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Weeda, C.V.

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CLAIRE WEEDA
LEIDEN

ABLE BODIES: THE ORGANISATION OF LABOUR AND HEALTH, 1300-1600: A RESEARCH AGENDA



One of the longer term, much-debated consequences of the outbreak of the Second Plague Pandemic in the mid-14th century, was the increased poverty and geographical mobility of labourers in Europe's urbanised regions.¹ Urban bylaws attest that in the 15th century, cities recorded and regulated through repression the presence of itinerant workers and beggars, who took to the road in seek of labour opportunities and, in times of famine, of food.² How to deal with the urban poor and vagrants was subsequently a question prominent on the agenda of city governments, including in the early 16th-century Low Countries. This article argues that health experts played a significant role in the organization of labour at this time.

Thus, in 1526, at the behest of the city government of Bruges, the philosopher Juan Luis Vives (1493-1540) drafted *De subventionem pauperum* (On the Assistance to the Poor).³ In it, after weighing how each individual should show virtue through charity, he lays out a scheme focusing on the social, moral and physical "betterment" of the poor. This is brought to fruition by gathering information on and training the able-bodied poor, to raise their productivity and find gainful employment. Strategies include learning a trade or being forced to labour on public works, working in textile, on the ditches, sewers or other edifices. Vives also suggests establishing various administrative procedures for the programme's execution. Officials should be appointed to visit the houses of the poor and make inquiries about their way of life and predicament. Able-

1 S. Cohn, *After the Black Death: Labour Legislation and Attitudes Towards Labour in Late-Medieval Western Europe*, "The Economic History Review" LX (2007) 3, pp. 457-485; J.P. Byrne, *The Black Death*, Westport 2004; S.A.C. Penn, *Female Wage-Earners in Late Fourteenth-Century England*, "The Agricultural History Review" XXXV (1987) 1, pp. 1-14.

2 C. Lis, H. Soly, *Worthy Efforts: Attitudes to Work and Workers in Pre-industrial Europe*, Leiden 2012, pp. 457-461; C. Lis, H. Soly, *Poverty & Capitalism in Pre-Industrial Europe*, Brighton 1982; B. Geremek, *Poverty: A History*, trans. A. Kolakowska, Oxford 1994.

3 Juan Luis Vives, *De subventionem pauperum*, ed. A. Saitta, Florence 1973.

bodied beggars, furthermore, should render their names and the reason for their state-of-being to the city council. Sick beggars, considered to be a public health threat, should do so in the presence of a doctor and two to four councillors, thus sparing the other council members' delicate senses. The officials should be invested with the power to coerce, punish and, if necessary, incarcerate. As soon as the sick recover in the hospitals, they should be put to work and health experts should ascertain that sickness is not feigned. Indeed, no able-bodied man, in good health and of the right age, should go without work, as Paul the Apostle had written in his Epistle to the Thessalonians. Healthy beggars, finally, should be removed from the city and sent to their original place of dwelling.⁴

Juan Vives, who originated from Valencia in Spain, came from a family of so-called *conversos* or New Christians who had converted from Judaism at the time of the Spanish Inquisition. Advising to reorganise the aid to the poor by bringing it into the sphere of the public domain, Vives's treatise has been heralded as a foundational text in the development of the early modern, centralised welfare state. This is particularly so because the Habsburg emperor Charles V, in 1531, decreed that cities must establish a *Gemene Beurs*, a central fund for the common poor under the auspices of the city government instead of the Church. Whereas the government, it is argued, thus took informed measures for the sake of communal wellbeing, the Church acted out of religious duty, charity and mercy.⁵ However, on closer examination, many of Vives's ideas, about the significance of health and environment in children's education, can be identified as standing in a longer tradition of the organisation of labour, production and reproduction in an emerging capitalist society. Ben Parsons's *Punishment and Medieval Education*, for instance, has shown how Galenic medical theory was applied in teaching manuals in the 13th century.⁶

Moreover, medical efforts to contain the plague sick earlier had readily transformed into issues of social control. In the 15th century in Mantua, for instance, during outbreaks of plague, Italian health boards organised the sequestration of migrant beggars.⁷ Nor were authorities only awakened to the challenges of public health issues in the face of the crisis of Black Death, as the systematic issuing of bylaws and policing of public health

4 Ibidem, I.6.4; II.1.3; II.2.4-7; II.3.3, 6, 8, 14; v.1-2.

5 G. Tournoy, *Towards the Roots of Social Welfare: Joan Lluís Vives's De subventionem Pauperum*, "City" VIII (2010) 2, pp. 266-273; A. Keck, *The Change of Philosophical Motives of Care From Thomas Aquinas' Notion of Alms to Juan Luis Vives' 'De subventionem pauperum'*, "European Journal of Social Work" XIII (2010) 1, pp. 127-130.

6 B. Parsons, *Punishment and Medieval Education*, Melton 2018.

7 A.G. Carmichael, *Plague Legislation in the Italian Renaissance*, "Bulletin of the History of Medicine" LVII (1983) 4, p. 522; A.G. Carmichael, *Plague and the Poor in Renaissance Florence*, Cambridge 1986, pp. 108-165.

before the 14th century attest.⁸ Finally, the transition from a decentralised apparatus of religious charity in an economy of salvation to a centralised state welfare system around 1550 is likewise less linear than is often suggested. Before the creation of a central coffer for poor relief, cities already had a finger in the pie of charitable funds. In the Low Countries, for example, city governments appointed *heilige geest meesters* to oversee the parochial distribution of alms through the Church. The more fragmented poor relief was organised via various additional channels, including through abbeys and the hospitals of Beguines as well.⁹

This article aims to explore approaches to the question to what extent health experts, alongside religious organisations, were involved in the organisation of labour and welfare in the period 1300-1600 in European cities. Rather than seeking to establish a tipping point when religious charity was replaced by a welfare system, I argue that looking at the involvement of health experts in the organisation of labour opens up new avenues for exploring the nexus of the categorisation, disciplining and valuation of the worker's body in racial capitalism. Understanding the long, multiscalar history of health and labour irrevocably means challenging the dominant conception that biopower – the governing of collective life – is a modern, European phenomenon emerging in the 18th century. Within a Foucauldian framework, the emergence of biopower entailed the transformation of power from the external to the internal and the productive, whereby the domain of medicine became social. State power was thereby considered to be diverged through a network of institutions and resources to be able to govern collective life.¹⁰

But how then, to view earlier efforts to govern life, through networks of government and in relation to productivity? My suggestion is to explore this question from two perspectives. First, to look at how health or body experts, as voices of authority, acted as intermediaries in these networks and negotiated between the state, church and populations in the organisation of labour and

8 C. Rawcliffe, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities*, Woodbridge 2013; G. Geltner, *Roads to Health: Infrastructure and Urban Wellbeing in Later Medieval Italy*, Philadelphia 2019; *Policing the Urban Environment in Premodern Europe*, ed. C. Rawcliffe, C. Weeda, Amsterdam 2019.

9 J. Haemers, W. Ryckbosch, *A Targeted Public: Public Services in Fifteenth-Century Ghent and Bruges*, "Urban History" XXXVII (2010) 2, pp. 218-224; A. Tervoort, 'To the Honour of God, for Concord and the Common Good': *Developments in Social Care and Education in Dutch Towns (1300-1625)*, in: *Serving the Urban Community: The Rise of Public Facilities in the Low Countries*, ed. M. van der Heijden, E. van Nederveen Meerkerk, G. Vermeesch, M. van der Burg, Amsterdam 2009, pp. 89-106; J. Haemers, *For the Common Good: State Power and Urban Revolts in the Reign of Mary of Burgundy, 1477-1482*, Turnhout 2009, pp. 185-187.

10 For a discussion of Michel Foucault's concept of biopolitics and its applicability in earlier periods and regions: M. Meloni, *The Politics of Environments Before the Environment: Biopolitics in the Longue Durée*, "Studies in History and Philosophy of Science" LXXXVIII (2021), pp. 334-344.

the redistribution of bare necessities in earlier times and regions. And second, to look at how workers themselves cared for their bodies and social lifeworlds with a view to the requirements of labour, taking health and safety measures and at specific moments exerting claims to welfare via their bodies, for instance by drawing attention to physical impairment or employing specific signifiers of ill-health.

The involvement of medical practitioners in administration, and the medicalisation of social and legal institutions, is visible in several domains in the period prior to the outbreak of plague in 1347-1353. Urban financial records from Italy, the Low Countries and German territories show that governments, from the thirteenth century, placed certified doctors and surgeons on their payroll.¹¹ Besides doctors who cared for the health of the affluent, surgeons and barbers had forensic and military tasks, tending to wounds, and sometimes also working at the local hospitals for the poor and needy. In the sphere of forensics, midwives and surgeons sometimes also facilitate in criminal procedures, for instance by examining wounds or the physical stamina of the interrogated, even assisting in executions.¹² Beyond the sphere of forensics and the military, we can also see health professionals stepping in directly in domain of the organisation of labour.

City courts in Ghent, as Lola Digard argues, summoned surgeons to examine the extent of workers' injuries in private litigation, to establish indemnities in the context of work.¹³ Poignantly, as Luke Demaitre and Carole Rawcliffe have shown, doctors, together with city councillors, took an active role in detecting leprosy – thereby establishing inmates' rights to receive support, attested with a special *vuilbrief*.¹⁴ Finally, as the ground-breaking work of Irina Metzler argues, workers themselves, through their

11 A.W. Russell, *The Town and State Physician in Europe from the Middle Ages to the Enlightenment*, Wolfenbüttel 1981; C. Rawcliffe, *Urban Bodies...*, pp. 299-308; R. Ladan, *Gezondheidszorg in Leiden in de Late Middeleeuwen*, Hilversum 2012; M.R. McVaugh, *Medicine before the Plague: Practitioners and their Patients in the Crown of Aragon, 1285-1345*, Cambridge 1993; J. Shatzmiller, *Jews, Medicine, and Medieval Society*, Berkeley 1994; K. Park, *Doctors and Medicine in Early Renaissance Florence*, Princeton 1985.

12 For physicians and forensic medicine: S. Butler, *Forensic Medicine and Death Investigation in Medieval England*, New York 2015; *Medicine and the Law in the Middle Ages*, ed. W.J. Turner, S. Butler, Leiden 2014; J. Mattelaer, *Le Medionat – une tache moins connue du barbier-chirurgien lors d'une execution*, "Janus" LX (1973), pp. 137-147; E.T. Hurren, *Dissecting the Criminal Corpse: Staging Post-Execution Punishment in Early Modern England*, London 2016; M.A. van Anel, *Chirurgijns, vrije meesters, beunhazen en kwakzalvers: De chirurgijns-gilden en de praktijk der heilkunde (1400-1800)*, Amsterdam 1941.

13 L. Digard, *Alleviate and Compensate: Forensic Medicine and the Medical Market in the Pacification Court of Ghent, 1350-1500* (forthcoming).

14 L. Demaitre, *Leprosy in Premodern Medicine: A Malady of the Whole Body*, Baltimore 2007, p. 59.

guilds and confraternities, organised their own safety networks, taking precautions to protect their bodies and work environment.¹⁵ Nonetheless, relatively few publications about the involvement of health professionals in labour have appeared to date.¹⁶

The period 1300-1600 marks the influx of Graeco-Arabic Hippocratic, Aristotelian and Galenic ideas pertaining to medicine and the body politic in Europe and the institutionalisation of medical knowledge. The main focus of this present survey is on the involvement of health experts organising the labour of free and semi-free vagrants, the impoverished and enslaved workers, who often worked in the army/naval sphere and public works, as well as in smaller and larger households. Two main questions raised here are, first, how medical knowledge informed the categorisation of bodies for various forms of labour, free or coerced, and their functioning in communities; and, second, how health experts in practice contributed to the evaluation, care, and disciplining of those bodies. This approach helps to bridge ideas and practices, both directly through health professionals' own actions and mediated through their texts and through collaborators such as city officials.

CLASSIFICATION AND REPRESENTATION

In recent years, substantial work has been done on the impact of ancient Greek and Arabic thought on the classification of bodies, particularly from the second half of the 13th century onwards in Europe.¹⁷ For that reason, I will only discuss the schoolmen's contribution to the categorisation and representation of bodies briefly here. From antiquity, in the Mediterranean world, men educated in natural philosophy and medicine discussed the classification of peoples, their alleged abilities, qualities and functions, in conjunction with the place where they dwelled, their gender, age and profession. They did so within the framework of two scientific contexts: climate theory and its sibling theory of the humours. Graeco-Arabic thought held that collectively, the environment, matter, movement and emotions were crucial external agents whose workings manipulated the balance of the four bodily humours (sanguine, choleric, phlegmatic and melancholic). To attain

15 I. Metzler, *A Social History of Disability in the Middle Ages: Cultural Considerations of Physical Impairment*, New York 2013, pp. 36-91; R. Jütte, *Poverty and Deviance in Early Modern Europe*, Cambridge 1994.

16 V. Zimmermann, *Ansätze zu einer Sozial- und Arbeitsmedizin am mittelalterlichen Arbeitsplatz*, in: *Mensch und Umwelt im Mittelalter*, ed. B. Herrmann, Stuttgart 1986, pp. 140-149 is one of the few publications.

17 For humoral theory and the classification of ethnic and religious groups: *The Origins of Racism in the West*, ed. M. Eliav-Feldon, B. Isaac, J. Ziegler, Cambridge 2009.

a level of balance, human beings were advised to constantly administer to the proportions of elements and qualities of heat, cold, moisture and dryness in their bodies. The combination of these elements and qualities was believed to have a profound effect on peoples' bodies and minds.¹⁸

Given the focus on environment, a species's physiology accordingly was linked to geographical situation. The oldest surviving text applying the theory of climate and place is *Airs, Waters, Places*. Attributed to Hippocrates (c. 460-c. 370 BC), this treatise argued that the climate, winds, rain and terrain affects the physiology of peoples and animals, producing various different types with different physical and mental qualities.¹⁹ These qualifications subsequently were aligned with systems of governance and fed into arguments about the organisation of labour, notably in Aristotle's *Politics* written in the 4th century BC. European schoolmen, monks and courtiers, influenced by the translation of Arabic and Greek texts in the field of medicine and the natural sciences from the late 11th century onwards with the rise of universities, increasingly began to apply these ideas to groups in western Europe as well, particularly from the second half of the 13th century.²⁰ Texts comment on the physical and mental traits of ethnic groups, but also on those of peasants and professions, based on their proximity to the elements and qualities.²¹ Before the 12th century, ideas about group characteristics and the labour of military recruits, moreover, were transmitted separately through copies of the 4th-century AD military manual of Vegetius, *De re militari*, which engages climate theory to advise how to manage army troops and recruit the best soldiers.²²

18 C. Rawcliffe, *The Concept of Health in Late Medieval Society*, in: *Le Interazioni fra Economia e Ambiente Biologico nell' Europa Preindustriale Sec. XIII-XVIII*, ed. S. Cavaciocchi, Florence 2010, pp. 317-334.

19 Hippocrates, *Airs, eaux, lieux*, ed. J. Jouanna, Paris 1996, XXIII.I-IV, pp. 241-244; B. Isaac, *The Invention of Racism in Classical Antiquity*, Princeton 2004.

20 P. Biller, *Proto-Racial Thought in Medieval Science*, in: *The Origins of Racism in the West*, ed. M.E. Eliav-Feldon, B. Isaac, J. Ziegler, Cambridge 2009, pp. 157-180; J. Ziegler, *Physiognomy, Science, and Proto-racism 1200-1500*, in: *ibidem*, pp. 181-199; J. Kaye, *A History of Balance, 1250-1375: The Emergence of a New Model of Equilibrium and its Impact on Thought*, Cambridge 2014.

21 For Jews, for instance I.M. Resnick, *Marks of Distinctions: Christian Perceptions of Jews in the High Middle Ages*, Washington 2012, pp. 175-214; P. Biller, *A 'Scientific' View of Jews from Paris Around 1300*, "Micrologus: Natura, scienze e società medievali – Nature, Sciences and Medieval Societies" IX (2001), pp. 137-168; W. Johnson, *The Myth of Jewish Male Menses*, "Journal of Medieval History" XXIV (1998), pp. 273-295; B. Bauchau, *Science et racisme: les juifs, la lèpre et la peste*, "Stanford French Review" XIII (1989), pp. 21-35. For serfs: P.H. Freedman, *Images of the Medieval Peasant*, Stanford 1999, pp. 139f.

22 Vegetius, *Epitoma rei militaris*, ed. M. D. Reeve, Oxford 2004, I.II; C.T. Allmand, *The De Re Militari of Vegetius: The Reception, Transmission and Legacy of a Roman Text in the Middle Ages*, Cambridge 2011.

Through the adoption of ancient Greek Hippocratic climate theory, schoolmen contributed to shaping racial ideological discourse, determining which bodies qualified for specific types of labour in a hierarchy of power.²³ Throughout this period, ethnographic texts categorise bodies of others in terms of functionality, physical strength and rationality, applying scales of humanness.²⁴ But the use of medicine also stretched to the categorisation of workers within the own community, including of army recruits, servants, wet nurses, and preachers.²⁵

The allotment of tasks to specific groups offered employers a framework for unequally distributing rewards for labour. The textual representations, commenting on individuals' and groups' degrees of strength, rationality and hence functionality, thereby portrayed which bodies were well or less qualified to, for instance, protect territories and property in the military sphere – such as knights –, and which bodies were more or less qualified for different forms of labour in the service of others. The self-representations of those wielding power tended to emphasise their own manly strength in combination with rationality – think courtly knight –, while depictions of others might underscore more irrational or weak features. In addition, within the sphere of the distribution of alms, representations of the deserving and undeserving poor served to distinguish between those entitled to community support, such as the infirm and those following in Christ's footsteps, and those who must work for a living. This also happened based on moral and physical description.

These representations were not empty signifiers. Cicero, whose work was influential in the period under review, had presented ideas about how specific human qualities justified claims to property.²⁶ Cicero's *De officiis* stated that reason and eloquence held society together. They were prerequisites for maintaining public order and the rule of law. Primordial society, where man lived erratically, without rationality, law or religion, had transformed into social

23 K.E. Fields, B.J. Fields, *Racecraft: The Soul of Inequality in American Life*, London 2016, argue that perceived differences are produced through practices embedded in structures of inequality.

24 C.V. Weeda, *Ethnicity in Medieval Europe, 950-1250: Medicine, Power and Religion*, Woodbridge 2021.

25 For preachers: A. Montford, *Fit to Preach and Pray: Considerations of Occupational Health in the Mendicant Orders*, in: *The Use and Abuse of Time in Christian History*, ed. R.N. Swanson, Woodbridge 2002, pp. 95-106. For references to wet nurses, see below note 66, and R.L. Winer, *Conscripting the Breast: Lactation, Slavery and Salvation in the Realms of Aragon and Kingdom of Majorca, c. 1250-1300*, "Journal of Medieval History" XXXIV (2008) 2, pp. 164-184.

26 For the influence of Ciceronian learning on court ideals and ethics: C.S. Jaeger, *The Origins of Courtliness: Civilizing Trends and the Formation of Courtly Ideals, 939-1210*, Philadelphia 1985; C.S. Jaeger, *The Envy of Angels: Cathedral Schools and Social Ideals in Medieval Europe, 950-1200*, Philadelphia 1994.

existence through urbanisation and professionalisation. Such a transformation allegedly occurred because of human beings' natural ability for speech and reason, in which they distinguished themselves from animals. The capacity to use speech allowed humans to claim property under the law, which was considered to historically evolve from the fruits of labour; animals, on the other hand, were subjected to humans and unable to make moral choices or claim the fruits of their labour.²⁷ Thus, by toiling on a plot of land, it was argued, property claims emerged and this had happened from the earliest times – there were debates about whether this was before or after the original sin.²⁸

Accordingly, whereas all peoples were subject to and protected in various degrees by the *ius gentium*, animals, lacking reason, fell under natural law. However, some groups of people, such as peasants or women, were positioned lower on the hierarchical scale and represented as less endowed with rationality. These classical representations merged with Christian thought. In Vives's treatise, for instance, work is considered to be God's punishment as a result of the fall. This is reflected in scholastic discussions from the 13th century onwards.²⁹ It was argued through genealogical constructions of descent that some groups were more stricken by the original sin than others. Schoolmen pathologized group features after the original sin, claiming some groups, such as Jews or serfs, to be more melancholy.³⁰ Theologians framed specific lineages of Jews and serfs as cursed descendants of Cain whose bodies were weakened or corrupt.³¹ The significance of these categorisations in relation to labour has only recently begun to be explored. In 2019, Lindsay Kaplan's *Figuring Racism in Medieval Christianity* made the important argument that the discourse of racism pertaining to Jews as slaves concerned, above all, narratives of servitude in a hierarchy of power.³²

At times, climate theory was engaged to frame these bodies within a scientific discourse. The Latin translation of Aristotle's *Politics* in about 1260, discussing natural slavery and its interaction with environment, gave an impetus to discussions about the relationship between the body, climate and labour. Climate theory increasingly was applied in the ethnography

27 C.J. Nederman, *Nature, Sin and the Origins of Society: The Ciceronian Tradition in Medieval Political Thought*, "Journal of the History of Ideas" XLIX (1988) 1, pp. 3-26; J. Coleman, *Medieval Discussions of Property: "Ratio" and "Dominium" According to John of Paris and Marsilius of Padua*, "History of Political Thought" IV (1983) 2, pp. 209-228.

28 C.J. Nederman, *Nature, Sin...*, pp. 5-9. For a discussion of power, work and (typologies of) the human body in Eden A. Minnis, *From Eden to Eternity: Creations of Paradise in the Later Middle Ages*, Philadelphia 2015, pp. 84-139.

29 Juan Vives, *De subventionem pauperum...*, I.1.

30 See note 21 for references.

31 I.M. Resnick, *Marks of Distinctions...*, pp. 206-214.

32 M.L. Kaplan, *Figuring Racism in Medieval Christianity*, New York 2019.

of colonised peoples.³³ In his *Politics*, Aristotle had defined enslaved persons as instruments of action, whose functionality was reflected in their strength and inferior rational capacities. Aristotle alleged that the enslaved, because of environment and training, understood reasoning, but could not actively conceive how to achieve the best action.³⁴ Enslaved persons accordingly carried out menial tasks. Mirroring their qualities, on the other hand, the master was said to be rationally superior, educated and virtuous, from whose qualities and recreational activities those lower in the hierarchy could benefit in pursuit of a 'common good'. Bryson's ancient text *Management of the Estate*, translated in Montpellier into Latin from Arabic by the university professor and physician Armengaud Blaise in 1312 under the title *Yconomica Galieni*, in this way distinguishes between servants and slaves, as those able to make informed decisions and those destined for menial tasks respectively.³⁵ These ideas formed a theoretical underpinning in the development of racial capitalism.³⁶

ABLE-BODIEDNESS AND IDENTITY

Not only were experts of the body involved in the theoretical classification and representation of bodies, however. Experts of the body also took upon themselves the task of examining workers, for two purposes: to determine able-bodiedness for labour and to establish identity. Establishing able-bodied-

33 For climate theory's application in ethnography in colonisation programmes: A. Pagden, *The Peopling of the New World: Ethnos, Race and Empire in the Early-Modern World*, in: *The Origins of Racism in the West*, ed. M. Eliav-Feldon, B. Isaac, J. Ziegler, Cambridge 2009, pp. 292-321; A. Wear, *Place, Health, and Disease: The Airs, Waters, Places Tradition in Early Modern England and North America*, "Journal of Medieval and Early Modern Studies" XXXVIII (2008) 3, pp. 443-465; M. Harrison, *Climates and Constitutions: Health, Race, Environment and British Imperialism in India, 1600-1850*, Oxford 1999.

34 R. Kamtekar, *Studying Ancient Political Thought Through Ancient Philosophers: The Case of Aristotle and Natural Slavery*, "Polis: The Journal for Ancient Greek Political Thought" XXXIII (2016), pp. 150-171; N.D. Smith, *Aristotle's Theory of Natural Slavery*, "Phoenix" XXXVII (1983) 2, pp. 109-122.

35 *Economy, Family, and Society from Rome to Islam: A Critical Edition, English Translation, and Study of Bryson's Management of the Estate*, ed. S. Swain, Cambridge 2013.

36 N. Leong, *Racial Capitalism*, "Harvard Law Review" CXXVI (2013) 8, pp. 2151-2226; G. Bhattacharyya, *Rethinking Racial Capitalism: Questions of Reproduction and Survival*, London 2018. Racial capitalism stretches beyond the buying and selling of human beings for economic value and entails the capital valuation of race in and by itself and involves the financialization of the racial body, that by and in itself becomes an asset. The value of the body depends on factors such as age, gender, strength, skills and education. In addition, the body's value also relies on the degree in which the person to whom the body belongs, is considered to rightfully lay claim to the fruits of its labour. A. Bride, *Dead or Alive: Racial Finance and the Corpse: Value of the African American Slave Body*, "Journal of Historical Sociology" XXXIII (2020), pp. 99-115.

ness occurred to appraise a body's value in relation to profession; it was determined along scales of health, abilities, gender, age, class and ethnicity. Beyond the scope of this article, doctors thus appear on quaysides examining the bodies of enslaved workers after the Atlantic crossing, or earlier in the Islamic context of the slave market.³⁷ Medical knowledge mediated through inspection notably also appears in Mediterranean notarial deeds securing the sale of enslaved workers.³⁸ Workers' bodies also were examined for compensation claims.

From the late 14th century, the documenting of physical traits primarily aimed to identify workers in an increasingly mobile world. The information drawn from bodily examinations, listing the physical features – the scars, eyebrows, teeth, warts and moles, skin colour, height and gender – had various purposes. Authorities attempted to control and reduce the movement of the working poor seeking better labour conditions, thus introducing documents of identity to register their whereabouts. Indeed, as Juan Vives suggests in *De subventionem pauperum*, urban governments desired to obtain a clear view of who mobile workers or beggars were, and where they came from, in order to establish to what extent they could demand access to facilities such as hospitals. In the 15th century, city governments in the Low Countries accordingly might limit the length of stay of such workers in city facilities to one night. Valentin Groebner, in *Who are you?*, has argued that such registers served to identify both criminals and vagrants.³⁹ To an extent, these two categories merge in the 16th century with the criminalisation of vagrancy. In addition, the documentation of the movement of both goods and people, from the late 15th century onwards, served as a public health intervention to stem the spread of communicable disease such as plague.⁴⁰ Officials tied to hospitals were directly involved in the examinations of these migrant workers.

Registers recording the clothing, markings, hair, beards and skin colour survive from the 14th century of police and army recruits, enslaved workers and pilgrims. For instance, in Florence, a list was drawn up of garrison soldiers and their traits dating to between 1351 and 1363; of wool guild masters, their

37 H. Barker, *That Most Precious Merchandise: The Mediterranean Trade in Black Sea Slaves, 1260-1500*, Philadelphia 2019, pp. 98-104; S. Snelders, *Vrijbuiters van de heelkunde: Op zoek naar medische kennis in de tropen 1600-1800*, Amsterdam 2012.

38 See below note 56.

39 V. Groebner, *Who Are You: Identification, Deception, and Surveillance in Early Modern Europe*, transl. M. Kyburz, Cambridge MA. 2007, p. 75; C. Cluse, *Zur Repräsentation von Sklaven und Sklavinnen in Statuten und Notariatsinstrumenten italienischer Städte um 1400*, in: *Fremde in der Stadt: Ordnungen, Repräsentationen und soziale Praktiken (13.-15. Jahrhundert)*, ed. P. Bell, D. Suckow, G. Wolf, Frankfurt 2010, pp. 395f.

40 A. Bamji, *Health Passes, Print and Public Health in Early Modern Europe*, "Social History of Medicine" XXXII (2017) 2, pp. 441-464

family and minions dating to 1369; and of pilgrims in the books of the hospital of Santa Maria della Scala in Siena, dating to between 1382 and 1446.⁴¹ Between 1366 and 1397, Florentine officials recorded the age, skin colour, height, marks, forms of nose and eyes in the *Registro degli schiavi* of enslaved persons.⁴² Trevor Dean has shown that in Bologna, in 1406, the notary of the *podestà* registered the physical traits of the *birri*, foreign policemen attached to the city's *podestà*.⁴³ Similar lists were drawn up recording the features of mobile army recruits, such as in 1464 of the mercenaries in the Castel Sant' Angelo in Rome, recording their name, age and several physical features, as well as those of their horses.⁴⁴

Before the publication of Vives's treatise, we can observe how the able-bodied poor at times were set to work in public work programs, although to date I have not found any lists recording their physical features in this context. The earliest known, clear incidences of such work programs are found in 14th-century France and England, organised under the crown during the Hundred Years War. For instance, in 1367, all able-bodied men in Paris without work were ordered to repair the city's ditches.⁴⁵ Similar ordinances, extending to women as well, were issued in Utrecht when the city was under siege in 1483.⁴⁶ In 16th-century Florence, we similarly see lists of peasant conscripts drafted to work on the Pratolino, Grand Duke Francesco de' Medici's new villa, garden and estate north-east of Florence, in exchange for a meagre salary.⁴⁷

There is a large body of scholarship on how, in the wake of the 1347-49 plague outbreak, peasants in England were subjected to coercive labour, when able-bodied labourers were forbidden to take on the lighter task

41 E. Hubert, *Una et eadem persona sive aliae personae: certifier l'identité dans une société mobile (à propos de l'Italie communale)*, in: *Arriver en ville: Les migrants en milieu urbain au Moyen Age*, ed. C. Quertier, R. Chilà and N. Pluchot, Paris 2013, pp. 51-64 for source references.

42 S. Epstein, *Speaking of Slavery: Color, Ethnicity, & Human Bondage in Italy*, Ithaca 2001, pp. 108-111.

43 T. Dean, *Police Forces in Late Medieval Italy: Bologna, 1340-1480*, "Social History" XLIV (2019) 2, pp. 151-172; G. Morosini, *The Body of the Condottiero A Link Between Physical Pain and Military Virtue as it was Interpreted in Renaissance Italy*, in: *Killing and Being Killed: Perspectives on Fighters in the Middle Ages*, ed. J. Rogge, Bielefeld 2017, p. 178; V. Groebner, *Complexio/Complexion: Categorizing Individual Natures, 1250-1600*, in: *The Moral Authority of Nature*, ed. L. Daston, F. Vidal, Chicago 2004, pp. 372-376.

44 V. Groebner, *Who are You?...*, p. 112.

45 B. Geremek, *The Margins of Society in Late Medieval Paris*, Cambridge 1987, p. 34.

46 For instance, Utrecht Stadsarchief, Buurspraakboek 1481-1490, f. 61v. See also the 16th-century Antwerp gebodboeken, catalogued in "Antwerpsch Archievenblad" I (1864), pp. 120-464 for examples.

47 S.B. Butters, *The Medici Dukes, Comandati and Pratolino: Forced Labour in Renaissance Florence*, in: *Communes and Despots in Medieval and Renaissance Italy*, ed. J.E. Law, B. Paton, Abingdon 2016, pp. 249-277.

of gleaning in harvest.⁴⁸ In these cases, it is unclear who determined their able-bodiedness. In 14th and 15th century towns in France and the Low Countries, so-called ribalds or *koningskinderen* were set to labour on public works and in public health services, cleaning streets and removing waste, setting up tents, digging ditches, as well as policing lepers and sex workers. These men and women also appear to intermittently take on all kinds of logistical and menial tasks in the army, as foot soldiers, porters, cooks, nurses, washer-women and sex workers.⁴⁹ As a group of mobile casual labourers, they were themselves considered a risk to public health and order, and their movement was regulated and partially criminalised.⁵⁰ Significantly, it is in this world that we also come across itinerant health workers designated as quacks – men and women offering non-certified health services outside of the institutionalised remit of city governments and guilds.⁵¹

On occasion, coercive labour is organised from out of the hospitals. In 1519, beggars in Paris and elsewhere dwelling in hospitals were forced to labour on public works, cleaning streets and building fortifications.⁵² Through the criminalisation of vagrancy, in the course of the 16th century, they were subjected to coercive labour on galley ships and in the army as well.

In the 16th century, surgeons submitted the sick and the poor to examinations to determine whether they might benefit from public facilities.⁵³ For instance in 16th-century Middelburg, the men and women admitted to the hospital – listed in so-called *lootjesboeken* – received a leaden token.⁵⁴ How do these tokens stand in relation to the tokens handed out to the poor as

48 J.M. Bennett, *Compulsory Service in Late Medieval England*, “Past and Present” CCIX (2010), pp. 7-51.

49 B.C. Hacker, *Women and Military Institutions in Early Modern Europe: A Reconnaissance*, “Signs” VI (1981) 4, pp. 643-671.

50 R.C. Trexler, *Correre la terra: Collective Insults in the late Middle Ages*, “Mélanges de l’Ecole française de Rome: Moyen-Âge, Temps modernes” XCVI (1984) 2, pp. 845-902; J. Coomans, *The King of Dirt: Public Health and Sanitation in Late Medieval Ghent*, “Urban History” XLVI (2019), pp. 82-105; F. Viltart, *Le roi des ribauds à la fin du Moyen Âge: Une royauté infâme?*, in: *Les ‘autres’ rois: Études sur la royauté comme notion hiérarchique dans la société au bas Moyen Âge et au début de l’époque moderne*, ed. T. Hiltmann, Oldenbourg 2010, pp. 80-94.

51 For early modernity: D. Gentilcore, *Medical Charlatanism in Early Modern Italy*, Oxford 2006.

52 G. Fumasoli, *Ursprünge und Anfänge der Schellenwerke: Ein Beitrag zur Frühgeschichte des Zuchthauswesens*, Zurich 1981, pp. 31-34; J. Heinsen, *Historicizing Extramural Convict Labour: Trajectories and Transitions in Early Modern Europe*, “International Review of Social History” LXVI (2021), p. 120.

53 M.L. Hammond, *Medical Examination and Poor Relief in Early Modern Germany*, “Social History of Medicine” XXIV (2010) 2, pp. 244-259.

54 Zeeuws Archief, 24.1 Godshuizen Middelburg 1343-1812, 1343-1812, no. 21-26. The earliest surviving registers from Middelburg date to 1584, but the hospital financial accounts already record the issuing of such tokens in 1498-1499.

a sign that they qualified to collect alms? Earlier, suspected lepers were carefully examined by body experts at designated centres, such as in Cologne or Haarlem. As mentioned, those diagnosed with leprosy obtained a *vuilbrief*, certifying their condition while extending to them the right to collect alms and admission to a leprosarium. Mirroring this practice, 15th-century doctors associated with collegiate churches of Utrecht issued attestations that sick canons were permitted to take sick leave, and visit the baths, while retaining the right to their stipends.⁵⁵ These examinations formed a mechanism of control in order to establish authentic claims to support of the deserving sick. They also suggest a moral concern over alleged fraudulency, for instance of healthy workers presenting their bodies as infirm in exchange for support or in order to avoid being expelled from inside the city walls.

Beyond to establishing a person's identity, physical examinations also took place to appraise the enslaved persons' value for labour. Doctors surface across the Mediterranean region in 14th- and 15th-century notarial deeds acting as expert witnesses, establishing the health and detecting any possible hidden 'defects' of workers, as Hannah Barker has shown for Cairo, Genoa and Venice, and Carmel Ferragud for Valencia, among others.⁵⁶

The lexicography of the lists drawn up by Italian city governments recording the traits of army recruits, enslaved workers, as well as those of horses, show similarities. Some surviving formularies, mostly created by jurists at the university in Bologna, group the sale of the enslaved with that of animals. A sale contract for horses was adaptable for the sale of enslaved persons of both genders, and of various domesticated animals.⁵⁷ This is perhaps less surprising, although not less heinous, if we consider that in both ethnography and legal tradition, the comparison between animals and humans was used to categorise species in terms of functionality. Moreover, physicians in this period themselves produced treatises on the medicine of both humans and horses, and traders sometimes dealt with both enslaved persons and livestock.⁵⁸ There were close ties between

⁵⁵ B. van den Hoven van Genderen, *De heren van de kerk: De kanunniken van Oudmunster te Utrecht in de late Middeleeuwen*, Zutphen 1997.

⁵⁶ H. Barker, *That Most Precious Merchandise...*, pp. 98-104; C. Ferragud, *The Role of Doctors in the Slave Trade during the Fourteenth and Fifteenth Centuries within the Kingdom of Valencia (Crown of Aragon)*, "Bulletin of the History of Medicine" LXXXVII (2013) 2, pp. 143-169; D. Blumenthal, *Domestic Medicine: Slaves, Servants and Female Medical Expertise in Late Medieval Valencia*, "Renaissance Studies" XXVIII (2014) 4, pp. 515-532.

⁵⁷ In similar vein, in Mamluk *shurūṭ* manuals containing legal formularies, the sale of slaves is grouped alongside that of horses H. Barker, *That Most Precious Merchandise...*, pp. 16, 18, 26, 113, 120.

⁵⁸ For instance in Portugal: J.L. Vogt, *The Lisbon Slave House and African Trade, 1486-1521*, "Proceedings of the American Philosophical Society" CXVII (1973) 1, p. 11.

horses and humans, particularly in a military and agricultural context. Trevor Dean observes that in literary sources as well, the foreign policemen (*birri*), whose features were listed, could be described as animate tools in the Aristotelian tradition, men who took orders and executed routine actions while remaining silent.⁵⁹

The medicalisation of difference using the language of Galenic humoralism categorising physical and mental traits, is sometimes present in the notarial deeds recording the sale of enslaved workers.⁶⁰ Ancient Greek-Arabic humoral theory, assigning to bodies complexions based on the balance of the humours, was particularly useful for valuation because of its psychosomatic and aesthetic perspective on physical *and* mental traits. The notarial deeds, produced in Italy, the Crown of Aragon, Marseille, on the islands of Mallorca, Sardinia, Sicily, Malta, Crete and Caffa, to name but few sites, contain medical clauses to protect the buyers of enslaved persons against fraud and to establish accountability in case any 'deficiencies' were detected.⁶¹ In what manner do race and skin colour feature in these descriptions? It is often difficult to discern whether references to colour in the lists and notarial deeds refer to skin colour or the internal humoral state produced by nature, place, and nurture, in which the four humours are tied to four colours (yellow, black, red, white). Within the medical humoral system, a person's innate complexion, which impacted the bodily functions and the mental state, ideally was sanguine and coloured a combination of red and white. Notarial documents occasionally mention mixed colours, such as olive-brown or blackish-olive.⁶²

An example in which medical humoralism is evidently applied, is found in a slave contract from Sicily dating to 1344. It stipulates: 'The said female slave is intoxicated, a runaway, thief, liar, [word unclear], garrulous, melancholy, and she has a diseased liver, and is sick from dropsy and phthisis

59 T. Dean, *Police Forces in Late Medieval Italy...*, p. 160. In addition, there was perhaps also a performative aspect to the comparison between horses and humans. Several descriptions of slave inspections at markets for instance emphasise that the teeth, arms and legs of naked enslaved persons were inspected 'in the manner of horses'. Horse traders or *maquignons* interrogated the enslaved and gathered information from their physique using sight and touch.

60 I have not come across the use of the theory of the humours in the lists identifying police and army recruits, the latter often blankly categorising physical features.

61 A question is whether medical practitioners continued to detail the traits in the trans-Atlantic slave trade using the same lexicography, recording features upon the enslaved's arrival or, later, on plantations for insurance purposes.

62 H. Barker, *That Most Precious Merchandise...*, p. 55 states that only 3 percent of documents from Venice mention enslaved persons' colour. However, it is about 30 percent in Genoa in the 13th-14th centuries, and then drops significantly in the 15th century. The practice seems to be related to individual notaries methods of identification. A. d'Amia, *Schiavitù romana e servitù medievale*, Milan 1931, pp. 178-180.

[tuberculosis], and has a blocked liver and is spitting blood.⁶³ Humoral colour, such as black melancholy, designated a health condition, but colour was also a means of aestheticization. Beyond a focus on colour, in these deeds it is useful to look at classifications of essentialised traits of strength, weakness and rationality as well. These descriptions were used racially to classify people in regards to functionality.

Specific physiognomic manuals in the Mediterranean Mamluk world, such as the early 14th century *Book of Observation and Inspection in the Examination of Slaves* of Ibn al-Akfani, advised potential buyers and traders on how to appraise the bodies of workers based on external, physical features. Unlike the Mamluks, the Latinate trade did not rely directly on manuals and *shurūt* collections of model contracts. Barker has suggested the absence of specialist traders and brokers meant buyers in Europe may have consulted a physician instead when purchasing an enslaved person.⁶⁴ Yet is it conceivable that these body experts, alongside court officials, used physiognomic treatises to guide them when tasked with the appraisal of bodies in the context of labour? Joseph Ziegler has argued that the science of physiognomy aided some physicians in the determination of the complexion. He observes that many 15th-century treatises were dedicated to the nobility and suggests they advised how to choose one's associates based on natural dispositions.⁶⁵

It is possible some of these texts were used in large households and courts as well, to appraise servants and other types of workers. Bartolomeo della Rocca (also known as Cocles), in his *Chiromantie ac physionomie anastatis* produced in Bologna in 1504, specifically mentions that the art of physiognomy served, in the Aristotelian tradition, to 'instructeth a man by the outward notes, to foretell the naturall motions, and actuall conditions, that consist and dwell in many persons, especially in those, which lyue after their affection, and appetites, rather than gouerning themselues by reason'.⁶⁶ Bartolomeo is referring here to those men classed lower in the social hierarchy, governed less by reason than by appetites (and hence more well-suited for menial tasks). Bartolomeo's treatise indeed discusses the value of bodies for labour in at least ten

63 R. Livi, *L'esclavage domestique au moyen âge et son importance en anthropologie*, "Bulletins et Mémoires de la Société d'anthropologie de Paris" X (1909), p. 441: "Dictam servam fore ebriam, fugitivam, latronissam, mentitricem, sarreram, lingutam, melancholicam, et eam fore infirmantem epar, et habentem infirmitatem tropichiae, et malem subtilem (phthisie), ac habentem epar oppilatum, et spuente sanguine".

64 H. Barker, *That Most Precious Merchandise...*, pp. 49, 56.

65 J. Ziegler, *Text and Context: On the Rise of Physiognomic Thought in the Later Middle Ages*, in: *De Sion exhibit lex et verbum domini de Hierusalem: Essays on Medieval Law, Liturgy and Literature in Honour of Amnon Linder*, ed. Y. Hen, Turnhout 2001, pp. 176-179.

66 Bartolomeo de Rocca, transl. Th. Hill, *The contemplation of mankind containing a singular discourse after the art of phisiognomie etc.*, London 1571.

passages. Specific physiognomic tracts survive that aimed to aid the selection of wet nurses in households.⁶⁷ An exploration of the context of labour mentioned in other treatises of physiognomy – of which Lisa DeVriese has identified at least 193 manuscripts containing anonymous commentaries in Latin between the twelfth and fifteenth centuries and an additional 60 manuscripts of the Latin commentary of the pseudo-Aristotelian *Physiognomonica* – leaving aside the commentaries in the vernaculars! – would be worthwhile, as the context of these texts is currently poorly understood.⁶⁸

DISCIPLINING

Besides examination, regimens containing advice on the disciplining of the body, sometimes in conjunction with the management of territories, cities or households, appear in Europe in significant numbers from the 12th century onwards.⁶⁹

The learned men who produced regimens, such as Juan Vives, were sometimes actively involved with the development of policies to discipline the bodies of the workforce in the context of social reproduction.⁷⁰ Especially the young poor and orphans were subjected to disciplinary labour training through educational programs, such as in the Bogardenschool in Bruges, that fell into the hands of the city government in 1513, and where a surgeon and doctor were at hand.⁷¹ The involvement of doctors in education in European school systems is poorly understood, despite the fact that a significant number of school rectors in the 14th and 15th century Low Countries doubled as the city doctor, and that health and physical environment are factored into tracts on education such as the 13th century *Disciplina scolarium*.⁷²

Through disciplinary programs, vagrants, orphans and miscreants subsequently were put to work. The criminalisation of vagrancy and establish-

⁶⁷ For instance in manuscripts The Hague, KB, MS 71 G 60; Utrecht, UB MS 1328 and Vienna, ÖNB MS 2818.

⁶⁸ L. DeVriese, *An Inventory of Anonymous Medieval Physiognomic Treatises*, "Revue d'histoire des textes" XIV (2019), pp. 225-255; L. DeVriese, *An Inventory of Medieval Commentaries on pseudo-Aristotle's Physiognomonica*, "Bulletin de philosophie médiévale" LIX (2017), pp. 215-246.

⁶⁹ M. Nicoud, *Les régimes de santé au moyen âge: Naissance et diffusion d'une écriture médicale (XIII^e-XV^e siècle)*, Rome 2007, for an overview of health regimens.

⁷⁰ Vives for instance produced a regimen for the daughter of Catherine of Aragon for instance (*De institutione feminae christianae*).

⁷¹ Inventaire diplomatique des archives de l'ancienne Ecole Bogarde à Bruges, ed. L. Giliodts-Van Severen, Bruges 1899.

⁷² Pseudo-Boethius, *De disciplina scolarium*, ed. O. Weijers, Leiden 1976. Compare also the recruitment of the devşirme in the Janissary system in the Ottoman Empire: G. Yilmaz, *Becoming a Devşirme: The Training of Conscribed Children in the Ottoman Empire*, in: *Children in Slavery through the Ages*, ed. G. Campbell, S. Miers, J.C. Miller, Athens-Ohio 2009, pp. 119-134.

ment of intra- and extramural coercive labour programs could serve to supply armies and navies with cheap labour.⁷³ Dirk Coornhert, in his *Boeventucht* in 1587, argued explicitly that vagabonds, beggars, thieves, drunks, adulterers and unruly children be put to work, instead of punished, on ships and in public works. In 1598, the Estates of Holland equipped a galley ship powered by men convicted of various transgressions including vagrancy.⁷⁴

The men and women subjected to coercive labour were often represented as idle poor, distinguishing them from the deserving poor – the sick, the elderly, the disabled and the mendicant friars following in Christ's footsteps – and the idle rich, whose leisurely time was spent on the pursuit of virtue.⁷⁵ In 13th and 14th-century Europe, idleness is contrasted with the virtuous leisure and the recreation of the wealthy, as are manual labour vis-à-vis intellectual enterprise.⁷⁶

Accusations of idleness similarly feature in the ethnographies of peoples subject to colonisation, such as the 12th-century Irish, and of the able-bodied poor seeking alms, allegedly unwilling to work yet in reality often in search of work under marginally better conditions than serfdom. Such alleged idleness was encapsulated in negative tropes attached to itinerant workers, masterless men, who in 14th and 15th-century urban sources are depicted as disorderly, lewd, dirty types. The deserving poor, on the other hand, are foci of charity and reverence.⁷⁷

It is important to note that idleness and labour are, in this context, distinguished from physical exertion as a form of exercise. The latter was considered to be beneficial to health, movement being one of Galen's non-naturals.⁷⁸ Despite being condemned by the clergy, from a medical perspective dancing, for instance, could be health-giving.⁷⁹ Likewise, monastic work was considered beneficial to one's spiritual health. Whether or not movement

73 J. Heinsen, *Historicizing Extramural Convict Labour...*, pp. 111-133.

74 P. Spierenburg, *The Prison Experience: Disciplinary Institutions and their Inmates in Early Modern Europe*, Amsterdam 2007, p. 260.

75 C. Lis, H. Soly, *Worthy Efforts: Attitudes to Work...*, pp. 426-494.

76 Nonetheless, the appreciation of cratmanship, practiced by artisans, increased in this period, *ibidem*, pp. 313-425.

77 M. Rubin, *Charity and Community in Medieval Cambridge*, Cambridge 1987; *Approaches to Poverty in Medieval Europe: Complexities, Contradictions, Transformations*, c. 1100-1500, ed. S. Farmer, Turnhout 2016.

78 L. García-Ballester, *On the Origins of the Six Non-Natural Things in Galen*, in: *Galen und das hellenistische Erbe: Verhandlungen des IV. Internationalen Galen-Symposiums veranstaltet vom Institut für Geschichte der Medizin am Bereich Medizin (Charité) der Humboldt-Universität zu Berlin 18.-20. September 1989*, ed. J. Kollesch, D. Nickel, Stuttgart 1993, pp. 105-115.

79 In later Atlantic crossings, surgeons 'danced' the enslaved on long crossing in order to keep up levels of fitness and spirits. L. Fauley Emery, *Black Dance in the United States from 1619 to 1970*, New York 1972.

and exercise were considered healthy, immoral or unbecoming, therefore depended on class and situation.

PROPHYLACTIC AND CURATIVE PROGRAMS

Finally, the question arises which programs were in place to care for the bodies of workers, and to what extent workers themselves maintained their bodies for work. In recent years, historians of the body such as Irina Metzler successfully challenged the assumption that artisans and casual labourers had no access to medical care or a safety net before the Protestant Reformation.⁸⁰ They have shown that programs addressed both the prevention of sickness and injury as well as curing work-related diseases and caring for the disabled or elderly, across a range of professions and groups. Workers themselves had a set of tools to try to maintain the health of their bodies for work, or in the case of injury or sickness, seek relief. Many miracle accounts record working professionals visiting shrines in a bid to seek physical aid in case of injury, sometimes after the consultation of a surgeon had failed.⁸¹ They also took recourse to a range of religiously informed prophylactic practices, often administered by women, to protect their health, such as the use of amulets, charms, prayers and religious symbols.⁸²

Supported mainly by guilds and confraternities, hospitals were set up for sick or disabled workers, such as carpenters or stone masons. Attention was paid to protecting health through protective gear designed to enhance work safety, such as the face coverings used by masons and tanners to reduce inhalation of dust and toxic fumes.⁸³ Sanitary and health provisions were in place for miners and seafarers, and pertained to workspaces and air circulation, as well as to their diets.⁸⁴ Ship surgeons' tasks concerned both the curative – tending to wounds and sickness on board ships – as well as the preventative –, securing clean water and fresh food for seafarers. The demand for ship surgeons was particularly pressing on naval fleets, and naval surgeons used empirical knowledge drawn from practices to further

80 I. Metzler, *A Social History of Disability...*; V. Zimmermann, *Ansätze...*

81 I. Metzler, *A Social History of Disability*, pp. 43f.

82 S. Ritchey, *Acts of Care: Recovering Women in Late Medieval Health*, Ithaca 2021.

83 I. Metzler, *A Social History of Disability...*, pp. 36-91.

84 G. Geltner, C. Weeda, *Underground and Over the Sea: More Community Prophylactics in Europe, 1100-1600*, "The Journal of the History of Medicine and Allied Sciences" LXXVI (2021) 2, pp. 123-146; G.-M. Fleischer, *Seereise mit Uringlas und Speikübel – Reiseumstände und Medizinisches von Kreuzzug und Pilgerfahrt ins Heilige Land*, "Zentralblatt für Chirurgie" CXXXVII (2012), pp. 587-591; L. Cifuentes, *La medicina medieval i els viatges per mar*, "Mot, So, Razo" III (2004), pp. 35-44; P. Horden, *Regimes and Travel in the Mediterranean*, in: *Mobility and Travel in the Mediterranean from Antiquity to the Middle Ages*, ed. R. Schlesier. U. Zellmann, Münster 2004, pp. 117-132.

develop medical treatments. The earliest known ship surgeon from Venice, Master Gualteri, established the first hospital for sick and elderly seamen in 1318. In 1337, each of the 40 galley ships from Genoa has its own barber and assistant on board, and the admiral his own surgeon. Naval ships themselves could be transformed into floating hospitals, such as the *St John* in the naval convoy of 1556.⁸⁵

Advising pilgrims, army commanders and household officials on preventive health measures, and taking into account environmental factors, mobility, and seasonality, physicians also produced health regimens for army recruits and travellers that draw from a rich Greek-Arabic tradition. An example is Valencian physician Arnald of Villanova's (1235-1311) military manual *Regimen almarie* produced in 1309 for King James II of Aragon – there is a plethora of medically informed military texts originating from the Arab and Byzantine world.⁸⁶

The extent and quality of the care is, however, subject to debate, certainly where it concerns enslaved workers on galley ships or later on plantations, for whom hospitals also existed, for instance in the harbour of Genoa in the 15th century.⁸⁷ Surgeons and barbers on later sea crossings took responsibility for the health of the 'cargo', investing in the reduction of levels of disease, as communicable disease would have endangered the entire crew.⁸⁸ A question is whether surgeons also tended to convicts and vagrants sent to the galleys in western ports. Tending to the health of enslaved workers was economically rational, as it contributed to the maintenance of the workforce. As Eugene Genovese in *Roll Jordan Roll* observed, owners of slaves also made an effort to perform, as paternalistic 'good masters', a moral duty towards enslaved workers.⁸⁹ Acts of extreme cruelty in this sense were counterproductive, and illegal, for they undermined the allegedly moral foundations upon which the organisation of labour balanced, that was framed as a pursuit of the common good. It is not unthinkable that empathy on occasion slipped in through

85 G.-M. Fleischer, *Seereise mit Uringlas und Speikübel – Reiseumstände und Medizinisches von Kreuzzug und Pilgerfahrt ins Heilige Land*, "Zentralblatt für Chirurgie" CXXXVII (2012), pp. 590f.; L. Sicking, *Neptune and the Netherlands: State, Economy, and War at Sea in the Renaissance*, Leiden 2004, p. 404.

86 G. Geltner, *In the Camp and on the March: Military Manuals as Sources for Studying Premodern Public Health*, "Medical History" LXIII (2019), pp. 44-60.

87 S. Epstein, *Speaking of Slavery...*, p. 170. Especially the Knights Hospitaller present an interesting case. C. Savona-Ventura, *Knight Hospitaller Medicine in Malta 1530-1798*, Malta 2004, pp. 97f.; P. Cassar, *A medical service for slaves in Malta during the Rule of the Order of St. John of Jerusalem*, "Medical History" XII (1968) 3, pp. 270-277.

88 I. Bruijn, *Ships' Surgeons of the Dutch East India Company: Commerce and the Progress of Medicine in the Eighteenth Century*, Leiden 2009.

89 E.D. Genovese, *Roll, Jordan, Roll: The World That Slaves Made*, New York 1976.

the cracks as well. Nonetheless, the treatment of enslaved workers was certainly most harsh and cruel.

A fruitful new approach that allows scholars to establish the extent of physical impairment sustained in labour, and possible care received, forms the osteoarchaeological research of the remains of enslaved workers. Michael Blakey's ground-breaking work on the bioarcheology of the Atlantic slave trade in 1998 gave insight into the extent of physical trauma of labour.⁹⁰ Collaborations within this developing field will substantially enhance knowledge of the effects of work and care for the bodies of the enslaved.

A RESEARCH AGENDA

The ties between the world of medical science and labour are still poorly understood. In the final section of this essay, I would like to set out several research questions in relation to medical practice and labour and their broader implications. Beyond engaging Hippocratic and Galenic medicine to appraise bodies, medical practitioners in the pre-industrial world worked within a range of legal provisions, embedded in political and philosophical ideas about the relationship between property rights, labour, and humanness. The mechanisms through which medical practitioners established the value of able-bodied-workers thus lay to bare entrenched traditions in which the classification of bodies by experts ultimately served to solve moral issues of rights of ownership of the fruits of labour, status and recognition. Workers themselves engaged with the medical-social apparatus of work and welfare, for instance by making claims to social support in times of dearth or because of disability. Such claims, however, could be met with distrust, for the body was also considered a site of possible disinformation, through feigning ill health.

This raises several questions. First, how were medical practitioners, as voices of authority, appointed to categorise workers? Who paid for their services, city governments, navies and armies, merchant enterprises? In which networks were they active? Were these doctors also active in medical faculties at the universities? Did surgeons and doctors draw information in their medical practices, examining the bodies of workers, to develop medical knowledge? Second, did the classification of bodies serve to establish a privilege for masters, presented as situated in the body, to withhold certain profits from labour from workers? Third, how did morality claims of the pursuit of a common good allow masters and workers to make contesting moral claims, in legal courts and social relations? How did body experts'

⁹⁰ D. Martin, A. Osterholtz, *A Bioarchaeology of Captivity, Slavery, Bondage, and Torture*, "The SAA Archaeological Record" XII (2012), pp. 32-34.

activities facilitate a moralised negotiation of the unequal distribution of capital and the expenditure of energy within a hierarchy of power? Did this moral negotiation justify and reinforce the hierarchy in which inequalities were entrenched?

Exploring the multifaceted role of medical workers helps to lay bare the interaction between discourses and practices categorising bodies of workers in many contexts – those defined as ‘natural slaves’, servants, vagrants, army recruits.⁹¹ This interaction had significant consequences and implications in racial capitalism and the institutional production of knowledge. Scholars in recent years have shown how physicians and surgeons appropriated bodies of enslaved persons as sites of knowledge, for medical experimentation.⁹² Universities also built extensive collections of *materia medica* drawn from the slave trade and in the colonies.⁹³ The extent to which western universities not only profited financially, but also in the foundation of collections, from the slave trade is yet to be broadly understood and acknowledged. To understand these interactions, historians can look at the broader, social role of medicine in history from a *longue durée* perspective.

ABSTRACT

In the wake of the Black Death in the mid fourteenth-century, levels of poverty and casual labour rose significantly in Europe’s urbanized regions. In response cities increasingly regulated the labour of migrants and the working poor. Able-bodied men and women were set to work in trade enterprises, public works, armies and navies, or expelled from cities. In this situation, medical professionals played a notable role in the organization of labour. In physiognomic texts and manuals informed by Galenic medicine, body experts described who qualified for which kind of tasks, based on physical and mental abilities. In practice, they contributed to the inspection, valuation, compensation, training and care for workers. This article argues that researching how medical professionals facilitated the organization of labour benefits our understanding of the development of racial capitalism in the late middle ages.

Keywords: health, labour, middle ages, racial capitalism, poverty

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