense form of mutual interplay between what accounting does as it gets inside us and what we already accept as being the true form of valuing our selves thanks to how we have learned that good grades (whether relative or absolute) equal excellence and success and poor ones equal wretchedness and failure.

But even if we do not accept the strong form of that argument, the fact that we now live in a world that expects us to be literate and numerate and where we have continual interaction with the practices of writing, examining and grading from birth (or indeed before) and where they become familiar secondary practices (i.e. practices that we take for granted and simply deploy as we pursue our primary goals) means that we are, in general as humans, set up through our whole life experience to allow, or even welcome, accounting inside us. Given the way we learn under these practices, and given what we therefore accept as the nature of truth (as the product of writing, examining and grading articulated in the knowledge disciplines),

we are set up to find accounting's forms of truth statement familiar, and if not always congenial, still very difficult to resist.

This then is the nature of the space/time/value machine that is accounting. It is constant in the way it always names and counts, and the ways in which it deploys space and time within its textual space in order to generate its significations. It is constantly tending towards difference as its forms are imitated, amended, supplemented and supplanted. As supplement it has always supplemented itself, not only through temporal succession but through spatial diffusion. One of its great successes, thanks to its machine qualities, is the way in which it gets linked into series. Again this is nothing new, as both ancient and medieval worlds operated with sets of accounts. But the serial linkage of these machines into networks and their role within what Barbara Czarniawska, drawing on ANT theory, now describes as 'action nets' is one of their most powerful manifestations. Combine that extensive power across time and space with the intensive power of the machine to enter and structure the internal time and space of our selves, and it begins to be apparent precisely why this machine, whose diachronic emergence we have briefly attempted to sketch here, should command both our attention and respect when we consider its operation synchronically. This is what we seek to demonstrate in our next section.

At the same time, we would just close by observing, once again, that accounting is not therefore everywhere and everything: nor has it ever been. Just as in that early agricultural economy and the world of the early *polis*, there is life beyond accounting. To acknowledge its power is not to acquiesce in a fatalism before it. Supplements, however powerful, remain fragile and provisional – always potentially reducible to secondary afterthought, or alternatively open to definitive supplanting by some new supplement as yet undreamed. They also remain, by definition, less than life, with the world stretching beyond them.

4 Accounting in the play of contemporary objectivization and subjectivization: Episodes from the world of contemporary transport.

In this section we intend to take all that we have been saying to date and put it to work within one site of or scenario for experience. That site/scenario follows on from some of the research reported in Frandsen (2004), insofar as it involves a return to the world of the public transport company. But this research is based on subsequent experiences, stimulated by a chance encounter with a 'real' Knowledge Bus (i.e. a real bus named the 'Knowledge Bus') and then executed through a series of further interviews and observations of travelling in Göteborg, in which a particular focus is on the 'lived experience' of those involved in travelling by bus and the spacings and timings involved therein, and the different 'lived experience' in travelling in another way, by bicycle.

What we see in these episodes is a range of ways in which the accounting machine comes to constitute space, time and value, internally and externally, in the everyday lived experience of disparate human beings. In episodes two and three we see a strong presence of accounting in the ways in which drivers and passengers on public transportation vehicles have to act and interact. In episode four we attempt to point out the limits of accounting's power, or alternatively the specificity of the contexts in which it has power, by reflecting on how it recedes from lived experience as soon as a human actor moves outside the bus/tram context, and starts using a bicycle as his/her mode of transport. But first, in our first episode, we want to consider how accounting operates in a less visible but still significant way as it gets

implicated with (and so reinforces the impact of) certain other modern writerly pedagogic and evaluation practices in a process that is concerned to re-make the bus driver via tactics where objectivization and subjectivization are bound to interplay.

At the empirical level, in this first episode we attempt to get at the interaction between the accounting machine and other practices through interviews with protagonists involved in setting up the Knowledge Bus initiative, and through analysis of the documents and DVDs that were used in follow-up initiatives which were also focussed on re-making the bus driver via the promotion of a new form of driver education. In the second episode, we get at the more direct roles of the accounting machine through the presentation and analysis of a record of 'lived experience' kept by a driver plus further discussion of that record with the driver, and in the third the 'lived experience' record of being a passenger is presented via a transcript of the personal experience of one of the two authors. In the case of travelling by bicycle, this latter approach is also used. But let us begin with the source of our metaphor, the Knowledge Bus.

Episode 1: Creating the new and more 'accountable' professional via education and knowledge

A contemporary transportation company, such as Göteborg Bus & Tram Company, operates within a world of highly measured, organized and coordinated space and time. It operates precisely defined routes, each with a beginning and end and specified stops along the way, marked by bus/tram stops. Each route has a timetable, with precisely specified times of beginning and ending and reaching each stop along the way. Each bus/tram journey requires a vehicle in proper working order, ready to leave at the right time from the start point, plus a bus/tram driver who must also operate as a revenue collector, source of information to passengers on any questions they ask, and who must know the route to be followed and then drive the vehicle in a safe manner but keeping to the prescribed time. All of this has to be successfully achieved, regardless of particular traffic, road and weather conditions, all of which vary in the course of each day and across the different seasons of the year.

Additionally, beyond the level of the individual vehicle, its driver and its route, there is the whole network of routes to be run and maintained, the whole roster of drivers and other operatives to be coordinated, and the whole financial and managerial system to be managed. Beyond that, the company as a whole has, like any other entity, to pay due regard to its stakeholders, and in this particular context, to consider the retention/renewal of the contract to operate the bus and tram transportation system in Göteborg, which typically runs for between 5 and 8 years.

But further even to that, a key feature of running a contemporary transportation system is seen as ensuring that one's workforce are up to the mark in terms of technical competence and professionalism, and that they are fully prepared and trained to meet the challenges of tomorrow (if we may briefly adopt the kind of language used by companies in such contexts). It is with an episode concerned to meet that objective that we begin here.

The 'real' Knowledge Bus

What kind of thing was/is the 'real' Knowledge Bus, and what kind of activity did it or does it produce? This was, we may recall, a bus developed exclusively for the training and

improvement of already-skilled drivers. Therefore at first glance it might be viewed as something fun or entertaining for the drivers to do. Or as the local Transportation Authority, the Authority Västtrafik (hereafter VT) was saying through the posters they put up to convince drivers to get committed and involved, it was 'an opportunity for bus drivers to be motivated, inspired and maybe to get a positive experience'. But it was also promoted as a move towards a more serious objective: a new kind of education for the drivers' certificate.

The 'real' Knowledge Bus is therefore something quite distinctive. It was designed as an educational space, and a space in motion, all carefully planned and structured to promote a learning defined in advance as desirable and formative. Additionally the Knowledge Bus is a kind of theatre-in-action. For it is a kind of auditorium in which, on its journeys, a play unfolds, a play in which both the driver and the passengers that the bus picks up are all actors. The actors then create a theatrical performance over two hours representing different kinds of 'real' situations, with a particular focus on the drivers' way of handling them. Discussion of the scenes and what happened in them was then led by a facilitator while everyone was still on the bus. The audience for this play was designed to be 'real' bus drivers employed by the private companies who held the bus transport contracts in the Gothenburg area. The audience had to be invited and persuaded to join the bus however. Posters were put up in depots and other company places where drivers would see them, with a large headline saying – "The Knowledge Bus is for you"– and then giving more detailed information, i.e. "the bus is loaded with problem passengers and ambiguous situations which have to be resolved. Take the chance and join the journey". A timetable for the Knowledge Bus was also announced (three times a day over three days).

Therefore this was very much a rhetorically persuasive text, designed to convince bus drivers to join the joyful ride, but in the capacity of an 'audience' sitting towards the back of the bus and watching the action in front of them. The idea formulated by the Transportation Authority (VT) was then that there should be a number of scenes. Scene one began when the bus stopped and the first problem passenger(s) entered, the interactions between (actor) driver and passengers then followed, and finally the 'real' drivers should discuss what happened and what went wrong and how conflict could be avoided or resolved in future. Then the bus would continue to the next stop, the next passenger(s) would get on, and the scene played out again. But the bus drivers were not there just to watch scenes similarly in many ways to their ordinary working day but also different. The difference was played out by requiring them was to reflect on the "situations" being played out in front of them. In so doing it was hoped to start the process of change about them selves as drivers. For instance there is a scene where a drunken man enters the bus having problem finding his money thus making the bus late and encouraged the driver to help him.¹² At the next stop there is a lady who is not a regular bus passenger but clearly demands 'good service' and she comments loudly about the fact that the bus is late. She also notices the only seat available is near the drunk man and wants him to move or get off the bus. A "situation" emerges for the driver to reflect upon and solve with the guidance from a representative from the Authority. Then the bus moves on to the next scene.

In a subsequent interview with Björn, a clerk working for VT, he said that one reason for hiring this particular theatre group was that they were very skilled and so could improvise during scenes, depending on how the discussion was going and what the mood of the audience of 'real' drivers was. If a 'good solution' to a situation was suggested then the actors could come up with a new scene which would show how this solution would or would not be

¹² This scene is taken from the DVD film available of the knowledge Bus theatre.

likely to work in practice. The whole idea, Björn observed, was that there was no one right or wrong answer to be given in all situations. It was realised that context was significant, and that therefore each situation may be unique or have special characteristics. With skilled actors the ability to influence reflection would increase and in so doing the next step into a customer-facing driver, a professional driver, could hopefully be more easily taken.

However experience then revealed that using this theatrical approach did not work that effectively to promote the overall objective, i.e. re-defining the role of the bus driver from being a good technical driver/fare collector/question to including a more customer-facing and problem-solving and so “professional” driver. Other approaches were also needed even if the Knowledge Bus could be seen as an important one in terms of starting the process.

A first one was to turn the Knowledge Bus experience into a DVD film “To travel is to learn – the Knowledge Bus”. This made it available for instance to drivers who could not attend the Knowledge bus and to other interested parties such as managers from bus companies and politicians. But additionally the DVD made it possible, in a more effective and extensive way, to objectivize the subject as driver, and to start seeing, reflecting on, and changing the way a bus driver should perform his/her role so that he or she would conform more to the new style of public transport customer focus. With encouragement from the narrator on the DVD (who here took on much of the role played by the facilitator on the bus) the audience had time for a practice of reflection. Framing each scene on the DVD-film the narrator would come into shot and comment on the scene in a relaxed and relaxing way of talking (projecting an air of detached but expert authority). So the DVD film opens with the following statement:

“Today the profession is not just about driving the bus. A bus driver has many roles, as driver, as service professional, as cashier. It is a profession which requires more and more competence to do well. Still *the* most important aspect of this profession is to create good relations with the customers.” (Original stress)

According to Björn the DVD was an eye-opener for many because they were surprised to discover the many problems drivers have to face. Even so that surprise has not stopped people who are not professional bus drivers from defining and prescribing what a driver’s working day should look like, or from assessing their performance against some decontextualised and decomplexified model of work drawn from the performance measurement literature (not least because once the job is defined as including ‘soft’ or customer-facing skills, outside experts or quasi-experts have a new sanction for intervening). That development is not surprising in a management culture that thrives on fashion (Czarniawska & Sevon, 1996), so that this kind of approach is already ‘to hand’ as a ‘sure-fire’ way to elicit the desired new performance out of bus drivers. And it is not only managers and consultants who will believe this, but also existing and future passengers informed via the media will do so too. For all these actors, what is now seen as the ‘narrow’ framing of the old bus driver role manifestly needs to be changed.

The narrator then moves on to discuss the new bus driver’s license and the requirements for full certification. Education is what will help the driver to become a better driver, and therefore there emerges a link between the Bus and a wider agenda of training and re-skilling, re-making the driver’s identity along more multi-skilled lines. Pure competence in bus driving, while still necessary, is emphatically not sufficient.

All this arguably sends a rather different message from the initial poster which sought to convince bus drivers to participate. The poster talked only about problematic passengers and learning about good customer service. But implicitly the redefinition implies that the current bus driver is also problematic. This whole approach to characterising drivers eliminates all the other 'sides' of the person, as well as the extent to which all particular situations drivers will encounter will be unique, in favour of an image where (for purely didactic purposes) the driver is seen only in situations where they display non-attractive behaviour. This reduction of the person can easily be read (and not only by drivers) as a caricature. Even if there is an implicit message that there is no one solution, as Björn from the Authority says, there is a separate message saying that there is an 'ought' beyond what 'is', that drivers need to become other and better, more professional, selves, always travelling onwards along the road for change.

However, how successful is any of these messages, or rather, in what range of ways might they get translated into action, by drivers or others? We are not looking here to offer an exhaustive empirical survey, but to offer some paths for thinking about this. As already noted, there does not (so far) appear to be any way that this kind of didactic tool changes the behaviour of those who plan and manage drivers. But it is equally fragile, we suspect, in its attempts to translate drivers into 'better' drivers with new knowledge. At a first level, not a great number chose to 'join the ride' initially. Riding the Knowledge Bus as theatre was not a compulsory activity for drivers, and indeed was 'voluntary' only insofar as their employers would give them paid time off to attend. According to Björn, it failed seriously at this first hurdle. When the bus was introduced in the Gothenburg area, in the fall of 2003, not many drivers would or arguably could join, for two main reasons. First one of the two main companies running buses, Göteborgs Spårvägar AB (i.e. Gothenburg Tram (and bus) Company Ltd which is 100% owned by the municipality, and hereafter is referred to as GSAB) was short of bus drivers¹³. Consequently their answer to the Authority was "which route would you like to cancel"? Of course the Authority did not want to cancel any because they needed to provide a full service and so it would cost too much.

Second, in the fall of 2003, the result of the most recent service procurement process was announced¹⁴. The other main transport company running services in the Gothenburg area, Swebus, had lost almost all their routes. For the procurement process had included tendering for 2/3 of the public bus transport in Gothenburg for a period of 8 years and with a value in Swedish Krone of 275 million SEK per year, plus a further option to extend the contract for 2 years (Västtrafik Press info 2003-09-15). The outcome was that GSAB effectively won everything, while Swebus retained nothing except for a few small routes, which they then

¹³ A shortage of bus drivers has been a recurring and huge problem in recent years not only in Gothenburg but in Sweden generally (Swedish Bus Federation 990618, Göteborgs Posten (GP) 000520, GP 000812, GP 000816, GP 001231). During one period Swebus in Gothenburg had many cancelled routes, for each of which they incurred a fine, as per their contractual terms. But in the end the accumulated fine payed was so huge that it was used to finance part of the new agreement between Swebus and VT which included a new education programme designed to recruit bus drivers.

¹⁴ Public transport in Sweden today is organised through public Authority and via procurement according to EU's restrictions. The Authority translates citizens need into very specified tenants where Gothenburg area is one of the most specified in the country e.g. from fixed amount of kilometers, measured by GPS, produced, length of contract which is between 5-10 years, the buses average year. This is the only way in which a company is allowed to operate as a public transport company in Sweden. Consequently those companies who seek to win contracts are careful to cost their bids sufficiently to deliver service quality. As noted above with reference to the British bus company, those who adopt a bargain space about content and price is eliminated because of the specified tender.

passed on to another company¹⁵. For Swebus this therefore meant that going forward they had no need for bus drivers, buses or depots anymore. So they had zero interest in sending bus drivers in paid time to join the Knowledge Bus.

Ironically there is now a third reason why the Knowledge Bus is likely to fail going forward. Even though VT wants to start it again, the current accounting numbers concerning profitability do not give them the space or scope to so¹⁶. So the Knowledge Bus is now grounded (at least temporarily), thanks to a chain of translations produced by accounting knowledge and practice that has been quietly running all the time in the background behind all the Knowledge Bus attempts to translate drivers into more professional versions of themselves.

So there is potential failure going forwards to match the unintended and unanticipated failures to date. That these have all been unanticipated appears fairly obvious. In the initial set-up phase of the Bus project, the project proceeded swiftly and with official support from VT, as a means of getting a translation via better knowledge to ‘better’ performance to value and money. No one questioned the validity of the approach or the truth of that statement. Now the Knowledge Bus is not moving anymore, because of the intervention of translations from what the accounting numbers ‘say’, and so learning and potential new driver expertise has stopped being produced in this form. That is not to say that knowledgeable drivers are not being produced, who will match the desired new professional identity, since there are other ways of making them knowledgeable, not least via the skills that have to be demonstrated to get the current driver’s certificate or license. Since the certificate is the necessary precondition to being a bus driver, then becoming knowledgeable – or at least knowledgeable in the ways that will be tested – remains something that drivers and would-be drivers know they have to develop. That is arguably a different way of creating knowledgeable to that exemplified in the Knowledge Bus. It is also ‘cheaper’ and more efficient (and so doubly acceptable in the accounting metrics of VT) since drivers themselves have to make their own time to study and pay for their licenses.

Tuan (2001) talks about freedom to move or moving as representation for freedom to transcend the conditions of ‘here and now’, even if the bus here is moving the freedom for transcendence is still bounded and limited. First it is the bus who moves, and as such the bodies inside do too, so motion as freedom could perhaps be an illusion. What can be seen, done and experienced on the road the bus is travelling on and the theatre performance is not set by the audience. And the space to let their thoughts fly freely is crowded by others who want to be present with thoughts on the same arena as you. What is to be learned here is very specific and the freedom to learn other things is limited. Even if it can not be said what is learned here can be totally controlled or bus drivers have the possibility to learn unintended knowledge, like how hard the bus seats are for instance, it is directed and limited.

But perhaps most importantly where the pedagogic or learning objective is central, the Knowledge Bus is an inefficient and ineffective device, as a one-shot experience, a unique

¹⁵ One effect of all this is that GSAB is now again running almost all public transport (99% according to VT) in Gothenburg, because the last 1/3 was already contracted to GSAB, which means that the situation is like the first procurement was introduced in one Gothenburg area in December 1991. Even if it is could just be a coincident but before this situation occurred the buses and trams had text on the outside visualising who run the route (which is a design plan that everyone has to follow according to the specification of the tender) saying “Västafik – This route is produced by X” (e.g. Swebus) but now it is changes to “Västrafik – In cooperation with X (e.g. GSAB).

¹⁶ VT bore the main part of the direct cost, since they financed the theatre group, with the companies only having to meet the cost of bus drivers’ hours.

performance designed to carry general or translatable insights. It is therefore very different from the usual way of learning to get experience, which comes through repetition and routine, as Tuan observes when he talks of how a space becomes a place, something familiar and known, through the repetitions in everyday life (Tuan 2001). In this way a bus driver learns many key aspects of 'being an expert'. For instance how the body learns to 'feel' the length of different bus types (the 12 meter or 15 meter or 18,1 meter bus), to internalise routes, to hear the right and wrong sounds buses make, to feel clock time in their body through the velocity of the bus in motion, to understand the traffic flows of the city at different times of the day, and perhaps to get to know regular passengers who travel with them, and the monetary value of the time spent driving.

In short despite its impressive name, the Knowledge Bus is a rather fragile way of promoting the translation of the driver to a new professional identity, as well as having proved susceptible to the truth of cost constraints signalled by accounting numbers. At the same time, it does have a potential use, for not all necessary forms of expertise can be acquired purely on the job, even though some like those just indicated cannot be learned any other way. Where there is a need to construct something beyond the traditional identity of the expert (for whatever reason, including, as here, the economic need of the company to get more cost savings while attempting to maintain service quality) then there has to be some kind of intervention (or multiple interventions) disrupting the taken-for-granted aspects of lived experience. Arguably the Knowledge Bus makes sense in that respect. But it remains a fragile way of promoting that outcome, compared to others, and in particular the new style Driver's Certificate mentioned above.

The drivers' certificate

One message that the Knowledge Bus was meant to send was perhaps captured in a strapline on the VT poster announcing it to the drivers: namely "You are the most important carrier of the company's message". More than just a performance for the drivers it was a stepping stone towards the new reality of having to be educated to obtain the new drivers' certificate, which would be the guarantee that they had become the new kind of professional driver. The first initiative that sought to redefine the bus driver role in this way had begun at a transport Authority in an area called Västerbotten in 2000. It has since been translated into a national programme for bus drivers with VT playing an active part in developing the idea and helping to build a common database of possible skills to test with Swedish Public Association (SLTF), which is responsible for rolling this out as a national program over the next few years. But already it is a requirement in the VT contract that the operating companies must include this education and licence. A key device in making the translation to this new identity continue is the 'Manual of Good Practice' which has been located as the key text at the heart of the new education program that will prepare bus drivers for the certificate. The description below tries to give an overview of the content and the length of different sections but also gives more detail on selected parts. The message sent by the relative length of sections is that what needs to be done during 'the working day' is of central importance. Inevitably the range of skills required in 'driving' is here re-specified to cover a range of customer or passenger-facing activities.

The manual is an 84 pages long description of how the Authorities via SLTF (Svenska Lokaltrafik Föreningen), which is responsible for the development of this text, wants bus drivers to carry out their profession. Each driver has access to the manual via an internet website where each driver also has a personal user code and password. The basic idea of how

to learn about its content is based on self study supplemented by classes given by the drivers own employer.

The manual has seven chapters as follows (giving the number of pages).

1. *Drivers Certificate– the qualitative sign of public transport* 8 p.p.
2. *The difference between “driving a bus” and being a professional driver*, 2p.p
3. *Customer service and customer encounters* 2p.p.
4. *Your working day* 50pp
5. *You do a useful job every day for society* 10p.p.
6. *Procurement – from tender to competitiveness* 5p.p.
7. *Customer service – some practical examples*. 7p.p.

Each chapter and subsection ends with text marked in grey which summarizes important points to remember and discuss from the chapter. For example in the chapter *The difference between “driving a bus”* (quotation mark added in the manual) *and being a professional driver* it is said in the grey zone – a professional is one who puts the customer and the customer’s need in focus. As a professional driver you are an information source, marketer, and service professional. The text continues – As a professional you *will* be respected and you *will* [emphasis added] have a responsible and interesting job. In a separate grey section the text then gives “keywords in your work”, such as “responsibility”, “interest”, “cooperation”, “how to drive” etc. In the next grey section the three roles of the professional bus driver are spelled out; the driver, the service professional and the cashier. In a final grey section there is a summary of “things to think about – what meanings in the following keywords do you think the traveller values most?”

The chapter on “**Your working day**” demands extended analysis given its length. The chapter starts with a grey marked area with a list of things followed by the sentence “Do you know?”

- There are several elements which are important for YOU to be successful in YOUR work (emphasis in manual)
- You carry out three different professions during your working day
- There is a customer service policy that the transport company must follow
- It is YOU who has the opportunity to create a positive experience for the customer
- All customers do not have the same expectation of their journey
- We must avoid giving inappropriate service

A subsection in the same chapter “Before you start your journey for the day” talks about how the driver must prepare him/herself to do a good job; she/he must be in good shape and rested, both physically and mentally. Then the driver will feel good and “you will get more out of your work. Like an athlete you must be well prepared.”

The subsection “During your journey” discusses how most people want attention but the hard part is where and when to direct your attention. It emphasizes the importance of creating good relations with the customer. The text also states that the journey can be divided in three parts.

The first one is when the customer enters the bus. Here, the text goes on, it is all about creating a good relation from the start, regardless of who the customer is. Particularly important is your body language and eye contact. Always turn your seat towards the customer. The next part is selling tickets. Here the text states that it is vital to figure out as quickly as possible the customer’s needs. Try to give the customer time to speak without

interruption before you answer. The last part is when the journey ends for the customer. Here eye contact is also important, a nod can be done as a confirmation that the journey has gone as expected according to the “deal you have done with the customer”. Even if the customer leaves the bus by the back door, the text observes that it is possible to make contact through the mirrors. The subsection ends with a grey section where “essential” things are again summarized, followed by a grey section asking “please think about this” and offering “Do you know?” observations (such as “a satisfied customer is a return customer”, or “grades on customer satisfaction surveys are the means to contract extension”).

In the subsection “Tickets and communication” the driver is told that to charge the right ticket fee is a cornerstone of good public transport. There are several reasons for this. It is 1) right from a moral perspective, 2) public transport needs the revenue and 3) it is important for your company to get paid correctly in line with its contract [this is because ticket revenues go to the Authority which then pays the company as agreed in the contract according to a tariff based on a mix of kilometres travelled and number of tickets sold]. It is therefore essential that each passenger is issued with the right ticket and this is the driver’s responsibility. The grey section then talks about ticket machine and communication systems. The driver for instance must always check the date and time on the machine before starting a route. The subsection “Being right on time is a key element” then specifies two aspects. First knowing the timetable is vital to ensure that each bus goes on time. To leave too early can never be acceptable. But also the driver’s clock must be accurate, and the text encourages the driver to phone “Miss Time” to check the clock is right before starting.

As well as studying the manual drivers can go on the website to do practice tests which offer detailed ‘right answers’ which specify the desired behaviours the new professional should have, and help them learn the right answers about ticket machines and contract details. The incentive here is that passing the real test is essential to obtaining the driving certificate and the official badge worn on their uniform for the next 5 years. That is a translation indeed.

However, what we wish to address here in more detail is how the old bus driver turns into a new one, i.e. how the new objectivization of the subject embodied in the Knowledge Bus, the DVDs, the pedagogic texts and the practice and real tests gets translated into and interplays with the subject’s subjectivization. Here the interplay between the pedagogic devices of training are important.

To start with the manual is given to bus drivers to read. It is a text they are encouraged to read not only during their paid education time but also during free time. It is manifestly long on normative description about how the authority wants the bus drivers to act in terms of future ‘lived experience’, as indicated by the summary of the ‘Working Day’ chapter just provided. The asymmetrical power relation being conveyed in this section cannot be mistaken. Words like “shall” are often used, or something “is” the case, when discussion is not allowed, or where only one answer is deemed possible. In this way definitions of proper behaviour get established, and the unspoken hope is that the ‘ought’ becomes an ‘is’.

In one sense, therefore, there is just a short step in the translation from what went on with the Knowledge Bus to what goes on via the credentialing process. There is a mutual reinforcement of similar messages, which construct an objectivization of the driver as new professional, as they talk up the objective of strengthening the profession and giving drivers an increased insight, as professionals, into the key objective of making public transport more attractive to the public. This is further reinforced by the experience of interacting with the

website (<http://www.foracertifying.se>) and the activities it allows. Here drivers who want to test their level of knowledge can do so by answering practice test questions available once they log on to their personal page, and then can see how well they score in terms of the target required. Over and over again the person who is a bus driver can sit at home and practice her/his knowledge and so discover themselves over and over on a path of potential translation to a new subjectivity via the objectivizations articulated in the website and via what it allows as action (and shapes as thought), as the driver travels the path towards a satisfactory or passing level of performance. So in practice, the path begins with an explanatory text detailing how the practice exam is to be carried out and stating how many questions there are in different sections. As in the real exam the driver has a certain amount of time to answer the questions in each section so that answering is time pressured on the same lines as the real exam (see further below). The real exam takes all day to do including lunch etc. but in this way the driver can prepare for the 'real' thing. More, each practice session is saved and the driver can watch how their "progress" is going and evaluate her/himself (everything on the driver's personal page is saved and stored in a server). There is also a link to what the certificate looks like, and to the badge that the driver will be given and must wear on their uniform when he/she has passed the exam. On the screen the picture has the driver's name already written in, presumably as an aspirational incentive, but also as a projection of a new objectivization not yet attained (and perhaps never attainable). There is a further visualization of that objectivized future, as well, as the link also shows a virtual diploma also with your name and a space for a virtual grade, again putatively to help the driver in his/her aspirational struggle to acquire the new knowledge, and to translate it in so doing into a new knowledge about him/herself. The personal page also is a link for the authority and the company to send 'personal' (but rather personalised) messages to each driver.

In all of this activity, the possibility that a driver is also a member of the public, with a life outside work, and perhaps with a different take on the work itself, does not come up. But then it arguably cannot, because the key point of separation or disjunction here, in terms of constructing the new objectivization, is between the public out there and the driver as professional 'in here'. So, recalling the three facets of the professional mentioned above, the driver is defined not as a citizen but as a cashier, not as a familyman/woman, but as an information source, not as a someone working on autopilot constantly driving the same routes, but as a professional customer-facing driver who is happy answering questions, dealing with problem situations, engaging in eye contact along with a welcoming body language, and additionally marketing the company as he/she does so. Put like that, such an objectivization of the subject almost demands the impossible. At the same time, drivers are in terms of their ongoing lived experience, engaging with it in a range of ways that interplay with and translate their prior subjectivization. But then they have to, so long as they wish to remain as drivers into the future. For some level of engagement is essential to pass the exam which is the *sole* means of obtaining or retaining the driver certificate. But additionally drivers, or potential drivers, do not automatically or necessarily act only instrumentally in their engagement. For the whole issue of their status as drivers is at stake, along with the existential concern about passing or failing and what that means in terms of one's subjectivization.

Finally they come to the real exam. This is for the most part done on a computer and divided into three sections. Section A is on **Service and customer behaviour** and is worth 60 points. Section B is on **General knowledge** and is worth 120 points (and includes knowledge about public transport policy, prices, routes, and such issues as procurement and the overall organization of the public transport sector. Section C is on **Technical management** and

includes questions about everyday activities, e.g. how to handle the ticket machine, how to read the timetable, and about different kinds of tickets and fares (60 points). The first part takes 60 minutes and has 6 questions with 3-4 sub questions. The next part takes also 60 minutes but has 40 questions and the last part has 40 minutes for 20 questions. Section A has only six questions because of it is more focussed on open-ended and fluid situations. For example questions may ask the driver how they would handle different situations. Here the driver has to define what he/she sees as the key features in the situation, offer a solution and construct a detailed argument for the solution proposed. This is because the question is designed to test the driver's attitude and behaviour towards the traveller, and to give an evaluation of their likely level of empathy and understanding. [Of course, it is always possible that drivers will be giving what they understand from their practice to be the 'right' answer even though they may act differently in any given real 'lived experience' situation.] They then get one of 4 grades: fail, pass, well done and very well done. Each individual answer has a points value, and the points awarded are then added to give the overall grade. Additionally, to pass the driver must pass all of the parts. The results of the exam will be sent to the drivers company by the Authority, who sign and send the certificate to the driver. The certificate, as noted, is then valid during 5 years, after which time the credentialing process must be repeated, along with the study of still new manuals preparing you for new exams, quite possibly with a still further redefinition of the 'good professional'.

With all this writing, grading and valuing surrounding the driver, into an indefinite future, the 'awful idea of accountability' (Hoskin 1996) emerges in a crescendo and makes its presence felt in extended new ways. Even if the real Knowledge Bus is now grounded its influence lives on because what is still 'running' is the certificate. It is a certificate which connects drivers not only to status but more important here, to become a cashier with moral aspects of the 'good employee' woven into the role, and with links between the employee and the winning of the next contract, which happens at least once each five years. In between exams, the need to keep the certificate will also give the employer a natural way of reminding the bus driver of the new definitions of duty. 'Public transport' as a career and a way of acting becomes redefined as a construct in the process.

To have bus drivers as cashiers and as good and courteous service personnel is of course desirable. It is also of great importance to the company because its stated goal is "always to make public transport as attractive as possible and to create the conditions to promote an increase in the use of public transport", an objective that is stated both in the manual and in VT's Operational Plan. Accentuating the significance of status and profession is a way to convince bus drivers to enrol in pursuing this goal. But at the same time beneath the surface there is also a strong connection to accounting numbers. For example after many years where companies have had to demonstrate cost reductions in order to win contracts, the contracting climate is now changing. Bidders are all now presenting more expensive bids, so that cost levels are rising again for the Authorities. During spring 2004 the deficit for VT was so large that they introduced a drastically reduced schedule of services which resulted in a saving of 27 million Kr (Trafiknämnden 040109). Given the established relation between money as representing value and movement through city as measured in terms of kilometres, the translation into and from accounting numbers changed the whole nature of the transport net at a general level by reducing the amount of kilometres run. At the level of lived experience, this changed the number of routes run, and how often the vehicles ran on those routes, with the objective of creating a more economic and efficient route net with higher ticket fees, but which would hopefully be as effective and attractive in meeting passenger demands.

For that reason, it was seen as particularly important to have drivers who would still encourage people to travel with the company through their good and courteous behaviour and their effective forms of customer service, including marketing the company on the front line of customer interaction. [It is worth mentioning additionally that the company had a further self-interest, since it can be fined for quality failures, including failures in terms of driver behaviour, as measured against the standards specified by the Authority.] Finally, it is crucial to have drivers who can handle all the kinds of unforeseen situations that can occur and potentially stop the bus from being on time. For the Authority also charges fines if vehicles fall outside a prescribed level of lateness or if the route is shortened or curtailed because of lateness, or for any other reason. In all such circumstances the company will not get paid the full contract fee, but only for the completed contract kilometers as measured by GPS.

The importance of being on time and making up time where there has been a delay is something the drivers know, but are constantly reminded of. As they drive their vehicles each day, the need to keep a focus on where they are at any given moment and how that relates to the timetable means that they are constantly learning to view the vehicle's movements across time and space in money value terms. The new manual and certificate do not negate the importance of maintaining the constant translation into accounting numbers and back both for the Authority and the bus and tram companies, instead they intensify the level and quality of activity that the drivers have to undertake in order to keep that translation going. In this way every bus/tram driver gets even more enrolled in the translations into accounting numbers as they simultaneously learn a new kind of customer-facing value that now circulates throughout the public transport space.

If that is the new interplay between objectivization and subjectivization that we see emerging, let us now turn to consider what it is building from, by considering the lived experience articulated by a current or "old" driver who is already enrolled in the existing accounting machine.

Story 2: A tram driver's diary

2004-08-13

5.52 I [Boel] arrive at the tram depot. Majorna and I begin work at 6.01. I check and prepare the tram, an M31, that I will drive. The security check takes about 10 minutes. Everything is OK. After that I have a cup of coffee and make small talk with my colleagues.

6.17 Start driving route no 3 towards Marklandsgatan. [...]

8.03 Arrive at Mölndal [a city next door to Gothenburg]. I have to go to the toilet, which means I do not have time to go through the tram.

9.51 Arrive at Saltholmen. Go through the tram and once more I have to get rid of many copies of the Metro.

10.08 Start my journey towards Angered. Now it starts to be incredibly hot in the tram despite the AC. Thinking of turning the AC off and opening the window instead.

10.42 At Centralen I get off. My replacement takes over the tram. I reckon that the new driver will turn the AC off and open the window. Break time.

11.43 I am due to drive route no 1 towards Opalorget. But the tram is late. When I look at the display it says 11 minutes until it will arrive. The TLX car with the foreman Göran is

standing a bit away from me, and I walk to him and ask if he has heard anything about route no 1. He says he is waiting for the same tram as me because there has been some damage on the tram the night before. He talks with TLX and is told that the tram is at Stockholmsgatan. There has had to be a change of tram running the other way and that is why this one is late. I start my journey 12 minutes late from Central Station. [bytte de till en skadad vagn?]

12.00 (approximately): TLX contacts me and knows I am late, they want me to turn around the tram a bit earlier than it should, at Frölunda. Göran is going to look at the tram and the damage. He could not see what have been done before because of all the passengers.

12.24 I arrive at Frölunda. I tell the passengers over the speaker that I am 13 minutes late and have to turn the tram around quickly. The next no 1 will be here in just 2 minutes. There is an old couple who have been travelling in the wrong direction. They were going to Centralen. I let them stay on the tram while I turn it around in the tunnel. Göran is here and he takes a closer look at the damage, which had been reported by an off-duty policeman in civilian clothes, who said he saw a passenger damage the seats yesterday evening. Göran does not see anything.

12.29 Now the tram is a route no 7 towards Bergsjön. I have a problem with the AC on this one too. It drips all the time. I give up and open the window.

12.55 When I leave Brunnsparken there is a red warning-lamp blinking. On the display it says something about 200volt and the inside lighting. Some of the lighting seems not to be working.

12.57 Arrive at Central station. It is time to get off. The next driver will write the default report about the lighting.

I buy a value card [to sell tickets with] and an apple.

13.11 I take over a tram as route no 4 heading towards Mölndal. The AC does not work. It is very hot. [det står inget om att en AC inte fungerar i handboken]

13.37 Arrive at the end station Broplatsen 4 minutes late. I get a call from TLX with message from those who do the planning. They wonder if I get take some overtime tomorrow. I say OK. Then I go to the toilet.

14.46 Leave again as no 9 to Saltholmen. When I arrive at Brunnsparken, there is lot of passenger asking questions. Does this tram go to Järntorget? Does it stop at Valand? Do I get to Danmarksterminalen with this one? If I want to go to Marklandsgatan can I go with you then?

15.42 At Saltholmen I go through the tram and this time it is lot of garbage, empty bottles, paper from a shoebox, ice cream sticks, and what is left of seed shells.

16.22 Time for a new driver at Järntorget. I am 5 minutes late. Time to go home.

My 'paid time worked' today is 9, 27 [which means 9 hours and 16 minutes]

Boel Johansson
Tramdriver 2158

As a tram driver there are many things to be learned and known. Boel drives her tram from south to north from east to west over and over again. Sitting in a tram she can travel long distance without moving her body in any major way. This can give her a mix of experiences of closeness and distance for example a experience of closeness to the tram she is in charge of, and to the movements and sounds it make, but at the same time an experience of distance in terms of the landscape she moves through. At that level of greater distance she learns who

lives in different areas not only by how the houses look in these areas but also by noticing who travels with her. She will observe how the type of passengers changes at different stops, for instance from professionals heading for the city's offices and the financial district to artisans and shopworkers heading for factories and shops. As she manages her vehicle across time and space in line with the dictates of the accounting and accountability technologies that she has internalised, she gets to know the character of different areas of the city, the suburbs and small outlying communities, and the kind of people who live there. She can hazard a good guess as well as to the kinds of lives they lead in these places that she would probably not have visited if it had not been for this job.

During periods when it is not very busy like the early mornings, the time can pass very slowly, especially when you feel tired, or when you are having to cope with a boring route, which can be like death as Boel later tells me. She finds the radio is a kind of company while driving. However, at the moment, with a broken button and no radio the only sounds that she gets to hear are those coming from the tram when Boel moves or stops it, and with the opening and shutting of doors, which of course are different depending on the type of tram, and from the passengers passing by here when they put their tickets in the machine which then beeps, and of course from the interactions she has when she is selling tickets. Sounds while driving through the city early mornings are also available, even if they are hard to hear. Singing birds can for example only be heard at the terminus stations where the tram turns around.

At other times, time begins to press on her. Many times she finds that the points fail to change when she sends the command, and then there is a hold up. However, every tram is equipped with a metal tool to change the points manually. With this tool it is possible to force the points to shift and so act in the way that is translated from what the timetable and route require. But using the tool is difficult and time-consuming, and so the points often stop her from continuing and completing her route to the time specified in the timetable. The timetable is an ideal standard to make flows with no interruptions included but she is practicing every working day to make this ideal come to life like her passengers do too. But everyday work looks quite different as Boel's lived experience constantly shows. Still the focus is kept on the route and time produced. For instance it is now taken for granted that when to write a diary as a tram driver it is the 'natural' way to use the same reference but to exclude it when having a break even if what happens then must be kept in this time frame of reference.

The experiences all fit into the 'big' frame of reference to objective time which becomes space as routes. Her life is controlled by time in a very detailed way, and it affects her life even when she is not at work, in her free time (Zerubavel, 1981). This of course is not mentioned in any manual. Her commitment to time and schedules not only make it part of her practice to produce routes they order her private life too in a dramatic way too. The rest of her family operates on totally different daily timetables to hers, so they do often do not get shared time when they are at home and having dinner together is often an exception rather than the rule. Further most of her friends have different working hours too which means her time spent with those who are important to her is limited. She has to go to bed so early at evenings sometimes that it is hard to sleep while her family are awake and work when everyone else is at sleep.

At work, given the commitment to the running of routes in a given time, the consciousness of being (or potentially being) late is there all the time even not surprisingly considering the amount of practice she put into this. But it is not only kept in mind and practiced by Boel but

also the passengers when standing and waiting at the specified stop (on time), which Boel also actually will stop the tram, and together with passengers making public transport happen, where arrival times are available for anyone to see. Besides this she also always in reach for people like TLX and supervisor who know where she is and will contact her to together try to do repair the broken time table, sometimes with the consequences of cutting a route off, or wanting her to work more. Which Boel and the supervisor know the company will not get paid for. Even if working alone it does not mean invisible or out of reach for others.

Her practice and consciousness about the time according to clocks is always present. She is full aware of that when she has to go to the toilet this will compete with time spent on checking the tram for lost items and garbage, like Metro all over the place and increase her work picking it up. In this frame of reference of pre-planned ideal time and space also unexpected things and situations will happen and give ground for experiences. In an everyday work life is full of parallel happenings and movements. For instance selling tickets, give information, being late, driving a boring route and maybe a need to make a phone call home. The contrast between the time table and the pre planned events and everyday flow seems to be standing far away from each other. Like how people just walk in front of her tram and how relieved she felt being able to stop in time, or how deterrent people can be to reach the Systembolaget. Not only for the man in the wheel chair but for many especially on Fridays and make it hard for her to produce routes on time. In fact unexpected things seem to be the “normal” thing and not the prescribed situations as a route according to a time table. In this frame of knowledge reference she gets to know people at a distance and how they get along with their every day life in very small parts. She experience people who are not acquaintance with Gothenburg or people who do not usually travel with public transport such as the old couple going in the wrong direction or people who ask about places which are known to most people living in this area. As a contrast she is only to meet and talk to her colleagues in a limited way because a driver is always alone while driving according to a time table. Small talk can be done before works starts, after or where there is a break and of course when replacing each other. Still another way to communicate is to raise a hand when passing each other while producing routes.

She can also experience people as flows and notice the change after the semester is over but also how she is a part of the change of flows, from low to intense, when she translate, practice and change new pre-planned time tables and routes here and now and make it possible for people to reach their work and make it possible for other companies to run too. This is a period which also is a battle for trams. They are always short of trams [read few seats available] then she says and you know instant when the schools start again and the semester is over, which means the traffic is back to normal again and becomes very busy.

Further she can also experience passengers and how they leave traces of their earlier presents onboard sometimes because they forget sometimes because they are too lazy. It is amazing she says later to me what people can forget. She sometimes wonders how it is possible when crutches are left behind. It is hard for her to get to know people who travel with her and vice versa. Passengers do not know her name, and not her employment number either like supervisors (and herself too) will connect her to. When she producing different routes connecting objective time to become a space for value over and over again she will only more or less meet people she does not know. Of course it happens that old friends travel along with her but that is not the ordinary thing that happens in this space of experinces.

In the perspective of the passengers routes are more or less solid net of routes meaning each routes has its path and timetable, and drivers like Boel, with a point tool in her, will try to be on constant move on time and ignoring heat, translating them here and now over and over again. In the perspective of Boel routes are produced in a constant changing flow where routes like 3, 13, 9, 4, 9, 1, 7 will be translated in an endless stream. Her tram can be any route, just change prescribe routes, change the sign on the tram and make Boel drive differently. She and her colleagues, identified with the same uniform as Boel, will replace each other like cogwheel, specified through scheduled time and space to the last minute, and if somebody would miss a time/place connection the solutions is to let the last driver continue because the routes must be produced. If not then they have to ask everyone to leave the tram and to take it out of circulation and the route this time will be no more.

As a well informed citizen she read how public transport cost money and how they must raise travelling fees. As a well informed tram driver she also knows how Västtrafik and her own company are doing in money value terms, both through media but also through information that reach her through personal log in places at Västrafik homepage and one by her own company, in short in this space and time reference value in money terms are present for everyone. For Boel also as payment each month and selling tickets. She takes people to school and work at the same time she earns her own money. She ends her reflection of her working day by the hour she is paid for. For each hour and meter she drive the tram she also connects it to money value. For passengers as value card and ticket, for the companies as payment for produced kilometres and drivers. The translation of objective time is here vital element in this translation. It helps to translate movements and kilometers into a space of value. Time as clocks and calendare connecting it to value in money terms is everywhere and you can not escape. What is clear here are that many issues which were highlighted to become professional drivers is not totally surprise for the "old" drivers. The new profession is here seen as an extension of existing practice, needs to be in place in some sense to make the extension happen. And it is an important extension too because by changing bus driver role and identity through examining and grading it makes the integration of accounting machine even more powerful by its integration into everyday life.

Story 3: A tram/bus traveller's diary

I can start my journey with public transport by using the timetable they have sent to my home (VT sends a timetable of all the buses and trams in Gothenburg to every household) or I can use the Internet www.vasttrafik.se as the pictures below try to illustrate. As a contrast I do not need a time table to start cycling, just go ahead. On the internet there is something VT call real time including two different real time systems. One is where GPS technology is placed on the buses which then are connected in a way so that I can see on the internet how the bus is moving. Well it is not the bus, but a little red dot which moves slowly representing the bus on the move. This system is working on some of the routes but most of the buses and trams are today using the other system. It is a system which is based on spatial points and forecasts about time to drive (KomFram-systemet or ComeForward, my translation). All these "systems" is of course not necessary when I wanted to use my bicycle and therefore it could be said to be less stabilising elements connected to this way of travelling to learn. But this description of a bus traveller's journey is when I left my brothers car I had borrowed and when I needed to take the bus home again. So I just went to the bus stop after I left the car and key. To walk home would take me at least 2 hours and by bicycle 30 minutes.

I stand at a place where the bus is supposed to stop, a bus stop. And I can see according to textual appendages to the stop, a so called timetable and route signs, that there are three routes to choose from. After some consideration based on what the text says about each route and where they are heading, stopping and due to arrive, based on the current clock-time (10.50) and calendar time (Wednesday the 30th of June 2004) I decide to take route number 40, since this is the first due to arrive. In fact it does so. First I can see the bus coming far away. Then I can see it is the bus for me because the route number is displayed on the front of the bus (it is also on the sides and back). This time I did not have to wait too long which is always nice. The bus is approaching and soon the bus stops just as it should (!) at the bus stop where I stand.

The front doors open and I and the other people standing in a line enter the bus. We are now passengers. In my hand I have a card which informs me that it is a value card of 100 kronor. This card I have to put into a green machine with the digits 1-9 on it. I just slip it in an opening on the top and the machine sucks it in and then I must press one of the digits. The machine waits for my actions. If I do not do anything the card will come out again. The machine makes different sounds when the cards are put into it. A new card takes a longer time to work with the machine and has one kind of sound. If you put in a used card which still has sufficient value for the journey on it, it takes a shorter time to read the card and the sound is slightly different. But if the card is invalid or does not have enough value (written as a negative value back of the card) on it the machine starts beeping and everyone around you notices. I know now what a negative value sounds like. What you then have to do is have a new value card to put in, but this has to be done in less than x seconds otherwise the machine will not read the card. Then you have to go back to the driver who is just behind you and the driver will have to help you get the card read. And if you do not have a new card you have to pay in cash for the difference which the card will show up as a negative value.

A passenger pulls the button which makes a STOP sign lighten up and should make the bus driver stop at the next bus stop, but this time. Maybe the driver was thinking of something else? A bit later when the industrial area has been left behind and another residential area begins, the bus stops and the passenger now get off. He looks a bit confused. Some people enter the door and one woman goes straight to the driver. She wants to buy a ticket. The woman has a 20 kronor note in her hand which will buy her a ticket to take her all the way into the city with this bus (she can also change bus and go by tram with the same ticket until she arrives where she wants to get off). The driver really tries to get the paper moving in the machine which seems to be stuck. He is looking for anything he can find as an instrument, even a pen he has found, to stick into the machine and make it work, meaning produce the ticket. But nothing is working. The woman tries to be helpful and give him some advice. The time is ticking. And the bus is beginning to be late according to the time table. After 5 minutes the bus driver has to give up. The woman can now enter the bus without paying. But that will also apply to all other passengers who want to pay cash until the machine is fixed. The driver tries a last time before he starts to drive again but with no luck. On the way to the next stop he sometimes looks at the machine. He does not smile.

Every stop has a name and a speaker tells us passengers what the next stop is called. But something is wrong. The voice says "Körkarlens Gata" but the sign at the bus stop says "Sägengatan" and according to my knowledge Körkarlens Gata is four stops behind, meaning we have passed that one. I can only hope that no passengers on the bus are strangers to this area who then trust the voice and get off at the wrong place. But who knows?

It is common that people use the time when the bus is on the move to read, unless you get sick like I do, which means I have to look out of the window. You never know who will sit next to you. Most of them are unknown people. They may have a cold, smell of perfume (or body odour); they may be crying or laughing children, people in the middle of conversations on the mobile phone which you would be happier if you could not hear. There are all different kinds of people on the bus today; people with grocery bags, young, old, black, white, tall, small, with blue hair, tourists, those who live here, men, women. And most of the times many people are just quiet.

The housing area is now behind us and a big shopping area is in front of us. At the next stop which is another big connecting stop where a lot of buses and trams converge, there are a lot of people getting off and on the bus. The composition of the passengers has now changed. The bus continues and it is heading for the bridge where the city centre is located. Before the bridge there is an industrial area again. When the bus is on the bridge I can see the river, a small shipyard, companies, boats. It is easy to see that Gothenburg is a city with many hills. The buildings and area are different from where I have just been. There is no industry here and the houses are bigger and in a wider range of architectural styles. I pass Banks and shopping areas. And where I get off there is big square with a statue in the middle with flags moving in the wind and white big buildings in two sides of the square. This is where Gothenburg has its city council. I get off at the next stop to change route and exit the bus at the back doors.

At the other stop a bus is approaching but what is this? Is this a bus for me? But the bus stops at the bus stop so perhaps it is one for me after all. When the bus stops I can see a handwritten sign on the side saying route 60. Luckily for me, even though it has an irregular sign, it is my bus, now I know it for certain. I am on my way home.

As a way to illustrate a slightly different way of travelling to practice and learn things my dairy of another journey will presented before comments and reflections are made.

Story 4: A bike travellers dairy

First I do not have to check for a travel time, either in a time table or on the internet. Here I can create my own time and 'time-table'. There is no queue, no ticket machine, no text recorded on a value card, no camera in the ceiling, no passengers to pick up.

I have to check the weather more carefully since it will affect me more if it rains. The weather seems Ok, even if there are some clouds around. I put on my helmet; I have my key, my clubs and a bag with things in it. Then I have to walk down to the ground floor and open the door to where my bicycle is. I put my things on my back or on the bicycle before I go out through the gate onto the street, time to get started. The only thing I have to decide is which route to take. Whichever way I go, however, the place where I live is high up, so when I start I do not have to put a lot of effort to get anywhere. I just pedal gently and the slope will do the rest. Yes, I know...I have a present when I get back or if you prefer a challenge of getting back up the hill. I decide I will take the same route as the no. 60 bus. Soon I feel the wind on my body as the slope does its work. It feels wonderful at this speed. I think I will change route and ride through the big park nearby instead. It is lot nicer than on the road. Today there are a lot of people here. People are enjoying themselves; they are out walking, jogging, and sitting on the grass, eating ice-cream, walking dogs, and playing with kids, or just relaxing on benches feeling the sun on their faces. The surroundings are so green but with other colours too, the

trees, the flowers and bushes. I stop and take some pictures with the camera I have brought with me. A woman with her dogs passes me. I start pedalling again and I pass a pond where there used to be many birds. After awhile the park ends and I decide to take a path which is parallel to the road with all the cars. It is noisy here even if they have put up some high fences so that you can not see the vehicles. It is a lot noisier than in the park. The path is quite easy to ride on, but the wind is against me, making riding harder. So I have to increase my activity rate, put more energy into my pedalling, and so I breathe more heavily, but it feels good. On my right side I have the tram tracks and the trams are passing me every so often. Route number 7 and route number 13.

My body is now quite warm and I am sweating. On the other side of the road I can see an industrial area. I will not take that path today. One good thing with having a mountain bike is that I can take myself wherever I want; up into the hills, off the roads, into fields, across grass. But today I think I will stick to the bike path. On my other side there is a residential area. Signs tell me now and then about places I can not see but which I can go to if I follow them. One sign is for a big shopping area. But I am heading someplace else today. I pass a man trying to teach a boy to ride his bicycle. The boy looks like he is concentrating very hard and is a little nervous. The man is holding the bicycle firmly at the back. Yes, it is a wonderful day and place to learn how to bicycle. After awhile [30 minutes clock time] I reach the driving range and start practising. At least I do not need to warm up before starting, that is for sure.

If I want I can start my journey with public transport at my home with many similarities how I can start my bike journey too. Of course there is differences as well like no need to coordinate with any body else, bus, space or time. With internet I can check if the buses are on time at this instant moment and coordinate it with my walk to the bus stop. Or I can use the timetable the Authority has sent home to me. I learn to use my watch, or other watches which are available everywhere and will expect the buses on time. Perhaps I have an appointment I do not want to miss. One minute according to the time table and I know it is late. But to become a passenger or as the drivers manual also define it traveller, ambassador, citizen, and even a customer a change of status happens when I leave the stop and enter the bus with just one step. I also then become an element in a public transport circulation.

Locally many people who travel with public transport know what to do as a passenger. This includes how to line up at the bus stops just before the bus comes/stops entering the bus through the front doors and go off at the back doors. We are all well instructed of what to do through text on time tables, on posters on board, campaigns and it can be noticed how we have been practicing for awhile. Sometimes it happens that people enter other doors too, but that is when people have lot of luggage or goes by trolley or by tram, which have a different way of entering the doors, or for whatever reason.

I learn and practice many things when I use and also produce public transport. Beside the importance of use and re use of objective time as clocks and calendars I and my companions on public transport practice about the importance of a ticket and value card and connect it to the journey we about to do. To enter the front doors might look innocent but it will get more people to pay for the journey because the machines are located just past the front doors when people (instructed) enter the bus. Signs inform me/us about fees and fines and can be seen just when I enter the vehicle. I have practices how to hold my value card ready for the ticket machine. I use a value card, 100 kronor, which will be less each time I put it in the machine, if not broken. What has been used up as value/numbers can be read at the back of the card along

with the route number, date, direction and the value of this particular journey. I can even learn about negative value when it is not enough on my card according to the text and how then the machine makes loud noises. I also know how to eliminate the negative value, also called a debt. I have another card ready for use which then can be charged instead (often while the bus is moving because the driver will not wait till this is done, just as long everyone is inboard the bus starts moving). With no other value card available the debt will still be there. The debt is not a relation between the driver who actually takes me to a place I want, s(he) is an actant using Latours (1998) terms, and the passenger. Still it has to be settled at once which is what the driver will handle. There is no tolerance of one way flow (Crump 1981), or delayed of payment. It is here and now it has to be done. I can also see how the driver tries really hard to make this work when there seem to be a problem. He tries to produce a ticket, a paper with text which is of vital importance here. But it turns out that the paper in the machine gets stuck and will not produce a ticket. With no written signs – there can be no payment – the woman can travel for *free*. This machine has of course to be repaired because the relation between public transport and value is taken for granted – no value in money terms means any public transport. The “normal” thing for people to do is to move to get in line and pay. Value and a journey are connected in this concrete way, in motion. Not only does everyone practice individually to connect money with timing and spacing but also together as the driver and the passenger tries to do. With value in money terms as payment I practice how to get access to a journey or put in differently I learn the relation between routes, movement through a landscape and value expressed as money value. Of course you can use a value card in a different way too. Alternatively you could use the card as a bookmark when reading a book, as the woman beside me was doing which is a difference to ride a bike. I can not read a book while riding my bike. But I do not have to use a value card at all in the first place and do the practice that goes along with it.

I have to let a stranger in uniform I do not know the name of drive me where I want to go when I use the bus or tram. Still I do expect him to stop when I press a button and a sign will come up saying STOP! The driver is not the only stranger around here. I have to sit and stand close and spend time and space with people I do not know. More or less everyone is a stranger to me. This is therefore not a place where people typically interact and chat. But we create public transport together. I can make other choices as I ride along with my bike, taking other roads, discovering other views. I can stop when I want to, for example when I see a friend as I did. There is no timetable, and no set route, and I do not have to sit beside another person. What I notice here with my bike is that I can have many other kinds of spontaneous meetings.

With bus and trams I practice how to change routes to get to where I want to go, where to get off and where to change. This is for the moment not in full control because VT changed the net of routes the 13th of June which made my route no 85 disappear and replaced with route no 60. The change of “routes” is not in my hands like when I ride a bike. Still I can make my way to places I want to go. With the new routes I can now see different streets and people and change differently than before. What is important is that I as a potential passenger can see a written sign of what routes approaching my stop. A sign, even a handwritten, which is highly irregular according to the text in the driver’s manual, makes it easier for passengers and the driver to keep producing route 60 over and over again. I also learn that I am lucky to know where I am and did not follow the speaker’s advice. The written sign on the stops were more reliable.

Changing landscapes and changing times. I notice when I can get a seat on the bus. The time of the day, the date and the fact that the route has just started are three reasons for that. First when I travel different times of the day, for example people can be at work, or on holiday, and it might be the beginning of the route and not many potential passengers has not been “collected”. With my seat I can relax watch the world outside. I can ‘sense’ a city meaning that there is more than the spatial point I call my home, and it seems to be a part of something more, of course with the help signs, text and maps. Houses are more frequent, there is lot of people. On my bike the area I travel with on bus will have taken a lot more time to do. But the bus would not either be able to travel to places the bike can get access to. As I practice public transport and also create what it “is” I experience distance changing landscapes from my journeys but I will also be a distant element to be know for others when being watched from the camera in the ceiling the tram has. When I stamp my value card I also get recorded as a number in a flow together with the recording device above the door when I get on and off. With my bike I use my body quite differently, in a way that requires me to be more active and less passive, and gives a greater direct engagement with the wind, sun, rain, etc. There is no cocoon from the world as there is on a bus. The contrast between tension and relaxation is different than when I am sitting on the bus. Then it is the bus that makes the contrast between active and passive and on the bike it is me who does them. Tuan talks about transcendence (2001) the condition of today by moving, travelling by bus means it is the vehicle that makes the transcendence, a ride I can access to through money value, and if I am lucky for free when the ticket machine is broken. By bicycle with a vehicle that needs my body engagement to move. Still this time and space production of public transport is also a ground for kairotic moments like when I feel really happy about good timing at one bus stop. Timing to travel home.

Every passengers journey can be defined according to the drivers manual as three parts, when passengers enters the bus a good relation through positive body language has to be created between the driver and passenger, second the selling phase where the driver as fast as possible should recognise my need and lastly when the journey is over for the passenger confirms it by eye contact and a nod. But to make people to practice and learn about everyday life movement in this way, not only as a bus driver, is also a way to organise life into events and flows through written forms. From a chaotic here and now into time tables and value. I will get translated into numbers and flows with my other travellers. I become part of a flow, a flow and time that easier can be connected to value in money terms. Together, the bus and I and other traveller, we (re)produce and make what a public transport system is (as of course does the driver too). But as a written record it easier to make events and connect a number and a value. By bicycle there is finally none of the apparatus of ‘public transport’ when I take my bicycle: no need to buy a ticket as a passenger, no record of my journey or of the vehicle’s, no camera as surveillance of my action while on the vehicle, no accounts of my time or the vehicle’s, or the driver’s, no calculation of revenues collected or wages due, no inspection of the vehicle for cleanliness or roadworthiness.

5 A Pause Along The Way: A Provisional Conclusion

As with any study that engages with the intersection between the past and the present, and then seeks to delve into the richness, complexity and frequent contradiction of lived experience, there is much that remains unsaid, even about the process of driving buses as it is, let alone as it is becoming. But we hope two things. First we hope that we have shown the ways in which accounting’s past, from before the invention of writing through the invention

of modern management, is very much embedded in the present, as evidenced by its shaping of the everyday work world of one key service facet of a modern developed society. Even those aspects of accounting which may appear at first sight to be far away from bus driving, such as issues of capital investment, company strategy, and negotiations with the Transport Authority, all surface in one way or another in that everyday practice, and the interactions of drivers with passengers. And where those issues may have been fairly invisible say ten years ago, they are being rendered more visible in the everyday work of driving because of how accounting and accountability are used both by the company and the Authority to generate a quality service at a competitive cost. And even the historically given fragility of accounting surfaces, e.g. in terms of the over-detailed specification of proper behaviour in the Manual, where the commitment to each customer that the accountability model demands is unattainable except when a bus is almost empty and in light traffic (and already on time), or the constant pressure to run to time and tracking of performance via GPS, which leads not only to failure being visible more frequently but to the ratcheting up of punctuality demands by Authorities (because these targets are now easily monitored) and rendering contracts less attractive for companies in terms of long-term profitability. Here accounting generates longer-term failure through its repeated success at the short-term immediate level of lived experience. But of course, as noted at the outset, this can only lead to more accounting and accountability measures being introduced to 'cure' the failure (and as noted often directed in the first instance at the people whose lived experience puts them in the immediate firing line, i.e. the drivers).

But more than this, we hope second that we have begun to make visible how it is impossible to separate the objective from the subjective in terms of the constructs of space, time and value that circulate in the operation of this transportation system and of this bus within it. The objective measured space of the route to be covered, the time it must be covered in, and the value to be generated through maximising revenues and winning return customers all intersect in the lived experience of the bus driver. What Boel tells us about her objective acts (negotiating the traffic, operating the points manually, collecting copies of the Metro, taking a toilet break) and about her subjective feelings (concern about checking in with TLX and messages from the route planners, about the reaction of the passenger who does not stop to repeat what he said, about the distanced relation with so many passengers required by concentrating on driving) shows how far accounting has shaped or even 'infected' both objective and subjective domains of time space and value for her. In an analogous or complementary way, any individual, living the experience as passenger on any regular basis, has to internalise the dynamics of space and time as measured for buses by the Authority to begin interacting with catching buses successfully (in the sense of an efficient use of one's own time and space). One can then, certainly, integrate the experience of elapsed time and space on the bus with ideas or activities that fall outside what the driver, the company and the Authority are concerned with accounting for. But one must still be ready to exit at the right time and place, and to switch modes from passenger to one's external daily existence. One has, in that respect, to keep measured time and space at hand, within the horizon of one's activity.

And then finally, as the episode of being a bike rider indicates, there are still ways of engaging with time and space which can be systematically different from those experienced by a passenger. And in such 'other' lived experience, other values now have a space (and the time) to be exercised by one's self, as a person who is definitively not a passenger, nor a driver, but in a zone of lived experience where accounting, perhaps, still has less sway.....

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SOU 2003:67 Kollektivtrafik med människan i centrum (2003)

Västrafik AB's Verksamhetsplan 2004-2006

Handbok i Förarcertifiering 2004, SLTF och Västrafik AB

DVD film "Kunskapsbussen – Att resa är att lära" (The knowledge Bus – To travel is to learn)

Västrafiks homepage www.vasttrafik.se

Appendix

Date	Week day	Route	Time	Hours payed
040405	Monday	5/1037	8.16 bp-9.52Rtx	9.9
		rsa	10.10 wl-10.15c	
		11/1066	10.25-12.49c	
		4/1120	13.53-16.34c	
		11/1068	16.52-18.51mx	
040406	Tuesday	11/1071	6.42mx-11.13c	9.77
		10/1035	12.23-14.35bp	
		11/1078	14.52-17.12c	
040407	Wednesday	Day off		
040408	Thursday	1/5009	6.38mx-8.35c	9.73
		1/5002	8.44-11.24c	
		11/5078	12.25c-17.23jt	
040409	Friday	9/6107	6.29mx-11.10jt	9.02
		11/6065	11.56-16.16jt	
040410	Saturday	Day off		
040411	Sund0ay	Day off		
040412	Monday	7/7048	8.56mx-12.47c	8.03
		Walk	13.35c-13.39bp	
		Rsa6	13.39bp-13.47jt	
		6/7132	13.52-17.46jt	
040413	Tuesday	Reserve {Standby?}	8.00-12.37	9.00
		11/1085	12.37-16.22c	
		Reserve {Standby?}	16.22c-18.00	
040414	Wednesday	Reserve {Standby?}	4.37mx-8.38	8.32
		1/1006	9.16-13.15c	
040415	Thursday	Day off		
040416	Friday	Day off		
040417	Saturday	9/6109	5.03mx-9.15jt	9.75
		Rsa60	10.17jt-10.22wl	
		8/6120	10.32rtx-12.46c	
		4/6010	12.55-15.25c	
040418	Sunday	Reserve {Standby?}	6.00mx-15.00	8.00