Labour Time, Guild Time?

Working Hours in the Cloth Industry of Medieval Flanders and Artois $(Thirteenth-Fourteenth Centuries)^{1}$

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Abstract

From their very early history, even before the craft guilds came of age, regulation of labour time was ubiguitous in most Flemish and Artesian cloth manufacturing cities. Nearly everywhere the working day was decided by the urban authorities and announced by bells; the working year was divided in working days and Sundays/religious festive days. Regulation, however, was refined and intensified in the course of the second half of the thirteenth and early fourteenth century when craft guilds pushed away the traditional relations between merchant-entrepreneurs and textile workers and replaced them with the late medieval small artisanal workshops. Labour time regulation was also clearly more developed in export-oriented cities: rules were stricter and the requirements of flexible workshops that could adapt to changing demand cycles necessitated more complex systems of regulation. Hence, labour time was not evenly organised across the different production stages. Cloth weavers have always been at the heart of regulation, while also cloth finishing and fulling were targeted. It is time-rate wages of journeymen weavers and subcontracting masters that set the standard for the intensification of labour time regulation once the guilds stepped in. Small-scale entrepreneurs needed to control more firmly the various production stages and adapt the scope of the enterprise to changing demand. Their mere economic survival depended, therefore, on the flexibility of labour markets. Once they gained access to political power, therefore, regulating labour time certainly became one of their main tools to control the organisation of labour.

Keywords: labour, time regulation, guilds, cloth industry, middle ages

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1 Labour time in a changing environment

The debate on labour time in the medieval industries has been, the fact is well known, set by two classic studies. Jacques Le Goff assessed the transition from natural and fluent time (the time of God and the clergyman) to artificial and fixed time (the time of the merchant and, therefore, the time of money) in a couple of seminal articles, while E.P. Thompson saw the control of time in industrial manufacture as a pre-condition for the industrial revolution.² Although both studies have been nuanced in the past decades, whereby a lot of attention was paid to continuities across the social and economic organisation of medieval cities,³ the study of labour time in the medieval textile industries remains mostly uncharted territory. Even wage studies, which deal with the building industries, by scholars such as Jean-Pierre Sosson, John Munro, Etienne Scholliers and Herman Van der Wee have left this topic almost untouched, usually only discussing the number of (often religiously inspired) festive days while assessing average yearly wage income, and only occasionally going into the organisation of the working day itself.⁴

Etienne Scholliers has been one of the few historians to have dealt more systematically and empirically with labour time in the pre-modern Low Countries, but only for the beginning of the Early Modern Period. He could identify a secular rise of the number of working hours across the Early Modern Period and described the working day in two of the largest cities of the sixteenth-century Southern Low Countries, Ghent and Brussels, as a remnant of the late medieval situation, although the situation seems much more complex than it is suggested by the presence in the accounts of just two systems, a winter and a summer wage.⁵ In Brussels the working day

J. Le Goff, 'Temps de l'église et du marchand', *Annales ESC* (1960) 417-33 and E.P. Thompson, 'Time, work-discipline, and industrial capitalism', *Past and Present* 38 (1967) 56-97.

³ For a recent discussion of the debates, see M. Arnoux, 'Relation salariale et temps du travail dans l'industrie médiévale', *Le Moyen Age* 115/3 (2009) 557-581.

⁴ E. Scholliers, *Loonarbeid en Honger. De Levensstandaard in de XVe en XVIe eeuw te Antwerpen* (Antwerp 1960); J.-P. Sosson, *Les travaux publics de la ville de Bruges XIVe-XVe siècles* (Brussels 1977); H. Van der Wee, 'Prices and wages as development variables: A comparison between England and the Southern Netherlands, 1400-1700', *Acta Historiae Neerlandicae* 10 (1978) 58-78; J.H. Munro, 'Builders' wages in Southern England and the Southern Low Countries, 1346 -1500', in: S. Cavaciocchi (ed.), *L'Edilizia prima della rivoluzione industriale* (Florence 2005) 1013–1076; P. Stabel, *De kleine stad in Vlaanderen* (Brussels 1995).

⁵ Most wage data on the southern Low Countries have been published in C. Verlinden et al., Documenten voor de geschiedenis van prijzen en lonen in Vlaanderen en Brabant (Bruges 1959-1974).

seems to have changed constantly throughout the year. It changed surprisingly no less than eleven times per year and there were six categories of working days ranging from 7.5 hours in winter to no less than 11.5 hours in summer. In sixteenth-century Ghent there were five categories. Working hours ranged from a minimum of 6.5 hours in winter to a maximum of 12.5 hours in summer. In sixteenth-century Antwerp masons worked between seven and eleven hours a day depending on the season.⁶ But there was also great divergence across economic sectors. For the textile industry, Etienne Scholliers and Alfons Thijs have argued that labour time was already under pressure in sixteenth-century Antwerp, where cloth finishers had working days of twelve hours (and sometimes even more).⁷ But this knowledge about sixteenth-century textile workers cannot necessarily be transplanted to earlier periods. Moreover, Antwerp was not a real cloth manufacturing city. It specialised in other fabrics (silks) and its dealings with the wool industry were mostly limited to finishing (usually English) cloth. Working conditions were, therefore, very different while the balance of power in Antwerp was clearly in favour of merchants and industrial entrepreneurs, in sharp contrast with the cloth manufacturing towns of Flanders, where guild masters had become a crucial factor in deciding labour relations.

This article does not want to challenge the assumption that there was a long-term process whereby time was increasingly standardized and that such a standardization was important for industrial development and for the organisation of labour markets. It wants to look closer at one key period of economic and social change and explore how labour time was gradually defined across the thirteenth and fourteenth century in the cloth manufacturing cities of Flanders and Artesia, probably the highest concentration at the time of industrial labour in Europe. The structural changes that characterised the cloth industry of the Flemish and Artesian cities across the thirteenth and early fourteenth century, with the coming of age of the craft guilds and the changing balance of power in the industry in favour of small scale entrepreneurs is likely to have caused also fundamental changes in the organisation of the labour market and of labour itself. The strange thing is that besides an almost general ban on night work in the medieval cloth cities of the Low Countries, in historiography traditionally linked to the guilds' concern with quality, and the ubiquity of

⁶ E. Scholliers, 'Werktijden en arbeidsomstandigheden in de pre-industriële periode', in: Verlinden et al., Documenten; P. Scholliers (eds.), *Werktijd en werktijdverkorting. Durée de travail et diminution du temps de travail* (Brussels 1983) 11-13.

⁷ Scholliers, Loonarbeid, 91 and A.K.L. Thijs, Van "werkwinkel" tot "fabriek". De textielnijverheid te Antwerpen (einde 15de-begin 19de eeuw) (Brussels 1987) 383-385.

festive holidays, precious little is known about the realities of labour time in this grandest of all medieval industries. In fact, precious little is known about labour conditions in general. Even income distributions among the various craftsmen or the fact whether piece or time wages were implemented in particular production stages still remain very much obscure. From literature it appears that once the guilds started to develop their regulation, journeymen (or subcontracted masters) were often paid time wages, mostly for specific tasks (fulling a number of woollens for a prescribed number of days), sometimes for the work of several days, of one day or even of a part of the day (weavers). The masters themselves (when not working as a subcontractor) were paid piece wages, as were the (mostly) women active in the labour intensive stages of preparing the wool and cleaning the woven fabric.⁸ An analysis of labour time can, therefore, also be a first step in a more broad assessment of labour conditions in general.

In order to measure differences between the proto-guild and the guild period, four issues relating to labour time in the medieval cloth industries will be tackled. First of all the effects of the industrial transformation of the industry in the course of the late thirteenth and early fourteenth century, when cloth entrepreneurs started to focus on quality and guilds started to define labour relations, need to be investigated. Was there a dramatic shift as well in the temporal organisation of labour for both the entrepreneurs (owners of workshops, masters) and the work force (wage earners, journeymen)? Studying this shift is no easy task. Source materials for the late twelfth and early thirteenth century are not abundant. Only for some manufacturing cities evidence has survived, most notably for Saint-Omer and Arras in Artois and for the Flemish cities of Douai and Ypres. Second, we need to look at how, when guilds became important, time regulation in cloth manufacture developed in the different manufacturing towns. In the course of the fourteenth century smaller cloth towns became important as cloth manufacturing centres, especially in Flanders, and they followed only

8 A very detailed analysis of wage formation and the many often hybrid forms of time-rate wages and piece wages in late medieval and Early Modern Europe can be found in: C. Lis and H. Soly, *Worthy efforts: attitudes to work and workers in pre-industrial Europe* (Leiden 2012) 522-537. On the successive production stages of medieval cloth manufacture: W. Endrei, 'The productivity of weaving in Late Medieval Flanders,' in: N.B. Harte and K.G. Ponting (eds.), *Cloth and clothing in Medieval Europe: Essays in memory of professor E.M. Carus-Wilson*, Pasold Studies in Textile History, 2 (London 1983), 108-109 and N.B. Harte and K.G. Ponting, 'Manufacturing a piece of woollen cloth in Medieval Flanders: how many work hours,' in: E. Aerts and J. Munro (eds.), *Textiles of the Low Countries in European economic history*, Proceedings of the Tenth International Economic History Congress, Studies in Social and Economic History, Vol. 19 (Leuven 1990) 14-23.

at a distance the manufacturing trends in the bigger cities. Was time regulation in all these different cities more or less the same or were there substantial differences? Third, we will also need to look at sectorial differences. Not all manufacturing stages carried the same weight. Some were more capital intensive, others more labour intensive. Hence weavers and cloth finishers seem to have developed a far-reaching regulation of labour time, while for other occupations (fullers, dyers and wool preparation) there was clearly less incentive to organise labour time. Last but not least we will also have to look at how labour time was perceived by the different groups of textile workers. Did wage earners, like journeymen, have a different notion of labour time, from the small commodity producers themselves (the masters and their household)?

2 Normative sources and social practice

Although, unlike the sixteenth-century examples elaborated by Etienne Scholliers and Alfons Thijs, sources that document the length of real labour time are not available in this period, and direct comparison between our knowledge about the working hours in early modern Europe is not possible, the mostly normative sources of the cloth industry do tell a lot about labour time and the way differences are made between working days and festive days. They not only reveal strategies of defining labour time and organizing labour markets, they also point at how the time of labour changed from a set time for the whole working community to a more differentiated time with specific validity for parts of the working community. While at first it was the religious liturgical calendar that decided when and at what time people went to work or stopped working, gradually the framework of time was adapted to new social circumstances and social hierarchies, when small scale producers gradually strengthened their grip on the urban labour markets.

As such the few available sources for the early thirteenth century, which can be considered as a proto-guild period, need to be compared with the more widely available guild statutes from later periods. The early documents include statutes of the 'draperie' (the organisation of cloth entrepreneurs and traders, usually exactly those groups that constituted the urban political elites) and urban ordinances issued by the city aldermen themselves. From the late thirteenth century onwards, however, as source materials become plentiful, the new guild statutes are completing our knowledge, and although the craft guilds in cloth production were quickly associated with political power, the social identity of the guild officials was different from the 'draperie,' as more and more small scale entrepreneurs were increasingly able to control cloth output. Sources of whatever nature and social identity are, however, always setting a norm, without necessarily revealing their implementation or the social realities of the real labour time (and allowing calculating working hours with some precision).

Yet we cannot be overly pessimistic about these normative sources either. Cloth manufacture was a very competitive business, and manufacturing procedures were constantly adapted to changing circumstances. The role of statutes was crucial in this respect. In order to guarantee export quality and allow entrepreneurs to compete for export markets, the normative framework had to be adapted constantly as well. Regulation, therefore, could not remain too far away from the realities of the workshop and the market. But most of all, because of the highly competitive nature of textile manufacture and the importance of standard quality for maintaining the competitiveness of the various manufacturing centres, implementation of rules was of crucial importance to safeguard the continuity of a town's cloth output. Furthermore, guild and urban economic regulation, tended to remain vague and ambiguous on particular issues, allowing for constant negotiation among the stakeholders (workers, entrepreneurs and merchants) and changing interpretation in function of the balance of power, but also in function of economic circumstance.⁹ On other points, however, regulation was much less vague and left less room for manoeuvre. We can, therefore, safely assume that labour regulation, if it was detailed, was up to a certain point representative for the realities of work.

3 An industry in transition

The thirteenth century witnessed a fundamental transition for the great industrial cloth cities of Flanders and Artois. In the course of the twelfth and early thirteenth century these two principalities experienced a period of rapid urbanisation because of their industrial expansion.¹⁰ Cloth of all qualities were manufactured in the leading cities of Flanders (Bruges, Douai, Ghent, Lille and Ypres) and Artois (Arras and Saint-Omer) and

⁹ P. Stabel, 'Guilds in the late medieval Low Countries: myth and reality of guild life in an export-oriented environment', *Journal of medieval history* 30 (2004) 187-212.

¹⁰ P. Stabel, Dwarfs among giants. The Flemish urban network in the late middle ages (Leuven-Apeldoorn 1997).

their woollens reached customers in northern and southern Europe alike.¹¹ The organisation of the cloth trade was in the hands of Flemish merchants and the so-called 'merchant-entrepreneurs,' who, like their archetypical representative Jehan Boinebroke from Douai, used their access to capital to control the successive manufacturing stages and the trade of raw materials and cloth.¹² It was the city governments, controlled by merchant and landowner elites, that provided a normative framework and guaranteed export quality and decided on trade and labour relations,¹³ while a farreaching division of labour – up to fifty different manufacturing stages – had to stimulate labour and capital productivity gains.¹⁴

From the middle of the thirteenth century, the industry, however, changed dramatically. Competition in other regions undermined exports.¹⁵ Moreover, general insecurity and increased warfare from the late thirteenth century onwards raised the merchant's transaction costs.¹⁶ The traditional outlets of continental Europe at the fairs of Champagne suffered as

¹¹ On the Flemish cloth industry, see J.H. Munro, 'Medieval woollens: textiles, textile technology, and industrial organisation, c. 800-1500', in: D. Jenkins (ed.), *The Cambridge history of western textiles* (Cambridge 2003) 181–227, and J.H. Munro, 'Medieval woollens: The western European woollen industries and their struggles for international markets, c.1000-1500', in: Jenkins, *The Cambridge history of western textiles*, 228–324; H. Laurent, *Un grand commerce d'exportation au moyen âge: la draperie des Pays Bas en France et dans les pays mediterranéens, XIIe-XVe siècle* (Paris 1935) and E. Coornaert, 'Draperies rurales, draperies urbaines: l'evolution de l'industrie flamande au moyen âge et au XVI siècle', *Revue belge de philologie et d'histoire*, 28 (1950) 60-96.

12 G. Espinas, La draperie dans la Flandre française au moyen âge, (Paris 1923); G. Espinas, Les origines du capitalisme, 1. Sire Jehan Boinebroke patricien et drapier douaisien (?-1286 environ) (Lille 1933); H. Van Werveke, De koopman-ondernemer en de ondernemer in de Vlaamsche lakennijverheid van de middeleeuwen (Antwerp 1946).

13 J.-M. Cauchies (ed.), *"Faire Banz, edictz et statuts" légiférer dans la ville médiévale* (Brussels 2002).

14 D. Cardon, *La draperie au moyen âge: essor d'une grande industrie européenne* (Paris 1999) and G. De Poerck, *La draperie médiévale en Flandre et en Artois: Technique et terminologie* (Bruges 1951). Technological aspects are discussed in Endrei, 'The productivity of weaving', 108-19 and Endrei, 'Manufacturing a piece of woollen cloth', 14-23.

15 J. H. Munro, 'The symbiosis of towns and textiles: urban institutions and the changing fortunes of cloth manufacturing in the Low Countries and England, 1270-1570', *Journal of Early Modern History* 3 (1999) 1-74, P. Chorley, 'The cloth exports of Flanders and Northern France during the thirteenth century: a luxury trade?', *Economic History Review* 40 (August 1987) 349-379 and various contributions in M. Boone and W. Prevenier (eds.), *Drapery production in the late medieval Low Countries: markets and strategies for survival (14th-16th centuries)* (Leuven-Apeldoorn 1993). For the smaller manufacturing centres in Interior Flanders see also Stabel, *De kleine stad.*

16 J.H. Munro, 'The 'New Institutional Economics' and the changing fortunes of fairs in medieval and Early Modern Europe: the textile trades, warfare, and transaction costs', *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte* 88 (2001) 1-47.

a consequence and with them also the Flemish cloth trade. Instead Mediterranean merchants and hanseatic traders started to come directly to the trade emporium of the Low Countries, Bruges. Cloth entrepreneurs had to adapt swiftly in order to survive. They started concentrating on luxury fabrics. Raw materials, skill, increasing market segmentation, higher levels of quality control and carefully managed systems to secure labour markets had already been considered important in the old cloth industry, by now they became critical. The balance of power in the industry shifted as a consequence. Flemish merchants focused on controlling regional trade networks of supply and seem to have abandoned the control of the manufacturing processes. Quality control and human resources management became the demesne of the craft guilds instead. Entrepreneurs were by now recruited from within the industry, usually from the core activities of working with the fabric itself. Clothiers ('drapiers') managed to control these crucial stages, not necessarily by controlling the flows of goods and raw materials, but by setting up manufacturing networks, by organizing subcontracting networks and by monopolizing skill and expertise.¹⁷ As a result a master weaver of master fuller was not necessarily like any other master. It was in entrepreneurship, as a 'drapier', that real profit could be made. But these were undoubtedly new men in urban society, who also wanted their share of political power. The craft guilds became their instrument of gaining access to polity.

And they were also new 'men'. Women, who had enjoyed a significant role in the manufacture before the late thirteenth century were ousted as independent labourers from the crucial production stages of making and finishing the woollen fabric and banned to the low paid jobs of wool preparation.¹⁸ Labour relations in the workshops were increasingly formalised as the guild curriculum of apprentice-journeyman-master gradually got hold and guild training schemes became increasingly important as gate-keepers for quality and status. Guild officials started a process of disciplining both labour and quality and helped in this way the still active official controlling system of the 'draperie', organised the city authorities. In the end this movement towards a greater guild involvement, who because of the "democratic" revolts of the 1290s and 1300s also had their impact in most cities of the southern Low Countries on political representation, seems to have been a very logical step to take. Besides various social

¹⁷ Van Werveke, De koopman-ondernemer.

¹⁸ P. Stabel, Working women and guildsmen in an era of economic change. Labour and gender identity (Flanders 13th and 14th century)', forthcoming.

ambitions, it also made economic sense, as the demand for quality cloth agreed with the changes of commercial flows across the continent. The social consequences were, however, not negligible for the organisation of labour itself, and labour time was, of course, a crucial element in this.



Illustration 1. The Ghent Belfort connected to the large Lakenhalle contained a very urban array of bells Photo: Peter Stabel

4 The bells of labour: time and the rising craft guilds in the thirteenth century

Labour time regulation in medieval cloth cities was dealing with two issues: 1° ordering the day and the role of labour in it, and 2° preserving free days according to the festive calendar of the Church and the city. In all cloth cities it is the liturgical calendar that decided the division of the year in working days and festive days and of the day in working hours and leisure.¹⁹ The central issue was, of course, uniformity, preventing one entrepreneur from taking advantage in a manner considered as unfair for his or her competitors. The central guild adagio of fairness and equal opportunity amongst guild members seems to stand firm in the late middle ages, yet it is striking to see that regulation does not seem to change drastically in the course of the thirteenth century, when guilds came of age and when they gradually got access to political decision making. Before and after the guilds, the labour bells continued to follow the rhythm of the church (and of the stomach for the midday meal).²⁰

The earliest examples of labour time regulation stem from the early thirteenth century already and they appear with the first surviving sets of regulation. As such, they predate full guild development by several decades. A regulation for the Arras cloth finishers and shearers from before 1236 sets the calendar of festive days in the city. The obligatory Sunday rest for shearers, members of the 'cariteit' (charity) of Saint Julian (a proto-guild type of organisation), started from Saturday at noon, nor were they allowed to continue working on the days before the festive days of Our lady and Apostle's day from the time the bell was tolled for vespers. Besides these days work stopped also for four days in the Christmas period and eight days during Easter and Pentecost. Working days were extremely long: a regular work day only ended when the bell struck the hour of "compline", the last liturgical hour of the day.²¹

20 The soundscape of bells and the introduction of clocks in public space has been a much debated issue since the seminal study by Jacques Le Goff. The significance of the medieval time 'revolution' for later periods is discussed in C.M. Cipolla, *Clocks and culture, 1300-1700* (New York 1967) and D.S. Landes, *Revolution in time: clocks and the making of the modern world* (Cambridge MA 1983). For the Low Countries, see in particular L. Leroux, *Les cloches et société médiévale. Les sonneries de Tournai au Moyen Age* (Tournai 201).

21 G. Espinas and H. Pirenne, *Recueil des documents relatifs à l'histoire de l'industrie drapière en Flandre. rre partie*, vol. 1 (Brussels 1906-1924) 220.

¹⁹ Le Goff, 'Temps de l'église', 417-433. More general observations on the liturgical calendar : J.C.J. Metford, *The Christian* year (London 1991) and R.F. Taft, *The liturgy of the hours in East and West. The origins of the Divine Office and its meaning for today* (Collegeville Minnesota, 1986).

The city of Douai boasts the most extensive early regulation of any of the Flemish cloth industries. On 23rd July 1229 the Douaisien aldermen set the standard in a city ordinance on shearing and cloth finishing. The aldermen clearly distinguished between a summer and a winter season. Three shearers, masters and journeymen alike, were allowed to shear only four and a half woollens in winter (from the 14th September until the opening of the fair at Bar-sur-Aube, one of the Champagne fairs, in March or early April) and six woollens in the summer season. Night work was forbidden, however, from Saint Nicholas's Day (6th December) until the opening of the fairs at Lagny, another of the Champagne fairs (in the middle of Lent); this ban was, however, not so strict. Shorter days meant less output, and it was, therefore, clearly considered a nuisance in periods of intense activity (just before the export towards the Champagne fairs took place). The absence of natural light was clearly not considered a problem vet for the Douaisien cloth entrepreneurs. Shearers were, however, not obliged to work such long hours: they could do less if only the merchants interested in Douaisien cloth were not harmed.²² The rhetoric of not harming merchant's interest is quite revealing for the international orientation of the Flemish and Artesian cloth manufacturers. It will linger on until the end of the industry in the fifteenth and sixteenth centuries.

A quite similar ordinance was issued for the weavers. Again labour time regulation was issued through a prescriptive volume of work for the winter and the summer season (this time All Saints and the first Sunday of Lent were the terms). But the ordinance is more explicit about the working hours in the day and the working days in the year. Douaisien cloth weavers were not allowed to start working before the bell has been tolled and they had to stop when the bell sounded vespers, much earlier than the compline in Arras.²³ It was the aldermen together with at least two of the controlling officers of the cloth industry ('eswardeurs de le draperie') – no weavers seem to have been involved in this – who were to decide when the bells should be struck. The bells were hung there, so an aldermen's ordinance one decade later in October 1261 tells us, at the express order of the city authorities ('li cloke que li eschevins i ont assise').²⁴ This is also one of

24 Espinas and Pirenne, Recueil, 2, 103.

²² 'Et sil avaient cose que li tondeur ne puissent ataindre lor jornees teles coume eles sunt ci deseure devisees, bien poeent faire mains, peroec que il ne le facent por les markeans faire anui' (Espinas and Pirenne, *Recueil*, 2, 19-20).

^{23 &#}x27;Et que nus teliers ne commence a tistre le matinee deci adont que li cloque des teliers iert sonnee ... ne que nus telier ne tisse, ne noe, ne entraie, puis quelle sera sonnée de le viespree' (Espinas and Pirenne, *Recueil*, 2, 69).

the very rare statutes that explicitly addressed the issue of working by candlelight in this early period of cloth manufacture. Night work by candlelight 'a candoille ne a lumiere' was forbidden and punished severely: a fine of no less than 100s. and banishment for life.²⁵

Twenty five years later, in 1287, an addition to this ordinance refined the Douaisien working day further. Weaving was to be stopped at noon and weavers were no longer allowed 'en jour ouvraule' to continue working 'entre deux cloques du mengier'.²⁶ When the bell for lunch was tolled is not mentioned, probably it was like the morning and evening bell at the discretion of the aldermen and the officials of the cloth industry. It is not known why this addition to an existing ordinance was decided. Possibly, the impact of the associations that became more decisive in this crucial period of industrial change towards expensive woollens. The 1280s were across Flanders a period of political and labour turmoil as masters and journeymen were increasingly attempting to influence urban polity.²⁷ Douaisien ordinances start to pay attention to strikes and outright revolt, and workers were more and more discouraged in the regulatory framework of the second half of the thirteenth century to do 'takehan'.

The requirements of the industry were also very obvious at this early stage of cloth manufacture in deciding the number of working days in the year. As in Arras, Saint Omer and in many other Flemish cloth cities, there was in Douai besides Sundays a limited number of festive days (the five days of Our Lady and Apostle's day and a number of days in the Christmas, Easter and Pentecost periods) where all work was forbidden.²⁸ Usually limits were also set on the days before the festive days. Hence Douaisien weavers were not expected to work on Saturdays and the days before festive days either, usually from noon (when the work bell was struck in the local Saint Peter's church near the city's belfry).²⁹ But again, there was a serious caveat. At all times the industry's officials and the aldermen could decide to make an exception, when the industry needed it.³⁰

In the city of Saint-Omer, on the border between Flanders and Artois,

26 Espinas and Pirenne, Recueil, 2, 106.

29 Espinas and Pirenne, Recueil, 2, 72.

30 'Puis que cele cloke sera sonnée a leure de laissier oevre, sil ne le fait par le conseil des eschevins' (Espinas and Pirenne, *Recueil*, 2, 103, October 1261).

²⁵ Espinas and Pirenne, Recueil, 2, 103.

²⁷ J. Dumolyn and J. Haemers, 'Patterns of urban rebellion in medieval Flanders', *Journal of Medieval History* 31 (2005) 369-393.

²⁸ In the aldermen's ordinance for the cloth sellers in 1250 these days were called 'les nuict de saintz en lan qui ont vigile' (Espinas and Pirenne, *Recueil*, 2, 89).

aldermen's ordinances contain the first traces of the organisation of labour time. The earliest surviving ordinance regarding labour time from the middle of the thirteenth century strangely concerns not the ubiquitous weavers, fullers and shearers, but wool workers who had to stop their working day after the 'verdeclocke' (the bell of peace) had struck.³¹ But also weavers, shearers and fullers were forbidden to work at night and they could not start before sunrise.³² No mention is made in Saint-Omer at this stage about a bell announcing the working day in the morning. Fines in Saint Omer were with 6os., however, substantially higher than in any other cloth city of Flanders and Artois.

For the big Dutch speaking cloth cities of Flanders, Bruges, Ghent and Ypres, sadly no such early regulation has survived. The earliest sources for Ypres, destroyed in the First World War but published before by Georges Espinas and Henri Pirenne, pay no particular attention to time regulation. Only from the second half of the thirteenth century statutes start to mention such issues. By then, however, guild organisation had appeared, so it is difficult to make the distinction between a proto-guild and a guild phase. It is, however, worthwhile discussing the measures of time regulation, as it puts the ample material which exists for the later period in perspective. The general statutes of the thirteenth-century Ypres cloth industry have been instrumental in organizing the industry as it would develop in the latter part of the Middle Ages.³³ In particular, attention was paid to the rights and obligations of masters, apprentices and journeymen, stating for example that journeymen cloth weavers were not allowed to share bed and board at his master's house. Journeymen weavers could not start working in their master's workshops before the working bell had tolled and after the evening bell they had to stop immediately according to an addition to the 'keure' of 1309 (remarkably still written in Picard when most statutes in this period were already in Flemish Dutch).³⁴ Once the bell was struck they even had to hurry to their work station ('tantost ke li clocke laisse sen son pour aleir à oevre, ke il soient sour leur ouvrage'). If they were late, the 'drapiers' would have the right to lower their wages 'al avenant quil monteroit de le defaute de le dite journee', suggesting that journeymen were paid a time wage rather than a piece wage. It is also one of the first times in Flemish and Artesian cloth towns that the working bell is explicitly called

³¹ Espinas and Pirenne, Recueil, 3, 229.

³² Espinas and Pirenne, *Recueil*, 3, 231.

³³ Espinas and Pirenne, Recueil, 3, 461 ff.

^{34 &#}x27;Que nus vallés ... ne puissent tistre devant le clocke des ouvriers ne apriès le clocke' (Espinas and Pirenne, *Recueil*, 3, 462).

the 'clocke des ouvriers' (bell of the workers). The Ypres statutes were less strict about night work than those from its Artesian or Walloon-Flemish competitors. Surely, cloth finishers were not allowed to do their work at night, but in particular periods, in particular in the winter period around Christmas, they could nonetheless work in order to accommodate the drapers and the merchants.³⁵

5 Uniform labour time across the urban system?

Despite the uniformity of time regulation, there were also always some local differences. Shearers in the small town of Aardenburg, close to Bruges, were explicitly forbidden in their fourteenth-century statutes to do their work at night, but they could always be asked by the city aldermen when the cloth entrepreneurs required them to do so.³⁶ Concern for the general welfare, and undoubtedly also pressure by the 'drapiers,' usually catered for a degree of flexibility. The Ghent shearer's statutes are very clear about this. At the request of the merchant ('en ware dat de coman dade doen'), cloth finishers could continue to work at night.³⁷

In general smaller manufacturing centres tended to be much less precise when the regulation of labour time was concerned. In Thérouannes, the small bishop's seat near Saint-Omer, time regulation was even abandoned in 1367 when the bishop and the chapter abolished the use of the working bell ('campane operatorum, quam pro mecanis et operariis existentibus et laborantibus'), because it had given rise to much discord among the workers.³⁸ In Eeklo, a booming secondary cloth manufacturing centre between Ghent and Bruges, the time of the cloth market was described in the aldermen's ordinances with great detail, but no regulation of labour time has survived. In fact the industry knew very little regulation at all.³⁹ In Nieuwpoort, a coastal town and with Dunkirk the most important fishing town of Flanders, cloth manufacture was certainly not the key industry. Its regulation tended to be relatively simple and its entrepreneurs did not aim at the export markets for luxury fabrics. In the fourteenth-century statutes

³⁵ Espinas and Pirenne, Recueil, 3, 473.

³⁶ Espinas and Pirenne, Recueil, 1, 56.

³⁷ Espinas and Pirenne, Recueil, 2, 583.

^{38 &#}x27;Propter pulsacionem hujusmodi campane in villa et ecclesia scandalum et division inter operarios, fullones et alios mecanicos oriatur' (Espinas and Pirenne, *Recueil*, 3, 395).

³⁹ Espinas and Pirenne, *Recueil*, 2, 363. For the cloth industry in Eeklo, see also P. Stabel, 'De Bourgondische periode', in: *750 jaar Eeklo* (Eeklo 1990).

it was natural light that decided working hours in the town in the spring and summer months (between Easter and Saint Michael's day) weavers were allowed to work between sunrise and sundown. In the winter season, however, God's time was replaced by the time of man. It was the 'dachclocke' (day bell) and the 'laetster clocke' (last bell) that announced the beginning and end of the working day.⁴⁰ Strikingly, the natural working day of the summer season seems to have been accepted more readily by the workers in Nieuwpoort themselves than the time regulation by the bell, as fines for any violation on this ruling were significantly lower in summer than they were in winter. The Nieuwpoort statutes, however, question the traditional assumption about guild economies and their ban on night work. Traditionally, this ban, so the argument goes, was because of the requirements of quality, safety and social order in crowded medieval cities. The fact that especially in winter time, when days were shorter, the necessity of daylight was not as urgent as is generally argued and that the requirements of the market made it an easy thing to bypass regulation on working hours in most industrial centres points to great flexibility.

Labour time regulation was more detailed in the important secondary cloth towns. They competed in the course of the fourteenth century with the bigger cities for export markets of medium and high quality woollens. In Oudenaarde, a town on the Scheldt River between Ghent and Tournai and one of the leading market centres for the proto-industrialised countryside of Interior Flanders, most guild statutes contain prescriptions about labour days. Over and over again, however, clauses contained exceptions. The Oudenaarde fullers were not allowed to full cloth the day before one of the religious feasts or on Saturdays after noon, unless they had already set up the fulling process before noon.⁴¹ Similar exceptions existed for weavers, who could continue working in the afternoon on such days if the loom had already been prepared. Only work on Sundays and on the feast days themselves was strictly forbidden. The same weaver's statutes of 1359 were also explicit about night work. As in the bigger cities, Oudenaarde weavers had to respect the working bells, which were decided by the aldermen of the town.⁴² Shearers and cloth finishers were less strict in their regulation and could work longer hours: craftsmen could even work on Saturdays and on the days before one of the festive days until the vespers

⁴⁰ Espinas and Pirenne, Recueil, 3, 63.

⁴¹ Espinas and Pirenne, *Recueil*, 1, 281 (1338).

⁴² Wercclocke die van onsen weghe ghestende ende gheordineirt zal zijn' (Espinas and Pirenne, *Recueil*, 1, 286).

sounded ('toter tijt dat te vesperen ommeluut es') and even on Sundays and on festive days they could still finish the job.⁴³

6 Sectorial differences

It is difficult to generalise about working hours across the whole occupational range of cloth manufacture. For some manufacturing stages hardly any data on the regulation of labour time appear. This is particularly true for the labour intensive wool preparation. Regulation on spinning, combing or wool beating is not concerned at all with labour time. Only the conditions of the industrial activity (mixing different qualities of wool) and the relations between the (mostly female) workers and the merchants were of any concern for the authorities. Most attention of legislators has gone to one stage in the production line: weaving. For cloth finishers (shearers), dyers and fullers, the other crucial and increasingly male dominated stages of manufacture, regulation of labour time was less ubiquitous and attitudes to labour time seem to have been also more ambiguous. But the situation could differ from one city to another.

Weaving was, therefore, central to most time regulation. Working with the broad looms - and most weavers seem to have possessed or worked upon several at the same time – required good management of labour. As a rule, master weavers probably employed several journeymen, even when labour input by apprentices, household members and unskilled workers is added. The working tools – the broad loom – and the raw materials, spun woollen yarn, were also relatively expensive, tying down the capital of each enterprise. An optimal use of labour was, therefore, crucial. Regulating working hours was, therefore, of the utmost importance. The Arras Vingtaine, the commission that oversaw the cloth industry, was very clear about this on 6th June 1342: weavers, they said, would be allowed to manufacture as many fabrics at they wanted, if labour time and the qualities were duly respected.⁴⁴ A couple of years later, countess Marguerite d'Artois repeated this clause adding that the working hours applied to both weavers from the city centre and from the suburbs ('es fourbours'). Weavers working before or after the working clock would be fined to 6 pennies (about a day's work for a skilled craftsman in this period), but they would be able to work all

⁴³ Espinas and Pirenne, Recueil, 1, 301 (16th June 1406).

⁴⁴ Espinas and Pirenne, *Recueil*, 1, 143 : 'Item porra on faire et tistre des draps et pieches dessus dictes tant que on porra, le cloque et les cures wardees.'

year round: 'ouvrer toutes fois que li jour ouvrant serront dedens les heurres de le cloque. Only on festive days the working bells would remain silent ('le cloque que on ne sonne point').⁴⁵ The same charter broadened the scope of the weaver's working time to weavers of says (cheaper fabrics of the light cloth industry). These woollens would slowly disappear from the cloth output of the big Flemish and Artesian cities in the course of the fourteenth century, to come back in full strength in the late fifteenth century at Hondschoote.⁴⁶ An ordinance issued by the aldermen in 17th January 1343 on the cheaper 'drapperie de piece' is more explicit as to the working hours themselves. Weavers, it is stated, should respect the hours of the working bell, or pay a fine of 12d. Apparently the evening working bell of Arras was struck well before the hour of vespers, pointing at relatively shorter working hours than elsewhere, as weavers found out working after vespers were fined double this amount (2s.)⁴⁷.

Time regulation for the shearers, fullers and dyers was much less detailed and the urgency to repeat and refine regulation seems to have been less in the cloth industry of Arras. In the early decades of the fourteenth century Arras journeymen-fullers were involved in a wage conflict with the local drapers. The conflict was about the working conditions and the alleged impossibility of getting the work done in the time, the cloth statutes gave them. They asked for longer days ('a avoir grans journees'), i.e. more time to get the work done like in the old days, so they would not be forced to overstretch.⁴⁸ In the end, as might have been expected, the statutes were confirmed again and the protest of the journeymen fell in deaf ears. But the aldermen thought it necessary to repeat in their ordinance the existing regulation, not about the length of the working day, the object of the complaints, but about the due respect for work days after festivities. Hence fuller's journeymen were to return to work the day after New Year's Day, and after the four days of Easter and Pentecost.⁴⁹ For the rest, fullers had to abide by the regular working hours of the working clock in Arras. This clause is repeated across the fourteenth century in the statutes of the drapers, but fuller's statutes hardly mention any time regulation at

⁴⁵ Espinas and Pirenne, Recueil, 1, 156-157 and 162.

⁴⁶ E. Coornaert, Un centre industriel d'autrefois: la draperie-sayetterie d'Hondschoote (14e-18e siècles) (Paris 1930).

⁴⁷ Espinas and Pirenne, Recueil, 1, 188.

^{48 &#}x27;Par quoy faire ne les pooient sans trop grant grief et trop grant exil de corps et de membres' (Espinas and Pirenne, *Recueil*, 1, 200).

⁴⁹ Espinas and Pirenne, Recueil, 1, 202.

all.⁵⁰ Time regulation for the shearers is very scarce in the surviving records of the fourteenth century (and they are many). Only very early, before 1236, the festive days of the year, when work was forbidden were mentioned.⁵¹ Dyers are not mentioned at all.

The Arras concern with weavers can also be found in Saint-Omer. In Douai, however, regulation of working time seems to deal with weavers, as could be expected, but also with shearers. Time regulation for fullers is less frequent and appears only in the later ordinances around 1400.⁵² For dvers no time regulation seems to have existed. In thirteenth-century Ypres, the quintessential of all cloth cities (where the impact of the industry on urban society was the highest), it is again weavers, whose working hours seem to have been regulated most carefully. But also the statutes for the shearers and dyers stipulate time control, with an explicit ban on night work and the importance of the bell 'of the workers'. The same groups appear again in the earliest fourteenth-century guild statutes. The weaver's statutes, starting in 1362 and adapted until 1405 explicitly forbade night work and work on Sundays and religious feasts. They also demand that on working days all craftsmen should respect the hours of the working bell and no weaver should be at his loom before or after the bell nor in the lunch break ('no tusscen den clocken'). But during working hours, they should work hard and fast or take care that people working for them did so.⁵³ Having this regulation obeyed was probably not an easy task. The new weaver's statutes of 1403 in Ypres are, for example, particularly resolute about guild officers who fail to sanction infractions of the working hours.⁵⁴ The fourteenth- and fifteenth-century weaver's statutes are, as we will point out in the next paragraph, much more detailed about the hiring of journeymen by master weavers and the work of apprentices.

The Ypres guild statutes of the shearers (1377-1408) and dyers of blue (1363-1403) also mentioned working hours, but they were much less detailed than the weaver's statutes. The shearer's privileges asked all craftsmen to respect the working bells in the morning and the evening and the traditional festive days ('also van ouden tiden ghecuert staet'),⁵⁵ while the dyer's statutes were more concerned with setting up new tubs with cloth to

- 50 Espinas and Pirenne, Recueil, 1, 171 (20th November 1377).
- 51 Espinas and Pirenne, *Recueil*, 1, 220.
- 52 Espinas and Pirenne, Recueil, 2, 336.

54 Espinas and Pirenne, Recueil, 3, 567.

55 Espinas and Pirenne, Recueil, 3, 604.

^{53 &#}x27;Maer al ander werc moeten zie wel spoeden ende doen spoeden' (Espinas and Pirenne, *Recueil*, 3, 562).

be dyed. Working hours for the Ypres 'kuipververs' were not regulated at all in the second half of the thirteenth century, but the amount of fabrics they could dye depended on the season. In winter because of shorter days, the number of woollens that could be dyed in a day declined significantly. The dying process, of course, could not always be limited to one day, so the statutes explicitly mention night work ('le jour ou le nuit ke il tainderont draes').⁵⁶ The luxury cloth of late medieval Ypres demanded a careful dying process, so dyers were not allowed to set up a new set of woollens after Wednesday (when the working bell struck in the evening), otherwise, work became necessary on Sunday, but on the other hand on Saturday night work was allowed to finish the cloth.⁵⁷ Pragmatic solutions for solving work related issues seem to have been considered normal. Time regulation for Ypres fullers has not survived for this period.

The largest Flemish textile centre, Ghent, seems to be an exception. Although the sources have not survived in the same way as for Ypres, Arras, Saint-Omer or Douai, it is the cloth finishers, rather than the weavers, who seem to receive most attention. An ordinance of count Louis de Male on 10th October 1359, in the midst of political turmoil when the political power of the weavers was heavily contested, describes how weavers should respect the working bells, both in the morning ('up te gane') and in the evening ('van der clocke aft te ghaen').58 But most detailed information was about the shearers. On 13th June 1354 the aldermen had to decide in a conflict among shearers about the working hours. The ban on night work had been detrimental for the interest of the industry, so some of the shearers argued, while others maintained that the working hours should be respected. The final decision is not known. The aldermen forwarded the decision to the craft guild itself, but clearly there was debate going on between those entrepreneurs that wanted to profit as much as possible from international demand and maximise working hours, while others adhered to the more traditional guild rhetoric of quality and a ban on night work.⁵⁹ The guild statutes of the shearers a couple of years before, in 1349, when the anti-weaver party took hold of political power for a couple of years, are as vague about this issue as the conflict in 1354. Night work was not allowed, unless the merchant asked for it.⁶⁰ This focus on cloth finishers seems to be awkward in the context of Flemish and Artesian

- 56 Espinas and Pirenne, Recueil, 3, 482.
- 57 Espinas and Pirenne, Recueil, 3, 631.
- 58 Espinas and Pirenne, Recueil, 2, 489.
- 59 Espinas and Pirenne, Recueil, 2, 481-482.
- 60 Espinas and Pirenne, Recueil, 2, 583.

cloth industries. The complex political history of fourteenth-century Ghent blurs, however, our perception. The constant struggle for power in the city between on the one hand the weaver's party (cloth entrepreneurs and the powerful weaver's guild) and on the other hand a party of other guilds (sometimes led by the fuller's guild) and the changing balance of power, before, finally, the system settled down and the weavers gained political control in the latter part of the fourteenth century, has probably influenced guild regulation to no small extent.⁶¹

In the smaller cloth towns the focus on weaving was similar. Only a few fuller's statutes mention labour time. Most, of course, deal with the quality of the work and, very strikingly more than in the larger cities, statutes seem to deal above all with wages for journeymen and masters alike.⁶² The Oudenaarde fuller's statutes of June 1338 repeats a similar clause of the weaver's statutes of the same period. Fullers were not allowed the day before a festive day after noon to start up working on a new set of woollens. They were only allowed to finish the work on woollens which were already in the fuller's tub before noon.⁶³

7 Realities of labour time: masters and journeymen

Perhaps the most outspoken development in the regulation of labour time management in the late medieval Flemish cloth industry was the attention specific guild statutes started to pay to the hiring procedures of workers. In the proto-guild period, before the middle of the thirteenth century, the hiring of skilled workers was left to the stakeholders themselves. No detailed regulation by either the cloth industry itself ('draperie') or by the city authorities has survived. Only in Douai some aldermen's legislation has survived for this early period. Elsewhere it is only from the late thirteenth century onwards, that the guilds and the urban authorities alike started to regulate where, how and when masters, the new key players in the organisation of the industry, could hire their labour force. Unlike the general time management, where in particular weavers were targeted, it is also other guilds, such as fullers, which were concerned by the working relations between entrepreneurs/masters and workers/journeymen. Regulation con-

⁶¹ D. Nicholas, The van Arteveldes of Ghent (Ithaca 1988).

⁶² H. Brand and P. Stabel, 'De ontwikkeling van vollerslonen in enkele laatmiddeleeuwse textielcentra in de Nederlanden: een poging tot reconstructie', in J.-M. Duvosquel (ed.), *Peasants and townsmen in medieval Europe: studia in honorem Adriaan Verhulst* (Ghent 1995) 203-222. 63 Espinas and Pirenne, *Recueil*, 1, 281.



Illustration 2. The market bell at the Ghent tanner's house on the Friday Market. The medieval labour bells are all gone, but some of the market bells have been preserved in for example Ghent Photo: Peter Stabel

cerns, however, above all those cloth manufacturing cities, that are geared towards exports. Only the bigger cities and some particular smaller manufacturing centres such as Kortrijk and Oudenaarde seem to have developed a regulatory environment that controlled the market for skilled labour. In smaller towns such regulation has not survived, or the normative framework was not developed as such.

The earliest examples of the relations between employers and their hired labour come from Douai. In the middle of the thirteenth century weavers had to hire their workers ('ovrier') –the guild nomenclature of masters and journeymen was not yet used– in the central place of the New Town ('a le Noeve Vile'). Workers were only allowed to start working

when the first mass at the church of Saint Peter was sung, and they should stop when the 'esbouresses' (women who take out impurities from the fabric) also stopped working.⁶⁴ The weaver's statutes of 1403, one century and a half later, give more detail about the hiring procedures. In this period, of course, the guild terminology of 'maistre' (master) and 'varlès' (journeyman) was widely accepted. Masters could only hire journeymen in the customary place on the Grain Market ('Marquiet au Bled vers le Cauchon'). Journeymen should be on this site before the working bell was struck ('avant le cloque des ouvriers') and they were to be hired within the hour after the bell was struck. A fine of no less than 20s was to be paid by both master and journeyman if they failed to comply, but masters could always ask the guild officers for more leniency and have permission to hire later in the day if it was necessary ('que li maistres eust pris congié a leswart de faire lievaige depuis ledicte heure'). For the rest of their employment all weavers, masters and journeymen alike, had to respect the four working bells ('cloque au matin', 'cloque du disner', 'cloque du reson', 'cloque du vespre').⁶⁵

Douaisien fuller's regulation was also concerned with relations between entrepreneurs and workers. Journeymen fullers in the second half of the thirteenth century were not allowed to work for more than one master in the same week, except when masters hired journeymen just for one day ('vallès a jor'). Strikingly, the guild terminology of masters and journeymen is used much earlier for the fullers than for the weavers. Journeymen were also obliged, once hired, to come to the workshop of their master in the morning after the 'banclocke' had struck, respect the working hours (at noon and at night) and work on those woollens the master gave them. If they did not do so, they would not be allowed to continue working and if they left work once arrived, certainly after a quarrel with their master, punishment was very harsh indeed: a fine of no less than £50 and banishment from the city for one whole year.⁶⁶

In Arras the earliest surviving legislation about hiring workers in the cloth industry dates from November 1377. In order to remedy the decline of the industry – Arras had been one of the first cities to suffer from the new competition on the international market for cloth – the general ordinance for the cloth industry mentions how master-fullers were allowed to hire journeymen on the accustomed places and at the hours that were set by

⁶⁴ Espinas and Pirenne, Recueil, 2, 64 (about 1250).

⁶⁵ Espinas and Pirenne, Recueil, 2, 333 and 335.

⁶⁶ Espinas and Pirenne, Recueil, 2, 79-83.

the aldermen. The terminology used for describing the labour relations between masters and journeymen is strikingly similar to family relations: 'puist prendre maisnie' (can take into his household). As such, journeymen seem to have taken the place women normally had in the labour process. Women were not allowed to full. Journeymen could not step in the fulling tubs before the working bell was struck and they were not allowed to finish the fulling process on Sundays and holidays.⁶⁷

The Ypres legislation gives most details about labour relations. The weaver's statutes of the second half of the fourteenth century stipulated that journeymen ('cnapen') must be hired at the accustomed place ('ter plache') before the bell of the market had announced the end of the proceedings. After this all stakeholders should leave. Journeymen who already had found work and masters who did not need workers were not allowed to appear at the market at all; and those who had been hired were to leave the spot immediately. Transparency of the labour market was all important. Journeymen for hire had to stand at a particular spot at the opening of the labour market ('tharer rechter stede binder eerster clocke ludens'). Foreign skilled artisans could only be hired when the Ypres based journeymen were no longer available.⁶⁸ Once the deal was struck, the journeymen had to go speedily to the master's house and be present there when the second bell ('tweder clocke') struck and the working day could really begin. The statutes identify employers as *drapiers*, suggesting that all master weavers were indeed also drapiers. The new weaver's statutes of 1403 repeat many of these prescriptions for journeymen.⁶⁹

Not only the big cloth industries tried to regulate labour time for journeymen and masters, the secondary centres did likewise. The weaver's statutes in Oudenaarde of 12th December 1359 even deal with subcontracting. Master weavers were not allowed to go to the labour market ('ter coutre') to rent out their work if they were still working for another *drapier* and had a piece of cloth on one of his looms. Mixing work was considered a big threat in the guild economy and masters were not allowed to get work done by other weavers ('buuten zijnen huus') as long as these worked for another *drapier* ('alse langhe alsij binnen zijnen huus huerwerck weeft').⁷⁰ For specific tasks, weaving only warp threads (probably on the loom of another master), weavers could only work on time wages ('in dachueren');

⁶⁷ Espinas and Pirenne, Recueil, 1, 169-171.

⁶⁸ Espinas and Pirenne, Recueil, 3, 562 (1362-1405).

⁶⁹ Espinas and Pirenne, *Recueil*, 3, 567.

⁷⁰ Espinas and Pirenne, Recueil, 1, 289-290.

elsewhere the statutes mention journeymen selling their work by the day ('dachcnape'), and, therefore, far more flexible than for example the already mentions Douaisien fullers.⁷¹

8 Conclusions

The general developments of labour time in the Flemish and Artesian cloth industries may have resembled each other, yet structural differences between cloth cities, different strategies of dealing with changing market circumstances and a different institutional framework have certainly influenced the different trajectories. The political organisation, which has only barely been pointed at, must have played an important role. The fact that the cities in Walloon Flanders (Lille and Douai) and Artesia (Arras and Saint-Omer) came in the fourteenth century under the jurisdiction or influence of the French king has certainly influenced the development of guilds. In the Dutch-speaking part of the county of Flanders cities such as Ghent, Ypres or Bruges boasted an independent guild system, which gained access to political power, but again not everywhere to the same extent. The analysis of labour markets must take into account such structural differences.

Yet, sketchy and impressionist as the analysis of the normative framework may be, some general tendencies have become clear. Regulation of labour time was ubiquitous in all cloth manufacturing centres, big and small, early developed or latecomers, grand scale or small scale. Nearly everywhere it had also the same characteristics, the working day being decided by the authorities and announced by bells, the working year being divided in working days and Sundays/religious festive days. No particular surprise in all this. Such regulation existed in many urban industrial sectors across Europe. What is more surprising, however, is the chronology of labour time regulation. It was in the important industrial cities of Flanders and Artois already well in place in the period before the guilds came of age or before they gained access to political power. Most time regulation also predated the middle of the fourteenth century, when allegedly the death rates of plague epidemics caused shortages on the labour market, and most even predate the big famine of 1315, when Flemish and Artesian cloth towns were struck hard.⁷² As such, labour time regulation seems to

⁷¹ Espinas and Pirenne, *Recueil*, 1, 291.

⁷² H. Van Werveke, De Middeleeuwse hongersnood (Brussels 1967).

have been the result of the proto-guild phase, when large merchant-entrepreneurs with easy access to the city authorities, were still dominant in an industry characterised by secular growth and proletarianisation of the working force. If labour time was also the clerical time of the liturgical calendar, this calendar was always implemented at the discretion of the (mercantile) urban authorities.

Of course, regulation was refined and intensified in the course of the second half of the thirteenth and early fourteenth century when craft guilds pushed away the traditional relations between merchant-entrepreneurs and textile workers and replaced them with the late medieval small workshops, where merchant capital was only partly involved in organizing chains of production and *drapiers* became the key players. These drapers were often themselves craftsmen (usually involved in the weaving of fabrics). No surprise that in labour time regulation from this period onwards, the focus was laid also on the relationship between masters as employers and journeymen as wage earners. Although embryonically also present in the early regulation (for example in Douai), measures dealing with the hiring of journeymen, with the transparency of the labour market, with the organisation of the working day of journeymen and with the exclusivity of relations between hired journeymen and their master-employers became much more widespread from the fourteenth century onwards, when guilds controlled labour markets. So if the traditional organisation of the working day was already present before the guilds, the measures were deepened when the guilds arrived; they were issued more frequently and above all their nature also changed. The guilds were important after all. Although the consequences of the Black Death (and its tighter labour markets) fall somewhat outside the chronological framework of this article, it is doubtful whether the so-called "golden age" of the medieval wageearner after 1370, when labour shortage and cheap agricultural products caused an upward surge of real wages, can have caused a similar change. The tendency of the urban cloth industry in Flanders was rather decline of output and increasing focus on luxury fabrics. Labour shortage, as such, cannot have been a major problem. Hence any upward pressure on wages in textile manufacture must have been linked more to the availability and definition of skill (and, therefore, to the economic strategies of the guild masters) than to general patterns of shortages on the labour market.

A second conclusion is that the variety of labour time regulation across the landscape of different manufacturing cities was not only the result of contingency and local difference. There was also a structural aspect to it. Labour time regulation was much more developed in those cities that were also prominent actors on the export markets. There is a clear tendency of stricter rules in bigger cities and in those secondary centres that focused on similar export markets for woollens. The focus on skill and division of labour, and the requirement of flexible workshops that could adapt to changing demand cycles (and depended therefore on flexible markets for skilled labour) necessitated more complex and complementary regulation of labour time. Hence Douai and Ypres, but also Oudenaarde developed complex systems of time management, while other smaller towns did not do so. Some towns even kept on using natural time or abolished earlier regulation.

A third conclusion must be the fact that in most towns, labour time in some particular manufacturing stages was explicitly organised, while it seems to have been less the case in other stages of manufacture. Weavers were always at the heart of regulation, but in some towns cloth finishing (shearers) and fulling were also targeted. Dyers organised time regulation only very occasionally and, of course, the labour intensive, but much less skilled stages of wool preparation, usually carried out by women, almost never received any time regulation at all. Again the essential role weavers had in deciding the output of cloth manufacture must have been crucial, yet the differences across the manufacturing cities need to be explained by other elements as well. It is time-rate wages of journeymen weavers and subcontracting master weavers (sometimes also of fullers and shearers) that set the standard of intensification of labour time regulation once the guild stepped in. The changed economic position of the small-scale entrepreneurs, the drapers, seems to have been of crucial importance. Unlike the merchants of the thirteenth century, they needed to control more firmly the various production stages and adapt the scope of the enterprise to changing demand. Their mere survival depended, therefore, on the flexibility of labour markets. Access to power must also have had a significant role to play. The drapers were usually also master-weavers (although dyers and in some cities fullers as well could be active as drapers). Sadly, the politically most influential weaver's guild of Flanders was the one in Ghent, a city where source material for the thirteenth and fourteenth centuries is too scarce to allow a deeper insight into the agency of political representation in this case. Further research into the labour market in general may help to explain further these divergences.

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