

**KINGSTON UNIVERSITY**

**Richard Cantillon's *Essai* and  
the Early-modern British Mercantilism**

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of Kingston University for the degree of  
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*For my parents, Osman and Nedret,  
who have committedly endeavoured to build a great life for me and my brother, Eray,  
my wife, Sumeyye, who makes this life more beautiful and enjoyable and  
my little daughter, Bade Idil, who will hopefully live in a far better world*

### **Declaration**

This dissertation is submitted according to the conditions  
of the Degree Committee of Kingston University.

I certify that this dissertation is solely my own work.

I owe special gratitude to my supervisors Dr Rex McKenzie and particularly Dr Richard van den Berg whose academic guidance, generous support, and constructive criticism and feedback were crucial in accomplishing this dissertation.

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Above all else to my family who have always supported me wholeheartedly...

## *Abstract*

Since it was rediscovered by Stanley Jevons (1881, p.67-8), who described the *Essai* as “the Cradle of Political Economy”, the name and works of Richard Cantillon, an Irish French economist lived in the late 17<sup>th</sup> and early 18<sup>th</sup> century, have gained currency among scholars. Different aspects of his works and theories, alongside the minute details of his enigmatic life has been widely studied. Nonetheless, his economic theories are mainly examined against more modern texts and schools like French Physiocratic school, British classical school or Austrian economics. Although being helpful to see the continuum of the economic theories over time, such a tendency leaves aside and say barely anything about the intellectual influence of previous British mercantilists upon Cantillon and, most specifically, Cantillon’s possible motivations, if any, in writing his masterpiece. This dissertation aims to specifically fill this gap most specifically by attempting to (re-)read this masterpiece as a mercantilist text aiming for bringing gentry class as the only class that matter in the socio-economic organisation.

Put differently, this project aims to revisits and re-examine Cantillon’s *Essai* as a mercantilist text that, on one hand, is mainly influenced from the earlier British scholars/economists that, on the other, puts landlords at the centre stage of his analysis. Bringing landlords influence in his analysis so lucidly is the main contribution the projects aim to make. Thus, the role Cantillon attributes in his socio-economic system, from the establishment of closed and market economies to population trends of societies, the par established between land and labour values and observations upon his intrinsic values all will be re-examined and highlighted in the first chapters. In the last chapter, his foreign trade is examined as a continuum of previous British mercantilist tradition in which some economists sought, vainly though, for finding an alternative measure to monetary values so the net gains and losses of their nation could be most accurately assessed even when trade balance is *even*. In this chapter, I have also tried to make a new contribution to literature on mercantilist trade balance doctrine by arguing that for mercantilist trade could benefit one side more even when monetary values of commodities exchanged are equal, a mechanism that is called in the dissertation as *mercantilist monetary unequal exchange* mechanism. However, this chapter is there not only as it is a contribution made to the literature but most specifically, I think Cantillon’s value theory makes great sense only when we examine it against such a mercantilist background. His attempts to find an alternative measure, the dissertation claims, helped Cantillon not only to find an alternative value theory that pave the root for classical (/Smithian natural) value theory, but arguably also to establish an economic system rotating around the gentry class.

## ***Abbreviations***

H Higgs' translation of the *Essai* that can be found in the van den Berg 2015. It is generally followed by a number implying the paragraph.

So, for example "H195" refers to Higgs translation, paragraph 195, that can be found in van dan Berg (2015)

D *Dictionary* version (of the *Essai*) that is attributed to Richard Cantillon. The work can be found in the van den Berg 2015. It is generally followed by a number implying the paragraph.

So "D195" refers to the paragraph 195 of *Dictionary* version in van dan Berg (2015)

## Contents

<b>Abstract.....</b>	<b>vi</b>
The Essai and its place in the development of economic theory .....	2
The alleged influence of the Essai on later generations.....	3
The aims and objectives.....	7
<b>1   Socio-Economic Organisation Theory: The Ideology of Market Economy in Locke and Cantillon</b>	<b>12</b>
1.1   Introduction.....	12
1.2   Locke's Two Treatises and individualistic, natural right-based approach .....	17
1.2.1   Property in Land .....	17
1.2.2   Money and unequal distribution of lands .....	18
1.2.3   The Importance of life necessities in Locke's analysis .....	20
1.2.4   Needs and rights of the landless class? .....	21
1.2.5   Concluding Remarks.....	22
1.3   Lord Bolingbroke; family and force against Lockean individual and his natural rights .....	24
1.3.1   Bolingbroke's anti-Lockean political philosophy.....	25
1.4   Richard Cantillon and the Essai.....	28
1.4.1   How lands were first 'owned' and the societies settled.....	28
1.4.2   Two different classes: landowners and the rest .....	30
1.4.3   Two different facets of the same (market) economy .....	33
1.5   Discussion and Conclusions .....	43
<b>2   Population Theory: Braddon, Dobbs and Cantillon .....</b>	<b>48</b>
2.1   Introduction.....	48
2.2   Population and Mercantilism.....	51
2.2.1   When did an interest in population start?.....	53
2.3   Political Arithmetic and Population: a succinct account of the 17 <sup>th</sup> century.....	55
2.3.1   Graunt.....	55
2.3.2   W. Petty .....	57
2.3.3   Gregory King.....	59
2.3.4   Concluding Remarks.....	60
2.4   Laurence Braddon .....	61
2.4.1   Political Arithmetic for his own project.....	62
2.4.2   His critique of William Petty's population analysis .....	63
2.4.3   Marriage and Multiplication rates .....	66
2.5   Arthur Dobbs .....	67
2.5.1   The Essay.....	68
2.5.2   The Critique of previous 'steady' multiplication rate assumptions .....	70
2.6   Richard Cantillon's Population Theory .....	73
2.6.1   Cantillon's analysis.....	73
2.7   Discussion and Conclusions .....	83



<b>3</b>	<b>Par Theory: Petty and Cantillon on natural denominations of value .....</b>	<b>87</b>
3.1	Introduction.....	87
3.2	Sir William Petty .....	90
3.2.1	The ‘par’ of Petty’s ‘Treatise’ .....	90
3.2.2	The ‘par’ of the ‘Manuscript’ .....	93
3.2.3	The ‘par’ of the ‘Political Anatomy’ .....	97
3.2.4	Further Discussions and Concluding Remarks .....	99
3.3	Richard Cantillon’s par .....	102
3.3.1	How is the par computed? .....	103
3.3.2	The crucial role of landlord in the establishment of the par .....	105
3.4	A comparative Account and Conclusions .....	109
<b>4</b>	<b>Value Theory; Did Cantillon have a reductionist theory of value? .....</b>	<b>114</b>
4.1	Introduction.....	114
4.1.1	The discovery and background of the term ‘intrinsic value’ .....	117
4.1.2	Background of the term in Cantillon’s work .....	118
4.1.3	What is Cantillon’s intrinsic value? .....	119
4.2	Cost of production and Value theory .....	121
4.2.1	Single-input theory of value? .....	121
4.3	Alleged fatal mistakes in Cantillon’s value theory .....	125
4.3.1	Two questions.....	125
4.4	The role of landlords in the establishment of so-called intrinsic values .....	133
4.5	Conclusions .....	135
<b>5</b>	<b>Foreign Trade Theory: Cantillon and Mercantilist ‘Monetary’ Unequal Exchange .....</b>	<b>138</b>
5.1	Introduction.....	139
5.1.1	Unequal Exchange: A Literature Review .....	143
5.1.2	Arghiri Emmanuel’s contribution .....	145
5.2	Mercantilist Accounts of ‘Monetary’ Unequal Exchanges Before Richard Cantillon .....	149
5.3	Richard Cantillon .....	155
5.3.1	Comparative commercial advantages or comparative commercial exploitations .....	155
5.3.2	How does Cantillon utilise his value theory to detect the ‘net’ gainer? .....	157
5.4	Discussion and Conclusions .....	165
	<b>Conclusion .....</b>	<b>168</b>
	<b>Bibliography.....</b>	<b>175</b>

## *Introduction*

Richard Cantillon was an Irish French economist born in Country Kerry, Ireland to a family with aristocratic roots. The roots of his family are only partly known to us. The family name indicates Spanish roots, according to some scholars like Jevons (1881) and Shackle (1998). However, that claim has not been verified, and Murphy (1986, p.10-25) suggests his ancestors were originally from Normandy before coming to Britain with the troops of William the Conqueror in 1066. In the next century they helped Henry II to invade Ireland and in return they obtained a grant of land in the province of Munster, making them the local Lords of the Manor. Living thereafter mainly in Kerry and Limerick and remaining there for around half a millennium as the landlords of these lands, the family had been apparently survived, at least partly, even the invasion of Ireland by Protestants troops in mid-17th century<sup>1</sup>. Nevertheless, after the defeat at the Battle of the Boyne in 1690, many of the Irish Catholic gentry fled Ireland. These landlords were known as the “wild geese”, and apparent Cantillon’s family were among them (Chown, 1994, p.212). Thus, a history of the family demonstrates the role of invasion and conquests in the gaining and losing of their landed wealth.

Although the exact date of his birth is unknown, the most credible sources, like Brewer (1992b) and Murphy (1983;1986), give the first half of the 1680s as his date of birth. According to Brewer, given the fact that Cantillon got French citizenship in 1708 which could not be obtained before 21, he must have been born before 1687. Murphy (1983, p.46) reaches a similar conclusion “from a detailed genealogical study of his family roots”, making the early 1680s as the probable date of birth. Indeed, we are not sure even about his date of death. Contemporary newspapers from 1734 state that “one of the domestic servants of Mr. Cantillon [...] murdered their master and subsequently set fire to the house” (quoted in van den Berg, 2015, Introduction). But the circumstances surrounding his death are mysterious, and according to Murphy (1986, p.282-98<sup>2</sup>) there is enough evidence to entertain the possibility Cantillon staged his death and made an escape with his wealth from the court cases against him.

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<sup>1</sup> The influences and effects of that invasion of the 1650s was dramatic not only for Cantillon family but for Ireland as a whole (see Maddison, 2007, p.250-2). It must be noted that while Cantillon’s family had lost its land estates upon this invasion, Petty, who himself a high official in Cromwell’s army, obtained so great a land stock over time from payments, marriage or rewards that “he died possessed of something like 270,000 acres in South Kerry”, the lands once occupied by the Cantillon family (Maddison, 2007, p.252). Given this background, the harsh criticism against opinions of Petty that occasionally occur in Cantillon’s works may have some ‘personal’ issues disguised in the form of intellectual critique.

<sup>2</sup> According to some details presented by Murphy (1986; p.282-98), and described “convincing” by van den Berg (2015, Introduction), the unidentified ‘Chevalier de Louvigny’ who appeared in Surinam some days after the death of Cantillon, may in fact be Richard Cantillon himself

This thesis, however, will not be about the familial or personal background of Richard Cantillon, which have been studied in great detail especially by Murphy (1986, see also Brewer 1992b; Higgs, 1931; Murphy, 1983; van den Berg 2015 for further information) but his *Essay*, a work that has been called “an imperishable masterpiece” (Shackle, 1988, p.59).

### *The Essai and its place in the development of economic theory*

Although historical accounts give the impression that Cantillon was a prolific author, only one work survived. This is *the Essai sur la Nature Du Commerce en Général* which was posthumously published in French in 1755 based on a surviving manuscript<sup>3</sup>.

Many mysteries surrounding Cantillon’s *Essai* persist. The exact location of its publication, the identity of person(s) who prepared the manuscript for publication and what happened to the lost *Supplement*<sup>4</sup> to which is regularly referred throughout the *Essai*, or whether any copy of the *Supplement* has survived to this day are all questions that still need convincing answers. Moreover, the date when the final version(s) of the manuscripts were completed (Herbert, 1987, p.194; Saucier and Thornton, 2010, p.13, Murphy, 1986, p.246), the original language of the manuscripts (Mirabeau, 1756; Higgs, 1931, p.38; Murphy, (1986, p. 250; Brewer 2001, p. x)<sup>5</sup> or the number of manuscripts available until the publication of the French *Essai* as well as the alleged plagiarism made from original manuscripts by Malachy Postlethwayt in his *Universal Dictionary*, 1751-1755 (Higgs, 1931, p.383), all are subject of debate in the literature.

In an attempt to mitigate such mysteries and shed some light upon the queries surrounding the *Essai*, Richard van den Berg (2015) has recently published a work in which all the texts that are attributed to Richard Cantillon are compared. This compendium includes not only the French *Essai* or Postlethwayt’s *Dictionary*, but also *The Analysis of Trade, Commerce, Bullion &c*” (hereafter *Analysis*<sup>6</sup>), that was first published in 1759 under the authorship of Cantillon’s

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<sup>3</sup> It must be also noted that when Cantillon wrote his *Essay* there were no recognised terms like ‘economics’ or ‘political economy’, arguably neither in English nor in French, in the sense we use them today. Instead ‘trade’ or ‘commerce’ were generally utilised to ascribe economic and commercial activities, which is how the term ‘commerce’ is used in the title.

<sup>4</sup> See Aspromourgos (1996, Appendix B) for a list of calculations that are supposed to be found in the lost *Supplement*.

<sup>5</sup> The year after the publication of the *Essai*, Mirabeau claimed in *L’Ami des hommes* that the first versions of the *Essai* were written in English but later translated by Cantillon himself “for the use by one of his friends” (quoted in van den Berg, 2015, Introduction). For Higgs the plagiarism by Postlethwayt proves the existence of an English version of the *Essai*, whereas Murphy (1986, p. 250) and Brewer (2001, p. x) did not find such arguments convincing enough.

<sup>6</sup> For some like Jevons (1881, p.63), “the English version of 1759 is so horribly garbled as to give no idea of the merits of the original work” and thus could be labelled as a bad replica of the original version. “The best parts of the chapters” are generally omitted from the English version, according to Jevons, “to allow of insertion of extract from Hume’s *Essay*” (ibid).

cousin, Philip Cantillon. A paragraph-by-paragraph comparison of the three text, as Richard van den Berg endeavours to prove in his work, suggests that while the similarities and continuity of the passages indicate that they were written by the same person, the variances between the texts are so crucial that there were arguably, at least, three different manuscripts each forming the base of each of these published works<sup>7</sup>. Hence, it can be argued that the manuscript that was published in French, after remaining in the possession of Mirabeau for 16 years, was not the only manuscript<sup>8</sup>. Additionally, all the variances between the texts strongly indicate that the manuscripts had been written over a significant time period during which the opinions of the author changed and refined. In conclusion, van den Berg (2015) argues that whereas the manuscripts versions of the *Analysis* and *Dictionary* were probably written originally in English<sup>9</sup>, among these versions the *Analysis* version was the oldest one. Relying on his expertise and having a similar conviction I will utilise thorough my work both the *Dictionary* and *Analysis* versions, alongside the *Essai*, when required. Especially in the last chapter, when the subject is about the foreign trade, the *Dictionary* version that supplies us with further details that cannot be found in the *Essai*, will be particularly utilised.

### *The alleged influence of the Essai on later generations*

In 1845, in the first important biography of David Hume, the biographer John Hill Burton (1846, p.356) acclaimed Hume's *Essays* to be "the cradle of economics". When rediscovering and bringing Cantillon's *Essai* to the attention of the scholarly community,<sup>10</sup> Stanley Jevons called the *Essai* both "the Cradle of Political Economy" and "more than any other book ... the first treatise on economics" (Jevons, 1881, p.67-8<sup>11</sup>), making Cantillon the first political economist.

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<sup>7</sup> It must be noted also that although there are a few French versions, among them, as van den Berg (2015, Introduction) highlights, "the Rouen manuscript [is] the only complete manuscript copy of the *Essai* known to exist".

<sup>8</sup> Mirabeau acknowledges this in a letter to Jean Jacques Rousseau (see van den Berg, 2015, Introduction). Historical and biographical accounts, it must be noted, suggest that Mirabeau himself, despite all his sweet-tongued praise for Cantillon and his abilities, "had the intention of utilizing Cantillon's manuscript and, after touching it up, publishing it under his own name", thereby plagiarising from the manuscript in his possession (Legrand, *Un mercantiliste précurseur des physiocrates*, 1900, p. 8 quoted in Hayek, 1931, end note 80). Due to such treatments, Mirabeau's motives had been justly labelled "entirely dishonourable" by Higgs (1891, p. 266-7).

<sup>9</sup> Other scholars, like Einaudi (2014, p.268), have made similar statements; Postlethwayt, he says, "clearly ... copied" from the lost original English document.

<sup>10</sup> Arguably, until the *Essai* was rediscovered by Jevons, the *Essai* had turned into a neglected, if not completely forgotten work. Except for Karl Marx, whose notebooks suggest a great interest in the *Essai* (see Ananyin, 2014), it is barely possible to find a voice extensively studied *Essai* before Jevons.

<sup>11</sup> Jevons (1881, p.67): "The *Essai* is far more than a mere essay or even collection of disconnected essays like those of Hume...[as] a systematic and connected treatise, going over in a concise manner nearly the whole field of economics, with the exception of taxation."

After him numerous scholars have attributed the fatherhood of political economy to Richard Cantillon. Schumpeter (1954<sup>12</sup>) Hayek (1991; 1985 [1931]), Hutchison (1988, p. 156), Rothbard (1995, p.343-362), Fuller (2020, p.6), J.M. F. Catalan (2010) among others all seem to regard, Cantillon as, in Sieroń's words, "the true father of economics" (Sieroń (2019, p.135 see also Thortnon 1998, 2007).

The *Essai* therefore becomes, for these scholars, the starting point of *political economy*<sup>13</sup> (Giacomin, 1984, p.143) or "modern political economy" (Catalan 2010) or "modern" economics (Spengler, 1954). More precisely, "the most systematic, the most lucid, and at the same time the most original of all statements of economic principles before the *Wealth of Nations*" (Blaug, 1997, p.21), "a masterpiece" and "the state of the art of economics before Adam Smith" (Ekelund and Hébert, 1990: 77) or "primarily a work of theory" that has a good claim to be "the first systematic treatment of economic principles of a sort a modern economist would recognize" (Brewer, 1992b, p.10).

In a more detailed analysis Fuller (2020, p.6) explains why the *Essai* deserves to be called the first economic text in a modern sense. According to Fuller, the work is "the first book devoted entirely to economics; ... the first systematic treatment of economic science as a whole" that examines economic subjects like "the theory of supply and demand, the quantity theory, the loanable-funds theory and price-specie-flow mechanism" (ibid), as well as "the theory of interest rate and the business cycle" (Sieroń, 2019, p.137) within an economic context with no references to "religion, law, ethics and politics" etc<sup>14</sup> (Fuller, 2020, p.6) and by highlighting the "self-adjusting and essentially autonomous character of the economic system" (Spengler, 1954, p.424). All this makes the *Essai*, in Brewer's words "the first attempt to understand the economy as an integrated system, held together by market exchanges" (Brewer, 2010, p.5).

Being so early and so systematic an achievement in the science of economics made Cantillon and his *Essai*, in the eyes of modern scholars, a potential source of influence for later generation. Thus, several scholars have regarded the *Essai* as a source for "the great French

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<sup>12</sup> *Ibid*, p.29 "[the *Essai*] can be considered as the first systematic attempt to work over the whole field of economics".

<sup>13</sup> See Rela (2020) for varying definitions of 'political economy', Veuthen (2014) for disputed paternity of political economy, Maucourant (2011) for the alleged "invention of political economy" in modern times, and Soll (2009) for a standpoint that treats the Dutch Republic and especially Holland, rather than England and Britain as the starting point of the political economy. See also *New Palgrave Dictionary of Economics* (2018, entry 'English School of Political Economy' by A. M. C. Waterman) for the transformation the term political economy experienced over centuries.

<sup>14</sup> Scholars speaking upon the history of economic thought seem to attribute unnecessary importance to *independence* in their analysis of allegedly *scientific* economics. If we consider this criterion as a benchmark then Smith's *Wealth of Nations* as well must be treated as a pre-modern or non-economic textbook as Smith himself thought he was writing something in "legislature" not political economics proper. Tomorrow, if not today, when economics become a more mathematical science or a more proper "economics", then even the political economists may be treated as pre-modern quasi-economists who could not escape from the burden of socio-political factors, e.g. class, in their economic analysis.

school” of Physiocracy (Jevons, 1881; Schumpeter, 1954, p.212; Cootz, 1965, p.16-7; Hayek 1985 [1931], p. 227<sup>15</sup>; Liggio, 1985), Hume (Hayek, 1931; Thornton, 2007<sup>16</sup>), Turgot (Brewer, 1992b) and Adam Smith. A review of the literature shows that scholars identify Cantillon as the potential source for a number of theories of Smith, including the “equilibrium wage” (Hébert (1987, p.197), the invisible hand (Thornton, 2009, p.43<sup>17</sup>), competition mechanisms (McNulty, 1968, p. 647; 1967), value theory (Spengler,1954, p.423; Brewer,2010, p.5; Robertson and Taylor, 1957, p. 192; Marcuzzo et al.,2020, p.13, see also the chapter on value). Some have gone further in such claims, accusing Adam Smith of being “a shameless plagiarist, acknowledging little or nothing and stealing large chunks, for example, from Cantillon” (Rothbard<sup>18</sup>, 1995, I, p.435)<sup>19</sup>.

Having, allegedly, so much influence on later generations made him also a forerunner of different economic schools, including not only classical political economy, as mentioned above, but French Physiocracy (together with Boisguilbert, as argued by Rochel and Teigeiro, 2003), and the so-called “anti-mercantilist” tradition (together with Hume by Thornton, no date; 2007a; 2007c, p.434). He has further been praised by Austrian economists also as “forerunner to the Austrian School's emphasis on relative inflation, as opposed to general price inflation” by laying down the “the microeconomic aspect of monetary inflation” (Catalan, 2010). Additionally, for them, Cantillon also “anticipated the Austrian theory of the business cycle” and interest-rate theory (Sieroń, 2019, p.137), alongside the subjective market-induced value theory of Austrian economists (Hebert, 1985; Hülsmann, 1997), more specifically of opportunity cost approach to value (Thornton, 2007b). Some of them have found in Cantillon even a prophet of Austrian liberalism; “it would be difficult” for these scholars “to find a more incisive prophet of nineteenth-century liberalism” (Ekuland and Hébert, 1975, p. 44) who refuted “various government interventions, ... [in a] characteristically Missesian way” (Hülsmann, 2001, p. 700). Thus, to the members of this school it is Richard Cantillon rather than anyone else, including Adam Smith, who deserves to be called the true prophet of liberalism, at least of Austrian form of liberalism.

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<sup>15</sup> Hayek; “...the basic ideas of the Physiocrats are to be found in Cantillon” (Hayek, 1985 [1931], p. 227).

<sup>16</sup> As van den Berg (2015, Introduction) warns us, however, none of these authors supply their reading with “completely convincing” evidence.

<sup>17</sup> Thornton, 2009, p.28-9 “One plausible and logical solution to the mystery of the invisible hand is that Smith found all the workings of his invisible hand in Richard Cantillon’s *Essai*”.

<sup>18</sup> Nevertheless, since the claims have not been supported by textual evidence, Rothbard’s allegations seem more like *biased speculation* rather than unbiased scientific investigation

<sup>19</sup> I tend to share, nonetheless, the standpoint of Landreth and Colander (2002, p.59) who distinguish between influence through actual influence versus actual brilliance of the text. If “criteria [picked] assign great weight to a given writer on the subsequent development of economic ideas”, they reasonably conclude Cantillon was not an influential figure. If the criterium be only “creativity or brilliance”, however, they claim, then “Cantillon would have a place alongside Smith as a founder of political economy”. Relying on their reading, I could say that the *Essai* was not so influential a text as scholars tend to claim. Nevertheless, this is beyond our subject.

Despite Austrian economists who label Cantillon as the true prophet of 19<sup>th</sup> century Missesian/Hayekian form of liberalism, some other scholars offer more 'precautious' readings. For these economists Cantillon's economic system seems to show the influence of mercantilist doctrines. For Spengler (1965, p.113), despite being a "forerunner" of the physiocrats, Cantillon was "in many respects a mercantilist", whereas Coortz (1965, p.19) states more clearly that "Cantillon's adherence to a favourable balance of trade doctrine stamps him as a mercantilist".

To all these we may add some interpretations that see in Cantillon not only mercantilist doctrines but even traces of feudal constraints, making Cantillon's economic model, in Davila's words, a "feudal-mercantile model" (Davila, 1982), in which the market economy functions merely by repeating the dynamics of feudal "*ancien regime*" (Giacomin (1994), or reproduces the "pattern of production that occurs on ... a local command economy" (Berdell (2009, p.234)

Thus, the literature on Cantillon diverges not only on whether he was the father of political economy or the author of first systematic and scientific work on economics, but also on whether his economic ideas resemble more a Austrian liberal or feudal, mercantilist or anti-mercantilist, physiocratic or classical outlook, etc., making his name to be affiliated with all this traditions in this or that way.

In one section of his book, "What did Cantillon Say" (Einaudi (2014)) the question is asked "whether Cantillon [is] worthwhile to be translated into Italian?". In answering his own question, he also makes the important statements that

the answer should be negative, if the publication was likely to be destined to add to the pointless logomachy of: 'was Cantillon a mercantilist, a Physiocrat, a protectionist, a believer in laissez-faire or a little bit of each or a precursor of all these schools, and of others too?' The only answer to this vexed question is: Cantillon, just like our Galiani, deserves to be remembered in writings on the history of economic science not because he was a precursor, originator or the follower of a school, not because he should be classified with brackets and sub-brackets in a column or line of a table outlining the progress of science, but rather for the very simple reason that he is called Cantillon just as the other writer is called Galiani. (Einaudi, 2014, p.268<sup>20</sup>)

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<sup>20</sup> The title of the article by Legrand, "*Richard Cantillon, Un mercantilliste précurseur des physiocrates*", also implies that one can be equally mercantilist and physiocrats so the exclusive definitions as if there were a pure form of a theory, especially mercantilism, may, and indeed must, be avoided.

### *The aims and objectives*

Keeping in mind this warning in the coming chapters I will try to revisit Cantillon's *Essai* as a mercantilist text written in response to the dynamics of his age, especially of Britain of late 17<sup>th</sup> and early 18<sup>th</sup> centuries. Then, Britain has experienced a great transformation whereas the commercial and financial classes consolidating their economic and political power against the traditional landed classes. Written during this transition by a person from a gentry background the *Essai*, the dissertation aims to show, could be reinterpreted as a text putting the gentry class at the heart of economic analysis. Thus, it might be said it reinterprets the *Essai* as a politico-ideological text with hidden agenda endeavouring to prove the crucial role of the landlords in the socio-economic factors and market dynamics, ranging from the organisation of economy and (non-) independence of landed and non-landed classes, through the discussions regarding the population size, employment level and profit rates to the alleged par between the land and labour and its importance for his value theory.

Nevertheless, and as the second objective, the *Essai* will be read as a mercantilist text with cross-references to his contemporaries and economists/thinkers predating him. Thus, while deliberately refraining from classifying Cantillon as a precursor, father or a member of any economic school or tradition and keeping comparison between his views and later economists at minimum mainly for the sake of summarising the literature on him and the *Essai*, I will rather aim to compare, so much as required, his views with the previous British mercantilist authors/thinkers such as William Petty, John Locke, John Law, Laurence Braddon and Arthur Dobbs<sup>21</sup>. Thus, I am aiming to demonstrate, on one hand, how much he has influenced from them and on the other in, which way he diverges from them, or what are the main critiques he raised against them. By such cross-references to his contemporaries and predecessors I endeavour to read the *Essai* against the mercantilist background thereby locate within the economic theory around when the *Essai* was written.

Remembering the warning by Giacomini (1994, p.132) made around three decades ago:

Despite the relevant contributions recently provided by scholars it must be acknowledged that little progress has been made in the reconstruction of Cantillon's economic theory since the publication of Schumpeter's *History of Economic Analysis*.

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<sup>21</sup> So some figures like Boisguilbert who was mentioned in the *Essai* by the name of his work, "*an État de la France*" (H404) have been neglected throughout the dissertation. For a work that identifies Boisguilbert as the potential source of Cantillon in terms of "the basic principles of the *Tableau Economique*" see (Rochel and Robles-Teigero, 2003). See also Groenewegen (2001) for an article examining Boisguilbert's monetary doctrines.



Of course, since these remarks were made some works have been added to the literature on Richard Cantillon<sup>22</sup>. Nevertheless, despite all such developments in Cantillon studies, most of these studies have apparently read Cantillon's views through modern lenses and especially in comparison to schools that were allegedly influenced by him, like the Physiocratic or classical schools. Despite being good to track the development of theories over centuries, such perspectives cost some of the merits of the works that has been, if ever, understudied. Keeping the focus exclusively on the British mercantilist tradition with a specific attention to role of the gentry class in the *Essai* has helped me to (re)discover such understudied points.

Flagging such understudied points, that are also the contributions aimed to be made to the literature by this dissertation, his bipartite classification of the society into two classes of landlord minority and landless rest have been apparently missed the attention of the majority of the scholars who have considered, arguably under the influence of classical political economy, his class division as a tripartite division of landlords, entrepreneurs and workers (see ch.1). I will try instead to systematically analyse, for the first time, his *bipartite* class division alongside its implications for the socio-political organisation of market and economy as a whole. Such a bipartite class division has some implication for his population theory as well, which will be the subject of the second section. In this section I will also compare his population theory with other less-known British political arithmeticians, which has not been done so far in the literature upon Cantillon.

Reading the *Essai*, through such a bipartite division of the society, as a political text aiming to prove the centrality of the gentry class in the organisation of market economy and by relying mainly on the views and theories of his contemporaries has helped me to made further contributions to the literature on Cantillon. Firstly, the vital role of landlords in establishment of the par between land and labour values has apparently not studied even by scholars who highlight the role of landlord in his system (Giacomin, 1994) or the ones who has studied his par theories (Brewer 1992a, 1992b). Secondly, his alternative 'natural' measure, *acre of land*, and what can be achieved with this seems to be completely neglected. Therefore, the tension that can arise with two measures of the intrinsic values, the monetary ones and the natural one, that occasionally vary from each other does not have gotten the attention it has required.

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<sup>22</sup> If we give a short summary of such works, alongside the ones predating the warning, his economic theories have been a subject of interest among scholars who have investigated different aspects of his ideas. Such aspects include, among others, his population theory (Spengler 1942, 1954; Tarascio 1981; and Brems, 1983) spatial economics (Hébert 1981), monetary economics (Bordo 1983; Euinaudi, 2014; Huq, 1954, who attributed the concept of the multiplier to Richard Cantillon), international circulation of metallic money (Sekine, 1973; Spengler, 1954), business cycle theory (Thornton 2006) opportunity cost theories (Thornton 2007a, see also Thornton 2009), production and distribution theories (Aspromourgos, 1989; Grieve, 1993, 2015), value theory (Brems, 1978; Brewer, 1988a; Grieve and Al-Muharrami, 2021, Grieve, 2022) surplus theory (Aspromourgos, 1996, 2009; Brewer, 2008;), supply-side aspects (Berdell, 2009) or demand-led features of his economics including the role of consumption and demand in the total activity level of economy (Thomas, 2018) or the growth and capital accumulation models allegedly present in the *Essai* (Gahn, 2020).

This tension shows its main impact in foreign trade. Thus, I analyse Cantillon's foreign trade theory as a continuum on and advancement upon previous mercantilist foreign trade. I shall also aim to demonstrate how he utilises these divergences in values, measured in alternative terms, to analyse the net gainer of the specific branches of trade. There I specifically aim to make two contributions, firstly, a) on Cantillon studies that in Cantillon when commodities are exchanged between distant locations the monetary values do not have to reflect the intrinsic values, that is the total land plus labour used in the production of the commodities whereas the alternative measure, acre of land, is picked by Cantillon as the most credible sign of intrinsic values in such case and secondly, b) on mercantilist literature that there is a possibility of unequal exchange in mercantilist literature that does not stem from the variances in the nature of commodities exchanged, including the exchange of other commodities for money-commodity, but more technically from the variances in the monetary values of commodities exchanged caused by the total amount of money circulating within given locations/nations.

Chapter 1 bears some political connotations. There Cantillon's *Essai*, which is generally considered as an apolitical text laying down an allegedly unbiased scientific economics, will be re-assessed through some political lenses. In order to do this, his ideas will be compared with both Locke, a Whig par excellence who greatly influenced British economic and political thinking in the early 18<sup>th</sup> century with his individualistic political philosophy and Lord Bolingbroke who had raised a great critique against the Lockean individualistic perspective with his political philosophy taking the gentry-class at its heart. Cantillon, it will be argued, as a member of a family with Jacobite affiliations (Murphy, 1983, p.48-52) and a close friend of Lord Bolingbroke seems to extend Bolingbroke's gentry-class oriented perspective to economic domains in his examination of the independence and non-independence of economic actors. His analysis, in the end, attributes long term independence only to landed class.

Chapter 2 attempts to extend the discussion in the first chapter to a more specific sphere of population. There, I aim not only to examine the population theory of Richard Cantillon but also brings some relatively neglected arithmeticians who both wrote after 1715, Laurence Braddon and Arthur Dobbs. The chapter will investigate, on the one hand, their critique of 17<sup>th</sup> century political arithmeticians and, on the other, will endeavor to identify what was original with Cantillon in terms of population studies, which is the introduction of landed gentry into population analysis as the most crucial factor.

Chapter 3, 4 and 5 consist of a continuum that must be highlighted; Cantillon's foreign trade theory (chapter 5) seems to be a climax of mercantilist trade theory aiming to discern the net gainer even when monetary values are of equal amount. His search for a decisive method and

answer to such a great problem, it will be argued, ended in his intrinsic value theory (chapter 4) that aims to assess the value of commodities exchanged in terms of an alternative value, the acre of land. However, as his par is a *sine qua non* of his intrinsic value theory allowing him to assess the values in non-monetary terms, I will first analyze his par theory.

Nevertheless, each of this chapter has its own aims that must be highlighted. Chapter 3 deals, most specifically, with the debates around the par of Petty and Cantillon. From his earliest published work, *the Treatise*, onwards Petty attempted to find a par between land and labour so value could be measured with no reference to monetary values, or what he called *artificial* value. Some scholars (Schumpeter, 1954; Groenewegen and Valdi, 2003, Dooley, 2005) have regarded Cantillon's investigation into the par as a continuation of Petty's research agenda that has ended in a solution to the problem first put by Petty. Such claims have been rejected by other scholar who have mentioned the variances and differences in their pars (Brewer, 1992a, 1992b). Nevertheless, a comparative account of the par of both Petty and Cantillon, alongside their merits and, if any, shortcomings have never been done. Additionally, the role of landlords in establishment of Cantillon's par between land values and labour values seem to be never studied. This chapter specifically aims to fill such gaps and thereby prepare for the next chapter in which the value theory of Richard Cantillon will be reassessed.

Chapter 4 revisits the value theory of Richard Cantillon. Since the *Essai* was rediscovered by Jevons, 1881), who described its value theory as an "ingenious theory of value" somewhat superior to the value theories of some 19<sup>th</sup> century economists (p.69), Cantillon's value theory has been interpreted as a forerunner of Physiocratic (Schumpeter, 1954) classical (Spengler,1954; Marcuzzo et al.,2020) or even Austrian value theories (Rothbard, 1995; Thornton, 2005; Sieroń, 2019). Nonetheless, despite its merits Cantillon's value has been the subject of criticism too. Some scholars (Bowley, 1973; Brewer, 1992b; Yong, 1993) who attributed to him a *reductionist* land-only theory of value have harshly criticised Cantillon for neglecting the heterogenous nature of lands. In the end, it will be argued, scholars who attribute to him a reductionist land-only theory of value seem to misconceive Cantillon's *acre of land* and thereby confuse, in J.S. Mill's words, the *measure* of value with the *regulator* of value (Mill, 1848[1965] p. 580). My reading diverges also from that of Grieve and Al-Muharrami (2021) who recently offers to reinterpret Cantillon's value theory as a *monetary* theory of value. In the end I will suggest Cantillon's acre of land not as a regulator but as a measure of value that can be used instead of monetary measure. In this respect this chapter will be the first work, so far as I know, arguing that in Cantillon there is second measure by which we can measure the intrinsic values of commodities. Nonetheless. This would not be the only contribution it aims to make. Additionally, as a continuum of the main thesis of the dissertation I will also try to show that at least in one version of the manuscripts, in the *Essai* version, Cantillon names the "expense" (H97) of landlords as the main factor determining the

intrinsic values of commodities as well. This occurs to me as an attempt to make landlords as a part of even intrinsic values of commodities. The potential implication of such a view for my reading and the tension the passage creates with further observations by Cantillon of intrinsic values have also been examined.

Chapter 5 is dedicated to Cantillon's foreign trade theory. Not only will the consistency between Cantillon's value and foreign trade theory be presented, but also will his foreign trade theory be supplied with a background with reference to great mercantilist of the era like John Locke and John Law. This comparative perspective allows us, on the one hand, to revisit mercantilist trade balance doctrine and underlying reasoning behind it, and, on the other, to reassess Cantillon's value theory against the mercantilist background. Thus, the aims of chapter are twofold; first, it will stress a neglected facet, if not formalize a new aspect, of the mercantilist trade balance doctrine questioning specifically 'how a nation can gain from foreign trade through a high level of prices caused or accompanied by abundant money in circulation'. Second, the chapter will reinterpret Cantillon's foreign trade theory in comparison with his value theory to further prove that his value theory is not a monetary(-only) theory of value neglecting physical aspects of value and that his value theory seems to be specifically designed, not only to measure the value of given commodities, but also, and arguably to a further extent, to discern the net gainer in each and every branch of trade with foreign nations, which was a great research question of the mercantilist age. These points do not only make a contribution to the literature, but also suggest an consistency in the narrative of this dissertation; Cantillon's foreign trade theory has been examined in this chapter against mercantilist background and with occasional references to value theory mainly because his value theory might be considered as a result of mercantilists debates on foreign trade. Thus, his value theory, I argue, may be read as a climax of mercantilist pursuits of picking the net gainer in each and every branch of trade, ending in Cantillon to develop a completely new theory of value predating Adam Smith but around half a century. It should also be noted that, while analysing how Cantillon advanced and arguably finalised this 'mercantilist' research question had previously occupied the minds of great economists like Locke and Law, I will rely mainly on the *Dictionary* version as it is only in this version Cantillon supplies his reader with a method, supported by thought experiments with numerical examples, that is specifically designed to discern the net gainer from each branch of foreign trade, including the ones when trade balance is even, that is, when the monetary values of commodities mutually exchanged are equal.

## ***1 Socio-Economic Organisation Theory: The Ideology of Market Economy in Locke and Cantillon***

### ***1.1 Introduction***

#### ***I***

During the 17th and early 18th centuries Britain experienced a great transformation. With no company that could trade with East India at the beginning of the 17th century, no stock market or bank that could rival its European counterparts, such as that were present in the Dutch Republic, even in the mid-17th century, England was still far away from what it had achieved by the early 18th century. By that time, Britain had already suppressed all its rivals in the commercial and financial spheres. Even the Dutch Republic, in general, and once admired “free” Amsterdam, in specific, felt obliged in response to take some conservative and protective measures to keep wealth within domestic borders and thereby challenge the shift in the political, economic and financial power towards Britain. It was all in vain though. In the 1720s and 1730s, London had already turned into the greatest financial and commercial capital of both Europe and world (Grassby, 1995; Gauci, 2001).

If we look more closely to this transformation, the political and economic transformations were apparently going hand in hand. Starting directly from the years following the Glorious Revolution, the financial class, then often referred to as the ‘moneyed men’, had consolidated their economic and political power within England/Britain. The establishment of Bank of England was of particular importance in this development. Ongoing war with France required funds and credit, enabling thereby the moneyed men to get a constant return for their lent to the crown. Additionally, the bubbles of the age, including both the Mississippi and South Sea, caused an enormous wealth transfer from other groups towards financial ones. Thus, when the England entered the 1720s, the moneyed groups had already confirmed their power, the established landlord class was arguably in a political decline whereas the ministerial positions were occupied by the Walpolean government who had good relations with financial cliques. In the end, the financial group had managed to become a rival of landlords in British politics and even a rival of commercial groups in economic activities. That was at least the view of the “country” party, which then prevailed among landlords. (Carruthers, 1996; Coward, 2003; Kleer, 2017; Neal, 1993; Pocock 1975 [2013])

Hence it may be argued that the transformation caused or even required not only battles abroad with foreign powers, but also within the kingdom between the supporters of the old regime, advocating still for the protection and maintenance of the established and allegedly “right” socio-political and economic order dominated by the King and gentry class, and supporters of the recently rising regime, in which the alleged birth rights of every British, alongside the materialistic wealth and money from commercial and financial activities were

the key factors in the desired novel political and economic order. What we today call Whigs or Whiggish tradition was the political brand of the second tradition advocating commerce and finance, whereas the first group, the Tory/Jacobite tradition, consisted of the people who resisted the transformation in a way still demanding, maybe romantically and unrealistically, for the old regime to be fully restored.

The new combination of political power accompanied with financial wealth was harshly criticised then by old Whigs and Tory/Jacobites. These groups did not only try to understand what was going on, but also endeavoured to protect and conserve their established positions in political and economic spheres. In that respect, Lord Bolingbroke and the scholars gathered around him were arguably the most successful group in analysing the transformation English society then experienced.

Lord Bolingbroke himself warned the old masters, i.e. the established landlords, against the recently rising masters, i.e. financial elites. In his *Some Reflections on the Present State of the Nation*, he states that;

“It was said that a new government, established against the ancient principles and actual engagements of many, could not be so effectually secured any way, as it would be if the private fortunes of great numbers were made to depend on the preservation of it, and that this could not be done unless they were induced to lend their money to the public, and to accept securities under the present establishment. Thus the method of funding and the trade of stock-jobbing began. Thus, were great companies created, the pretended servants, but in many respects the real masters, of every administration” (in Carruthers, 1996, p.230, fn.149)<sup>23</sup>.

Bolingbroke’s observations seem to be important in two respects; firstly, the government and great financiers, it implies, managed to tie the destiny of great numbers to them by borrowing money from them, making the majority in return a supporter of the new regime. Secondly, Bolingbroke analyses the situation through hegemonic relations that attributes mastery no longer to old landlords but financial elites. That being so, it may be claimed like Romani (2002, p.187) that, although the language of the critique was mainly political, it had already gained an economic sense as well with “Bolingbroke and Swift’s denunciation of the monied interest,

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<sup>23</sup> Bolingbroke seems to be one of the earliest perceivers of the fundamental change England had experienced over 17th and early 18th centuries. He is named by Pocock (1975 [2013]) as one of civic humanists, a tradition including, for Pocock, Niccolo Machiavelli, James Harrington, Andrew Fletcher, and Thomas Jefferson, to which Smith’s teacher Francis Hutcheson may be added. Whereas Pocock does not add Adam Smith directly to that tradition, for some scholars such as D. McNally (1998) and J. Dwyer (1992, 1993) both Smith’s and Hume’s observations are reminiscent of the Scottish civic humanism of Fletcher (for a work challenging the interpretations by McNally and Dwyer, see Kleer, 1996)

To Pocock, Lord Bolingbroke was one of the most “resonant” voice of “the Anglo-Atlantic equivalent of the ‘Machiavellian moment’, seen previously in Florence, adding “some positive complexities, in terms of economics and psychology” to that Machiavellian tradition (ibid, p. 477-8). Look especially ch. XIII and XIV of the work for more information about Bolingbroke. For a more refined work upon Lord Bolingbroke and political atmosphere of his day see Kramnick (1992) and also Hammersley (2010, ch. II).

the language of virtue and corruption in Britain [which] had a remarkable extent an economic or ‘material’ ring”. Thus, the critique by Bolingbroke circle had both political and economic implications.

## II

Richard Cantillon himself was a member of Bolingbroke’s circle (Kramnick,1992; Murphy 1987). Such a familiarity of Cantillon with Bolingbroke and other members of his circle allow us to read Cantillon’s *Essai* against this background the Britain then experienced, making it an attempt to comprehensively understand how the commercial and especially financial groups had managed to gather so much political power and materialistic wealth over the previous decades, eventually allowing them to posit themselves not only as an independent but also a rival group to landlords both in politics and market.

Thus, it shall be argued, Cantillon seems to share a similar concern with Bolingbroke and his circle. His analysis, however, ends in a completely different conclusion to that of Bolingbroke. Unlike him who attributes mastery to recently rising financial class, Cantillon’s examination ends in a firm refutation of not only such a mastery but even a long-term independence for such groups. All the wealth that enables these group to have some political and economic power could only be derived from landowners, the old masters, whereas the independence and lordship that the financial elite allegedly gained could only be a temporarily threat to old deviation from the old system dominated by landowners.

Such a reading has nonetheless some implications for the political aspect of the *Essai* and the conception of the market economy/society within. In fact, the main novel claim I would like to make has some political connotations; rather than being an apolitical text<sup>24</sup>, I will argue, the backbone of Cantillon’s *Essai* seems to be established upon the contemporaneous political debates. It may thereby be considered as a masterly extension of political debates of the day to economic sphere, made mainly in order for a genuine comprehension of how non-landed

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<sup>24</sup> It is most specifically the members of Austrian school that converge to an apolitical reading of *Essai*. In their liberal attitude I think this school oversight the role Cantillon attributes to landlords. Most specifically, for example, while regarding Cantillon as a potential source of Adam Smith’s invisible hand Thornton (2009) makes an observation that directly contrast my reading that argue that rather than being an invisible hand in Cantillon it was the hand of the landed elites that manipulate each and every occurrence of market. Thus, market rather than being a place in which the actions of independent members create somewhat optimality for the society as a whole, in Cantillon market seem to be conceptualised as a place where landlords desires and demands realizes itself through indirect mechanism price mechanisms. Thus, this market is a reflection and does not have to be optimal in any sense. Putting differently, the Austrian argument clashes with mine most particularly as it conceptualises the marketplace as somewhat an autonomous entity whereas in my reading rather than being an autonomous entity market of the *Essai* could only be depicted as nowhere in which old feudal constraints demonstrate themselves through new means and under the direct or indirect control of landlords

class had managed to accumulate so much wealth and power over the decades preceding the *Essai*.

Before going ahead, some words must be said upon the literature. Literature about the *Essai* diverges as to the nature and main characters of the society depicted in it. For some scholars it is clearly a modern “competitive market economy” positing a direct “contrast” to previous “centralized command economy” by which resources are optimally allocated among different economic actors (Murphy 1986, p. 253–254, see also Thornton, 2009). For others, such as Giacomini (1994), Cantillon’s economy appears, rather than being a modern one, mainly as a form of ancient regime or ancient economy in which the old relations between landowners and the rest maintain themselves only by different means and covers such as market and price etc. According to this view, rather than being the first systematic demonstration of a modern economy (as claimed by some scholars like Spengler, 1954, and Jevons, 1881), the society presented in the *Essai* can only be labelled a pre-modern one.

Revising this debate between the historians and economists, I intent not only to support but also extend the standpoint taken by Giacomini on a few points:

Firstly, I will support the thesis with a background by contrasting Cantillon’s views to his predecessor such as Locke and Lord Bolingbroke. Locke will be examined on two points: first, even though Locke’s influence on the socio-political changes England/Britain experienced over the late 17th and early 18th centuries has been downplayed by a number of scholars following Pocock (1975 [2013], 1985), my own readings convinced me that Locke was, either directly and personally or indirectly through his works used by others, a part of every great debate in which Whigs raised a novel interpretation or critique against the old and established system. These points vary from the reformations in tax mechanism, through rights of each and every British in both political and economic spheres, to even the specific debates as to the changes in the denomination of money (Rubini, 1970; Tully, 1994; Pye, 2016; Pinheiro, 2020). Additionally, the context and content of some of Locke’s works, such as *Two Treatises*, seem to examine similar queries to what may be found in Cantillon’s *Essai*, including queries about how lands are first owned, why there is an unequal distribution of lands, and what was the main reasons behind it and how economic interactions occur in a money-oriented market economy. The views and methods utilised by Locke in examining these queries seems to form a direct contrast to that of Cantillon, making the comparison more tempting. In fact, all these divergences between both, give me a personal impression that Cantillon’s *Essai* could also be read as a refutation of Lockean individualistic philosophy that was freely utilised by the rising commercial and financial classes in their ideological battles with the established system.

However, since I believe Cantillon’s perspective was influenced by Bolingbroke as well, I will analyse that author’s opinions too. Bolingbroke will be revisited mainly in relation to his



refutation of Lockean political perspective, which seems to significantly influence Cantillon's class-based economic perspective. Unlike the Lockean individualistic perspective that places the individual and his rights at the centre, Bolingbroke tried to form a class-based reading of society and politics in which the gentry/landed class is the main actor. The long-standing friendship and economic partnership between Bolingbroke and Cantillon (Murphy, 1983, p.151-2) give us a good reason to claim a potential influence between Cantillon and Bolingbroke. Claiming this, but also widening the debate to see Cantillon's original contributions, I will argue that Cantillon extended what had been done by Bolingbroke in the political sphere to the economic sphere. Having arguably a similar concern but a different perspective to Bolingbroke's pessimistic analysis of alleged gloomy days waiting ahead for the landlord class, Cantillon attempted, I will claim, to prove why the rising commercial and financial power is neither a revolutionary phenomenon nor a sustainable threat to long-established old system in which landlord are the only class with economic independence and political right to rule

In the following sections, I will first summarise Lockean natural-law and birth-right based individualistic philosophy in relation to society, markets and land distribution before giving a short account of Lord Bolingbroke's harsh criticism of such views. Thereafter I will examine in detail why Cantillon does not ascribe any long-term independence to non-landed classes and why such a reading has both economic and political significance.

In this respect this chapter aims to set a ground for the upcoming chapters. Thus, the socio-political and economic role Cantillon attribute to landed class is specifically examined, alongside his arguments for refuting the long run independence of non-landed classes and why he thinks the recently rising financial and commercial classes could only be a short-term deviation from the right order established for centuries, if not millennia, around the gentry class.

In addition to set the ground for coming discussions, the chapters also aim to make some contribution to the literature; first, as mentioned, it aims to read the *Essai* as a political text putting landlords at the centre of economic analysis. Second, in a way challenging the previous claims attributing a tripartite division of the society/economy to Cantillon, it suggests only two classes in Cantillon: the landlord minority and landless rest. Third, it conceptualises the marketplace of Cantillon as somewhere that the previous feudal constraint occurs in different forms and means, that is, through price mechanism than direct command as seen in closed economy.

## 1.2 *Locke's Two Treatises and individualistic, natural right-based approach*

Without entering in the detail as to the background against which Locke's *Two Treatises* was written (see Pye, 2016 and Killen, 2016) and why Locke then attempted to reconcile *Holy Scripture* with the previous *natural law* doctrine, we may directly start with the socio-political picture Locke draws in the *Two Treatises*.

### 1.2.1 *Property in Land*

In the second treatise Locke endeavours to follow societies or *civitas* back to their earlier stages and identifies consent as the only legitimate ground for any politic entity. "Men being all the workmanship of one omnipotent, and infinitely wise maker" (§ 6), he claims there, and "being ... by nature all free, equal and independent, no one can be put out of this estate and subjected to the political power of another without his own consent (II, § 95), making the "consent of the people ... the only one of all lawful governments" (*Two Treatises*, Preface). Therefore, he continues, "[t]he liberty of man, in society, is to be under no other legislative power, but that established, by consent, in the commonwealth" (II, § 22<sup>25</sup>).

How about the property in land, then? Could it be tied to consent or something else? Locke's answer to the query apparently claim that he cannot explain the concept of property in land, that is given to all the members of the humanity by the same "omnipotent, and infinitely wise maker" (ibid). Confessing the difficulty of the task, he states "it seems to some a very great difficulty how any one should ever come to have a property in any thing" without transgressing the Holy Scripture's warning that lands are "given to mankind in common" (II, § 25).

He finds his solution to the tensions that could otherwise occur between concept of private property and Holy Scriptures in the labour and work of the labourer. Since both the body and the labour of labourer belongs to himself, as "this labour being the unquestionable property of the labourer," anyone producing something with his labour, to Locke, has a right to keep it for himself and to exclude "the common right of other" (§ 25).

For "the labour that was mine," he reasons, removing [common goods] "out of that common state they were in, hath fixed my property in them", which, in result, makes these common goods "my property, without the assignation or consent of any body" (§ 28). It is "this law of reason", he assures, "makes the deer that Indian's who hath killed it ... ; though before it was the common right of every one (§ 30).

As the labour and toil to kill a deer makes the deer the private property of the hunter, likewise Locke reasons, the toil and labour of a worker to increase the fruits of the nature makes the

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<sup>25</sup> For a paper dealing with role of 'consent' even in Locke's observation about women and family, look a Grant (2003).

same fruits his undeniable property. Extending that logic to property in land *per se* he concludes, that

... As much land as a man tills, plants, improves, cultivates, and can use the product of, so much is his property. He by his labour does, as it were, enclose it from the common [and make it his own]( § 32.)

Additionally, since God directs human beings to improve and reap the benefits of lands, he further reasons, “He that, in obedience ... subdued, tilled, and sowed any part of it, thereby annexed to it something that was his property, which another had no title to, nor could without injury take from him”. Therefore, anyone could enclose some piece of lands and declare ownership over it, without the consent of the rest, as long as it is for the improvement of the same lands<sup>26</sup>.

To justify his position, he even refers to benefits of enclosures, for both the specific farmer-labourer and human beings in general. Enclosure, Locke reasons, “does not lessen, but increase the common stock of mankind”. Since cultivated lands could produce, roughly speaking, ten times what the uncultivated lands can produce, a person closing a piece of land, say, ten acres of land

may truly be said to give ninety acres to mankind, for his labour now supplies him with provisions out of ten acres, which were by the product of an hundred lying in common (II,§ 37)<sup>27</sup>.

Thus, labour becomes the *reason d’etre, or the foundation*, of property both in land products and land *per se*. Land closure cannot be considered as a transgression upon the rights of others so much a that the same enclosure is a requirement and facilitator of improvements enabling higher revenues from the same stocks. Therefore, labour and work force that is for the advancement and improvement the earth makes, in his eyes, the labourer the sole-owner of the both the land *per se* and its fruit even in the absence of the consent of the rest of the society.

### 1.2.2 Money and unequal distribution of lands

At this point it could be asked how Locke legitimises the unequal distribution of land among members of the society. Without entering into minute detail of his legitimation, it may be argued that for Locke the main cause of unequal distribution of earth/lands among the human

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<sup>26</sup> “Nor will it invalidate his right, to say every body else has an equal title to it, and therefore he cannot appropriate, he cannot enclose, without the consent of all his fellow commoners, all mankind.”

<sup>27</sup> To support his case, he compares the wild America with a small part of Devonshire; although, “nature having furnished [all people] ... with the materials of plenty” due to negligence of improvements by human labour, Locke says, Americans, who are “rich in land” ... “have not one-hundredth part of the conveniences we enjoy (II, 41, see also II, 37 and 43) By generalising the case, he even concludes “that of the products of the earth useful to the life of man, nine-tenths are the effects of labour ... [if not] ninety-nine hundredths. (II,§ 37).

beings is due to the existence of money, which enables people to produce and save more than what they need or consume.

Even though “a man had a right to... and temptation to labour for more than he could make use of.” (II, § 51) still for him, in the primitive stages of the society the perishable nature of commodities and goods prevented him from producing more than what they can consume. The emergence of money<sup>28</sup>, however, turned such perishable goods into unperishable commodities, enabling people to save and thereby amass wealth. Thus, money have “altered [not only] the intrinsic value of things, which depends only on their usefulness to the life of man” (II, § 37), but also the face and level of economic relations between human beings. Deliberately or not, by picking a non-perishable commodity and ascribing it both a store- and exchange-value in the market transactions, Locke reasons,

... men have agreed to a disproportionate and unequal possession of the earth; they having, by a tacit and voluntary consent, found out a way how a man may fairly possess more land than he himself can use the product of, by receiving, in exchange for the overplus, gold and silver, which may be hoarded up without injury to any one (II, § 50).

As Uberti (2013, p.50) highlights “consenting to money, for Locke, implies consenting to the distribution of benefits and burdens caused by monetization”<sup>29</sup> (see also, Ince, 2011, p.35). Locke’s theory also implies that it is only with the monetization of the economy that we may speak of an unequal distribution of lands among the members of the society. Apparently, Locke, while accepting labour as the only legitimate source of landownership, utilises money to justify the unequal distribution of land. By appealing to money, Locke indeed supplies a legitimate ground or justification for the unequal distribution of lands among human beings, which enables him to refrain from justifying all forms of conflicts and clashes that could otherwise occurs between human beings in their battle for the possession of land.

After analysing the role of labour and money in his system, I may now proceed to the queries as to how Locke legitimizes his conclusions. The answer seems to rest on a right to self-preservation, or self-maintenance, arguably the greatest of all natural laws. A review of Locke’s works demonstrates that the same phenomenon of self-preservation would be considered by him also as the main force driving human beings into societies. In the next paragraphs, I will analyse the role of self-preservation in Locke, and how he refutes, by using this right, all kinds of hegemonic relation that may otherwise occur between the landed and landless classes.

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<sup>28</sup> For Locke, the gold and silver also take their values “only from the consent of Men” (§ 50). This is another point upon Cantillon makes some comments. The subject is beyond the scope of this chapter though.

<sup>29</sup> Uberti (1993<sup>29</sup>) raises two critiques against Locke and neo-Lockean political philosophy. Firstly, consent, to him, cannot be the reason behind inequality but only a result, so more like a *de facto* justification of inequality, and secondly, “money is an irreducibly political institution” which cannot be explained in terms of natural state of humankind (ibid, p.49). For additional works on Lockean perspectives of property and money see Bell et al. (2004), Sreenivasan (1995), Tully (1980), Weymark (1980).

### 1.2.3 *The Importance of life necessities in Locke's analysis*

In the ninth chapter of the *Second Treatise* while discussing why human beings are driven into societies, Locke asks,

If man in the state of nature be so free as has been said ... why will he give up this empire, and subject himself to the dominion and control of any other power? (§ 123)

The reasons is nothing but “the mutual preservation of their lives, liberties, and estates, which I call by the general name property” (ibid). In later parts, the preservation of property is reiterated as the main factor and reason why “men enter into society” (§ 222) or why they are “putting themselves under government” (§ 124, also § 127, § 171). Property in Locke’s terminology, it must be noted, bears not only a narrow connotation of a right to property, but something of a self-preservation which includes a right to get the means of subsistence as well.

More precisely, the “self-preservation” seems to be conceptualised by Locke as the fundamental phenomenon of human nature, shared with other creatures: “The first and strongest desire God planted in men, and wrought into the very principles of their nature” he affirms, “is that of self-preservation”. (*First Treatise*, § 88). Being so vital a factor self-preservation explains also why “every man had a right ...”, for Locke “to take care of and provide for their subsistence: and thus, men had a right in common” (I, § 87), until labour makes some parts of the common the property of specific persons<sup>30</sup>.

The right of self-preservation is also utilised to refute the some claims previously made by natural law theorist identifying consent as a requirement of the property in land. “If such a consent” of humanity “was necessary” in the first steps of property, Locke reasons, then up until such a consent established among all the members of the society “man had starved, notwithstanding the plenty God had given him”. Hence, Locke further reasons “taking of this or that part does not depend on the express consent of all the commoners. ... The labour that was mine, removing them out of that common state they were in, hath fixed my property in them” (II, 28). Thus, even without, and maybe against the consent of the others, self-preservation necessities the right to ownership of land stocks. Although Locke’s reasoning does not seem flawless, apparently it is the right of self-preservation that he utilises to refute consent as a requirement of property.

In summary, Locke seems to consider self-preservation as a basis for the right to property (including property in body, labour and land at the same time) and the materialistic needs as

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<sup>30</sup> In Locke’s other works too including his translations from Pierre Nicole, “*On the Existence of a God*”, “*Discourse of the Weaknesse of Man*”, and the “*Treatise concerning the way of preserving peace with men*”, all made between 1675 and 1679 we encounter similar remarks that identify the self-preservation as the main force behind the establishments of societies. We will not examine these works here.

the main force driving human beings into societies. In that respect, both the source of property and society seems to find its main cause in the right to self-preservation<sup>31</sup>.

But how about the right to self-preservation of the poor and the possible hegemonic relation that may occur between the wealthy landlord -who may exclude other from his lands- and the poor - who desperately needs the products of the lands owned by landlord to survive?

#### 1.2.4 *Needs and rights of the landless class?*

If God “gave the world in common to all mankind,” as Locke (II, 32) clearly states, then there must be a right of everyone in provisions of life so (s)he can survive.

This is at least what must be claimed to be logically consistent. Locke himself assents to this point and clarifies his opinions. By bidding “mankind to increase” Locke reasons, God has also refuted to make “them depend upon the will of a man for their subsistence” (I, 41)<sup>32</sup>.

Thus, the merciful and prudent God, for Locke, “hath not left one man so to the mercy of another”, and thereby ““has given his needy brother a right to the surplusage of his goods; so that ...no man could ever have a just power over the life of another by right of property in land or possessions; (I, 42).

Such claims were also against the alleged rights of (land-)owners over the life of others, that were previously declared by some scholars such as Filmer, in the *Patriarcha*. By referring to the case of Adam the Father, Locke reasons, it did not matter whether Adam was the “sole proprietor of the whole earth” or not,

The most specious thing to be said is, that he that is proprietor of the whole world, may deny all the rest of mankind food, and so at his pleasure starve them, if they will not acknowledge his sovereignty, and obey his will. (I, 41)<sup>33</sup>

Neither such a property nor such a right can ever be claimed as ‘legitimate’ for Locke who finds it contradictory to accept, on the one hand, that God commanded humankind to “increase and multiply” but to give, on the other, the landlord such an exclusive power and right over the landless rest that may easily starve in such a case

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<sup>31</sup> The importance of self-presentation in Locke’s reasoning and justifications has drawn the attention of some academics (see Harris, 1994, p.215; Tully 1994, p.147-54 and Ince, 2011, p.40)

<sup>32</sup> Such a right to provisions of life apparently appears in the works of “natural law” theorists, including Adam Smith (see Salter, 2012, p.564-5).

<sup>33</sup> Among all the Lockean literature that passage could be regarded not only to be the most radical one, but only maybe in which we find a declaration predating Cantillon’s remarks putting landlords at the centre stage of economic and social organisation. That point is emphasised by Dooley (2005, p.211, en.11) and Spengler as well, who says this “comment by Locke... may have suggested to Cantillon the significance of the role of the proprietors” (Spengler, 1965, p.127, fn. 59).

In order to eliminate all room that may appear for a hegemonic relations between the poor beggars and rich proprietor Locke even interpreted “the subjection of the needy beggar” to the wealthy proprietor as being based on the former’s consent. Such a subjection, for him, “began not from the possession of the lord, but the consent of the poor man, who preferred being his subject to starving ... [Landlord] can pretend to no more power over him [the beggar] than he has consented to, upon compact ....” (I, 43)

By implying such constraints upon the landowning class, Locke seem to show that a due following of God’s command to multiply requires the proprietor class to share with the landless masses when they are in desperate need, so their socio-political and economic power could never put the survival of the rest of the community at hazard. Put differently, if the landless cannot get their livelihood through the economic and social system, by their endeavours and work etc., then it must be directly shared with them. Thus, the right to “self-preservation” seems to be conceptualised as the most fundamental right, that limits the right of the owner class even on and with their own lands. This is at least what his text implies for me.

#### *1.2.5 Concluding Remarks*

Reflecting upon the work of Locke, it might be argued that he meticulously tries to establish a politico-economic reading of society that is based on the individual and his rights. The individual has a right to self-preservation so (s)he does not have to wait for a consent to be established before declaring his ownership in land (products). Individuals are drawn into society as equal members by their mutual needs. When they accept and abide by a power, either political or economic power, it is their consent that makes them abide; this is also the only way for the ruler to be a legitimate ruler. Even the possession of land and its consequences are analysed through consent and “the subjection” of the poor man to the wealthy proprietor are tied not to the possession of lands *per se*, but “the consent of poor man” (I, 43).

In this analysis we never find a reference to power relations, battles or conquests as legitimate means and factors shaping the political and economic spheres. Even the most unequal distribution of land among human beings are justified without disgracing and disregarding the natural law doctrines and the rights of the individual to live and possess. Money is therefore picked and identified by Locke as the mean and tool that open a legitimate and legal door for unequal distribution of lands: by giving a value to a piece of yellow metal, he argues, human beings have also given a *tacit* consent to the unequal distribution of lands among the members of the society.

Given the circumstances of his day, it can be argued that Locke tried to mitigate and challenge the role and hegemonic influence of the master class, the landlords and kings, over the rest of the society by such references to the undeniable rights of the individual, the primitive stages of the society and the role of consent of *equal* members of the society in the establishment of the first political entities. Thus, he tries to restrict, with references to the Scriptures, the power of landlord class over the rest by arguing that God “has given his needy [poor] brother a right to the surplusage of his [landlord’s] goods” (I, 43) and the landlord “can pretend to no more power over him [the poor] than he has consented to...”<sup>34</sup>. Thus, it would not be surprising to find this political philosophy to be widely used by the Whiggish tradition of the day that sought for flourishing and consolidating its power within the politico-economic landscape of the day,

In the next paragraphs I will try to clarify how Lord Bolingbroke challenged that Lockean individualistic perspective, which was subsequently used by Cantillon to establish a class-based reading of the economic order. It must also be noted Locke’s analysis starts from the hypothetical state of the nature where there were no social and political entity but only the individual, alongside his undeniable rights, consent and labour. He apparently never examines a) how the landless class obtain their life necessities in reality and in actual societies despite the unequal distribution of lands and b) how the landowner actually do use their hegemonic power in the socio-economic and political organisations. In fact, it will be also claimed that Cantillon’s class-based system may be read as a result of such queries, more specifically as the result of all the attempts made to find some explanations for such queries, ending in a re-interpretation of economic system that ascribe no independence to non-landed classes

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<sup>34</sup> These observations seem to be in line with his observation as to the right of people to their property. There Locke asks “how far has he [God] given it [land] to us?”. Nothing more than enough “to enjoy” and what his labour could bring to him, “whatever is beyond this, is more than his share, and belongs to others” (II, §31).

Some scholars such as Bell et al (2004, p.52) have already examined “[w]hy does Locke impose these constraints?” on landlords, whereas others such as Ince (2011) have studied the influence of population debates of the 17<sup>th</sup> century upon Locke’s reasoning. Even though such examinations could be nice to supply a more comprehensive background to Locke’s philosophy for the sake of space I am excluding this literature.



### 1.3 Lord Bolingbroke; family and force against Lockean individual and his natural rights

Henry Saint John, 1st Viscount Bolingbroke, (1678-1751) was a Tory-Jacobite politician and philosopher of the early 18th century. Entering parliament in 1701, he became by 1710 the northern secretary of state in Harley's newly established ministry. Too ambitious to remain as a secretary, he soon tried to replace Harley. To this end, he attempted to play a greater part not only in the parliament but also in the Treaty of Utrecht of 1713 and the Schism Act of 1714 (Britannica, Bolingbroke entry). Throughout his life he had good connections with Tory-Jacobite figures, and himself tried, albeit vainly, to be a figure in high position with a great power to influence both the parliament and crowds.

His influence on the politico-philosophical atmosphere of early 18th century Britain was so decisive that some scholars such as Benjamin Disraeli (1914, p.218-220) have called him the "Founder of Modern Toryism" who both eradicated its "absurd and odious doctrines" and established the new critique against the "Whig attempts to transform the English Constitution into an oligarchy". To Pocock (1975 [2013]), Lord Bolingbroke was one of the most "resonant" voices of "the Anglo-Atlantic equivalent" of the 'Machiavellian moment', adding "some positive complexities, in terms of economics and psychology" to that Machiavellian tradition (ibid, p. 477-8<sup>35</sup>), making him also one of the first persons to contemplate the great transformation the British society experienced in his day.

Leaving such intriguing details of his political life and influences aside, I may say something on his long-standing friendship with Cantillon before starting to analyse his political philosophy.

In fact, even in the absence of a proved friendship, the intimacy of both with the intellectuals<sup>36</sup> and vivid social atmosphere of the day would be enough for one to suspect a potential influence between Cantillon and Lord Bolingbroke. Luckily for our study, however, the historical records provide enough evidence for an intimacy between both. As established by Murphy, when Lord Bolingbroke escaped England upon the change in the throne in 1715, it was Richard Cantillon who became his banker in France. In this hasty exile, Lord Bolingbroke was in need of the protection of his wealth. Eventually he made some secret arrangements and managed, by using his estates as security, to get a loan of £20,000 from James Brydges. The bill of exchange ended in the hands of Cantillon and despite difficulties, Cantillon did his best to provide

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<sup>35</sup> See especially ch. XIII and XIV of this work. For a more refined work upon Lord Bolingbroke and political atmosphere of his day, see Kramnick (1992) and Hammersley (2010, ch. II) for a work trying to locate Bolingbroke in a debate "between the Ancients and the Moderns"

<sup>36</sup> Bolingbroke's circle for example was full of intellectuals including Swift, Voltaire and Pope who starts his *An Essay on Man* (1734), Epistle I, by mentioning Bolingbroke by name:

"Awake, my St. John! leave all meaner things  
To low ambition, and the pride of kings...."

Bolingbroke with the money required (Murphy, 1986, p.151-2). Whether their friendship starts here or not, this favour from Cantillon paved a strong personal friendship and partnership between both that lasted through decades up until Cantillon's death in 1734. Even then, when Cantillon's body burned in his own house at the Albemarle Street, London in 1734, Bolingbroke was one of his neighbours on the same street (Murphy, *ibid*),

Demonstrating thus, by relying on Murphy's account, the intimate connection between the two men, I may pass to Bolingbroke's class-based critique of Lockean individualistic philosophy, which became in the hands of Cantillon a useful tool to analyse economic organisation and market.

### *1.3.1 Bolingbroke's anti-Lockean political philosophy*

In this section I attempt to show how Bolingbroke's political philosophy diverges, in fact confronts, the Lockean one, along the lines suggested by Kramnick (1992) and Giacomini (1994).

Unlike Locke, Bolingbroke identifies family, not the individual, as the unit of political entity<sup>37</sup>. "Individuality" he claims, "belongs to communities not to persons. Families might be conceived as individuals, though not men, in the state of nature" (Bolingbroke, 1967, vol 4, p.187). It is only in society, he says, that we may speak of individuals; "Men were never out of society; for if they were divided into families before they were assembled into nations, they were in society still from their original" (p.184), implying there were no individual without a family to which s/he belongs.

Although there may appear some conflicts between the members of the family, he further reasons, paternal authority was always ready to intervene for preventing or resolving conflict. The paternal authority, Bolingbroke nonetheless warns, is different from "royal fatherhood of that ridiculous writer Filmer" (vol 4, p.187). It is not a God-given authority above the society, but only a paternal authority of an old member to which obey the members of the same family in a deliberate and consentaneous manner.

Nevertheless, when societies grow in size and families forget their common ancestors, he claims, they also turn hostile towards one another. At this stage we can no longer speak of paternal government since there remain no 'parent' who can claim fatherhood for all the families. It is exactly at this point, for Bolingbroke, that human being levels up from the natural

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<sup>37</sup> A somewhat similar sentiment could be found in earlier literature too. John Evelyn, for example, likened so early 1648 a family to a political entity:

For even Private Families, the Husband & Wife, being the first Politiq & Society in the World. Are the seminars both of Church and State, a Compendium of absolute monarchy and the best of Governments... (quoted in Willes, 2017, p.82)

state to the political state; “as fast as the distribution, and as paternal government ceased, men went out of a natural into political state” (ibid,p.187). Hereafter start the political state and political entities alongside wars and conquests between political families/actors.

Once human beings reached this point, he reasons, the paternal authority could not maintain “peace and good order in societies” which were no longer composed of a few from the same family, but had more numerous members that were “heterogeneous ...[and] unconnected by consanguinity” (ibid,p.189). The members of such a society, he assures, “incorporated rather by art or by force, than by nature”, meaning force and conquest was the main motive keeping them under the same authority. To keep peace among them, “it became necessary to establish a power superior to that of the fathers of families”. Thus, in that artificial or political state human beings, for him, the authority of power gave way first to an aristocratic and then a to a monarchical authority (ibid,p.190). Thus, the “union of independent families” that gave rise “to civil societies” (ibid, p.187) must end first in aristocracy and then monarchy.

The mechanism and implication of Bolingbroke’s observations were completely against those of Locke. In Locke, it might be said, people living “in a state of natural freedom and natural equality” give consent to a civil government demonstrating itself in a “democratic form”. In the latter, however, “the very reverse of this seems probable ... The fathers of families, who could not all be kings upon this change, would have preferred aristocracy to democracy, and the multitude would have preferred monarchy to both” (vol IV, p.190)

To stress the differences in political implications of Locke and Bolingbroke, I may refer to Kramnick (1992, 98) who states that “Locke's political thought became the ideology of a middle-class individualism stressed individual freedom, self-interest, and competition as positive social values” whereas “Bolingbroke's political thought ... [was] the ideology of a family-centred aristocracy and gentry”. Indeed, taking a step further and adding Filmer into perspective, I may even say that Locke seems to idealize and ideologize individual and his rights, Filmer the absolute monarch and his God-given rights and Lord Bolingbroke the gentry class, or ‘gentry family’ and their right to rule (see especially ibid, vol.4, p.99 and 187<sup>38</sup>). Thus, Lord Bolingbroke seems to eradicate, on the one hand, the extremities of Filmer seeing the right to rule as a hereditary right going back to the Adam the Father, whereas, on the other, refuting individualistic perspective of Locke in order to open room for the right of gentry class to rule the nation.

His critique of the *state of nature* assumption<sup>39</sup>, and locating the family against individual as the most legitimate unit of the society could be seen not only as his refutation of Lockean

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<sup>38</sup> Unless otherwise told, the quotes are from the fourth volume of “*The Works of Lord Bolingbroke*” that is edited by Henry G Bohn (reprinted in 1967).

<sup>39</sup> The hypothetical “state of nature” doctrine of Locke could persuaded indeed neither Tories/Jacobites, nor some of the leading Whigs such as Lord Shaftesbury, whose once physician was John Locke. With arguably

political philosophy but of rising power of non-aristocratic persons, such as moneyed men and ministers etc.

Bolingbroke, it may thus be argued, was the most ardent voice refuting the new system in which a centralised government worked hand in hand with “business, commerce, paper money, the stock market, banks, and appointed administrators” (Sheldon, 2001, p.36). In short, Bolingbroke was refuting what Romani (2002, p.162) called “the oligarchic Parliament” that “controlled politics (more or less effectively)” by maintaining good relations with commercial and financial interest groups. As member of the gentry class and a Jacobite, Bolingbroke opposed, arguably from “a nostalgic ‘rural gentry’ perspective”, the rising power of commercial, banking and financial interests in politics, making the British parliament, in his eyes, an oligarchic parliament (Sheldon, 2001, p.36<sup>40</sup>). In his refutation of this system, he returned to classical republican ideas (Pocock 1975, and 1983, Hammersley, 2010) that pinpointed gentry class and aristocratic families as the main units of a virtuous political system. That being so, he seems to criticise the socio-political and economic transformations of his day from a rural and classical republican political perspective in which the landed class is identified not only as the main force behind the political movements in the history, but also as the most necessary element of a good government and right socio-political order.

In the rest of the chapter, I will assess how Cantillon seems to utilise a similar country perspective to examine the economic organisation and why it may be considered also as a politico-ideological reading of economic sphere, despite all the scientific methods and merits behind it.

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Hobbes and Locke in mind, Shaftesbury derided the doctrine in *Characteristics*; “The learned have such a fancy for this notion, and love to talk of this imaginary state of nature.” (quoted in Kramnick, 1992, p.89). To Shaftesbury men had a natural inclination to society which was stemming from them seeking for and getting pleasure from communal wellbeing, which was apparently a medieval/Aristotelian formulation of human nature that considers human beings as social animals.

<sup>40</sup> That perspective later becomes the prevailing opposition among romantic Tories including Edmund Burke

#### 1.4 *Richard Cantillon and the Essai*

In the preceding sections, I have tried to compare and contrast the individualistic political perspective of Locke with the family- and class-based perspective of Bolingbroke. Having noted the friendship and partnership between Bolingbroke and Cantillon, I would like to extend the debate in the coming paragraphs to examine how Cantillon uses Bolingbroke's class perspective in his analysis of the socio-economic organization.

##### 1.4.1 *How lands were first 'owned' and the societies settled*

From the beginning the *Essai* onward a different theory of property and society appears to that of Locke. Just in the second chapter, he identifies the force and conquest to be main reason behind land ownership;

It does not appear that Providence has given the Right of the Possession of Land to one Man preferably to another: the most ancient titles are founded on Violence and Conquest. (H77)

Without entering into any hypothetical or speculative explanation as to the nature of human beings or societies he apparently identifies conquest as the foundation head of land ownership. Likewise, without any speculation regarding why human beings establish society, or what were the alleged natural laws setting their rights, Cantillon takes arguably the most positive standpoint when he makes the allegedly objective statement that "it would always be necessary to fall back upon a law to settle Ownership in order to establish a Society, whether the law rested upon Force or upon Policy" (H18)<sup>41</sup>. Additionally, the "laws" of nations are for Cantillon nothing but the ones "established in consequence of such conquests", implying that the laws of nations themselves are not made in light of the alleged natural laws or the ones propagated in Holy books, but in a way reflecting the consent of the conquerors (D77). Consent and laws of societies, so to speak, reflect not that of humanity, Prudent Nature or God, but of conquerors and the powerful (landlords).

Hence, Cantillon's opinions as to land ownership and laws appear to be in direct conflict with those of Locke. In Locke, conquerors of unjust wars "have no title to the subjection and obedience of the conquered", nor "a title to the land of that country" (*Two Treatises*, II,192) and even when the war is assumed to be 'just', for Locke, "without a man's own consent, ... [lands] cannot be taken from him". (II, 193).

Cantillon's assessments as to landownership seems to be in strong agreement with Bolingbroke. Nevertheless, with respect to laws Cantillon seems to have some original insights that must be highlighted. Unlike Lord Bolingbroke, who occasionally refers to natural law

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<sup>41</sup> Moreover, the society should adjust themselves to the size and fertility of land stocks (H20)

doctrines in his works and tries to reconcile this perspective with a force and conquest perspective, in Cantillon there appears no references to the “natural law” doctrine. If there is any law that predates all others, it could only be the one fixing land ownership written by the conquest landowners. More specifically, as human beings cannot live without a direct connection with lands and societies could not be established without a law regulating land ownership, the first laws could only be the one regarding land ownership. Those laws, either written or oral, are the laws of conquerors in the final analysis, making the conqueror landowners also the first lawmakers or legislators of humanity<sup>42</sup>.

Upon conquest or discoveries of new lands, Cantillon continues, the land stock is distributed among members of families and society by their leaders. In relatively primitive or less settled societies, “their Leader should fix the boundaries of each Head of a Family and the Quarters of an Individual around the Camp”, whereas in “more settled Societies”, including France of the day, there is, generally speaking, three ways of land ownership occurring upon the conquest of new lands; “the head of an Army”, may, firstly, “distribute the Lands among Officers or Favourites according to their Merit or his Pleasure” or, secondly, “reserve to himself the ownership of lands and employ his Officers or Favourites to cultivate it” or, lastly, can provide lands to “them on condition that they pay for it an annual Quit Rent or Due” (H, pr. 10).

Even when lands are equally shared by a Prince “among all the Inhabitants”, as historically seen in the establishment of Rome, Cantillon assures, over time the owners “will be few in number in proportion to all the Inhabitants” (H10) due to some facts such as variances in family sizes, meaning smaller pieces for each child, sickness, or personal tendencies to work or laziness etc. It may be noted that, whereas in Locke labour and industry is the only cause behind land ownership in Cantillon, it is just a factor among many, so should not be overemphasised in examining the distribution of lands among members (H11).

In conclusion, Cantillon assures, “which way soever a Society of Men is formed the ownership of the Land they inhabit will necessarily belong to a small number among them” (H8). Such a claim however implies that lands always concentrate in hands a tiny population, which implies a binary division of the society among its landed and non-landed members. That reading will consist the backbone of the next section in which I will further highlight how Cantillon utilise this binary division of the society to analyse the economic organisation.

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<sup>42</sup> In a recent article upon *natural law*, Arshadnejad (2021, p.1) claims that it is the “dictum” that “no law can violate natural law” which “laid the foundation for republicanism in the West” in its struggle against the tranny. Form such a perspective, it may even be claimed that in Cantillon we do not encounter with such an idealisation of republicanism that is present both in Locke and Bolingbroke. It is so because, there is basically no natural law in Cantillon that is beyond the powers of conquerors by which even the conquerors abide. This is arguably why Murphy (1986, p.279) describes Cantillon’s perspective as “Hobbesian”.

#### 1.4.2 *Two different classes: landowners and the rest*

“Economists, of course,” says Schumpeter, “always had some schema of the class structure of society at the back of their minds”. Nevertheless, he continues, “Cantillon seems ... to have been the first to construct such a schema explicitly and to use it as a tool of analysis” (Schumpeter 1954, p.230). For him, even the tripartite structure of Quesnay and Physiocrats<sup>43</sup>, has its roots in Cantillon. Economists and historians evaluating Cantillon’s class structure seem to share Schumpeter’s tripartite division to a surprising extent. For Aspromourgos (1989, p.375), for example, his class analysis “deploys a notion of three distinct social classes” demonstrates itself in forms of farm landlords, farmers and labourers, whereas for his student, Alex Thomas (2012, p.93), that division classifies “inhabitants into (1) proprietors, nobles and landowners, (2) entrepreneurs, and (3) hired workers”.

Such interpretations seem to be made under the influence of classical political economy identifying three different economic classes in the society. Instead, I argue, Cantillon’s class structure suggest that there are only two classes; the landowner minority and the landless majority<sup>44</sup>.

The landless classes, i.e., all those members of society who possess no land, can be divided further into classes of wage-earners or entrepreneurs (or even financiers/moneyed men as we will later see). This, however, does not mean that the entrepreneurs or capitalists constitute completely different economic classes in Cantillon’s analysis, as we shall see. They may diverge from wage-earners by carrying out riskier activities or having some capital stock to get their livelihood by. In the final analysis, however, there are two point that prevent us to consider them as an independent class; firstly, they are in need of expenditure from the landed class, and secondly, their alleged independence, even for the wealthiest of them, could only be for the short term. Taking a long-term perspective, this group is not so different from wage-earners who have no or limited independence, with the exception of carrying out the riskier occupation. Thus even though “all the Undertakers are ... on unfixed wages and the others on wages fixed” (H131), still the difference between them and the wage-earner is not so crucial as it may appear from today: rather than being conceptualised as a different entity in the class

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<sup>43</sup> Physiocratic classifications of the society were apparently based on sterility-productivity dichotomy of their value approach. They were “productive class”, agricultural labour, “sterile class” non-agricultural labour, and landowners, the owner of net surplus (Meek, 2003 [1962], p.20). In that respect the criterion of Cantillon seems different to the criterion of the Physiocrats

<sup>44</sup> After Cantillon, some scholars also divided society into two classes of landowners and landless groups. Among them may be named Condillac (1715-1780), who did not only divide economic actors like Cantillon into two classes, but also “followed Cantillon”, as Spengler states, “much more closely than physiocrats” in his “treatment of the causes and consequences of population growth” (Spengler, 1965, p.136). Likewise, Germain Garnier (1754-1821) conceptualised the society to be consisted of two classes, land proprietors and the non-landed population (Spengler, 1965, p.152).

structure the entrepreneurs as well seem to be seen as a servant class working in the market set by the landlords to get some share of their wealth, like other servants, the wage-earners. In the coming sections I will examine in more details how Cantillon refutes the alleged independence and why I think that implies a bi-partite class structure.

A due analysis of the subject, however, requires us to examine how Cantillon finalized a research question Locke left untouched; the channels or means by which the landless class get their daily needs supplied, despite the unequal distribution of land stocks. That examination also requires one to consider the question why he saw the economy through binary lenses of land ownership and why the non-landed groups, including labourers, farmers, entrepreneurs and financiers were, for him, at the mercy of landowner class.

#### *1.4.2.1 Non-propertyied class and the necessities of life*

To Locke, God's command for humanity to multiply and the right to self-preservation and maintenance prevent landlords from exercising any hegemonic power on landless masses, arguably beyond their consent. That statements, however, seems hypothetical and normative, rather than an actual investigation as to how the society is in fact organised or more vitally, how the landless classes can get their provisions in actual circumstances and why or in which manner landlords share the products of their lands with the landless classes.

Cantillon's explanations as to these points, which appears in the chapter XII of the first book seem less hypothetical and locate landlords at the centre of the analysis.

Cantillon accepts the fact that landlords, generally speaking, prefer their lands to be cultivated since otherwise they "would be useless to them if it were not cultivated" (H, pr.115). This remark implies also that it is neither benevolence, nor prudence of nature, nor God's commands but the mutual necessity which forces landlords to share necessities produced by their land with the rest of the society. Nevertheless, such a necessity does not stop him from locating landlords as the key actors. If lands be left and are not cultivated by the "the Prince and Proprietors of Land", he affirms, "it is clear that there would be neither Food nor Rayment for any of the Inhabitants", That point leads Cantillon to his main conclusion that non-propertyied groups survive only "at the Expense of these same Owners from whose property they derive all that they have" (H, pr. 108). In other words, the landless class could survive and multiply only if landlords prefer their lands to be cultivated and their products to be shared with these groups. When landowners prefer not to do so, it seems unavoidable to Cantillon an immediate death for all members of the society who do not have any piece of land.

That being so, the living standards of the non-landed groups are also tied to the decisions of landowners. "If we examine the Means by which an Inhabitant is supported it will always



appear in returning back to the Fountain-Head, that these Means arise from the Land of the Proprietor" (H, pr. 112). Thus, landlords, who are the sole owners of the "Foundation-Head", i.e. lands, are people who determine whether or to what extent these means could end in the hand of landless class, As a result, all inhabitants of a society, Cantillon claims, live "according to the way in which he [landlord] wishes to maintain them" (pr. 139). Therefore, both the existence and standards of the lives of non-proprietary groups is tied by Cantillon to the preferences of landowners.

At first sight, it may be seen that Cantillon considers the case of an isolated state which is not applicable to the dynamics of the open economy. Indeed, Cantillon's *Essai* has the great merit of drawing a clear separation between a commanded or closed economy where the landlord directly commands the production and distribution and open economy in which the economic organisation, alongside the production and distribution, takes place through markets and the price mechanism. For Murphy (1986, p.17), for example, Book I depicts the old feudal, closed and commanded economy whereas the rest an open market-oriented economy.

Thornton (2009, p.38-9), by relying on this differentiation, regards Cantillon as a potential source of Adam Smith's invisible hand. For him Adam Smith's invisible hand analogy "took Cantillon's point of logic and observation ... to make the moral point that there is natural distribution of goods in society that is fair in some sense, despite the unfair distribution of land ownership". Thus, to him, Cantillon was searching how, "despite the unfair distribution of land ownership", all members of the society in one or another way obtain provisions (ibid, p.38-9). One may agree with him that one of the research questions of the *Essai* seems to be how and in which manner could an economic organisation enable all the landless people to get the provisions of life despite the uneven distribution of lands across its members.

A further look at the *Essai*, however, gives the impression that in the open/market economy as well they are still landlords who set the market dynamics and the mode of living of landless classes:

If all the Landowners of a State cultivated their own estates they would use them to produce what they want; and as the variations of demand are chiefly caused by their [landlords'] mode of living the prices which they offer in the Market decide the Farmers to all the changes which they make in the employment and use of the Land. (H145)

Despite being in an indirect way through the market and price mechanisms, it is apparently still the landlord class that sets the dynamics in the economy to which the landless class should respond, making them the responsive class of the market rather than being active market-

setters<sup>45</sup>, implying non-independence of landless classes, which will be the subject of the next section.

### 1.4.3 *Two different facets of the same (market) economy*

The division of the society into two fundamentally different categories of landlords and landless class has consequences for Cantillon's examination of the working of the economy.

The *Essai*, Cantillon acknowledges, "endeavour[s] to make [it] clear" that the landlords are the only people "who have the disposition and the direction of the Landed capital, to give the most advantageous turn and movement to the whole" and that "everything in a State depends on the Fancy, Methods, and Fashions of life of the Proprietors of Land in especial" (H115). The market thus seems to be conceptualised as a platform in which the "Fancy, Methods, and Fashions" of the propertied class materialise themselves through indirect means rather than the direct commands of old times.

Therefore, the non-landed class are being conceptualised as a respondent class endeavouring to survive and prosper in a market set by and reflecting of the preferences and fancies of the landlord class. To survive, they must, find a way of selling their labour and the products of their labour, either directly or indirectly, to a landlord.

Additionally, unlike the landlord class, this class has no power on the market, or at best a negligible one. They act due to necessity, rather than any form of preference. Instead of being deliberate or arbitrary choices, their actions could be best regarded as a result of urgent needs. "It is need and necessity" Cantillon says,

"which enable Farmers, Mechanicks of every kind, Merchants, Officers, Soldiers, Sailors, Domestic Servants and all the other Classes who work or are employed in the State, to exist... (H117<sup>46</sup>)

It is "only from necessity" Cantillon continues, any member of these groups can "change their mode of living" (H143). Thus, not only the preferences but even the mode of living of the landless class seems to be relatively fixed in a way difficult to transform unless there be another necessity (arguably from landlord class) that forces them to change.

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<sup>45</sup> The landless class could manage to get their life necessities and provisions, but it was not due to the prudence of nature, invisible hand of God, benevolence of the market or conscience of the humanity but thanks to the gentry class who consent to share the products of their lands with the rest.

<sup>46</sup> The landlord indeed does not have to enter society at all to survive. In other words, he can supply both himself and his family with subsistence without entering the society and interacting with anyone else, except his family. Thus the landlord class can survive alongside their family without selling either labour or land product to anyone else, which is arguably why Cantillon regard it as the only independent class. All the rest, however, should enter society, interact and transact with others, sell their labour or commodities and serve in a market reflecting the demand patterns of the landlord class, including the Prince. Hence, it may be argued, unlike Locke who thinks people establish societies due to physical and materialistic needs, landlords' entrance into society seems to motivated by other motives beyond sheer need for materialistic needs.

So, even when they amass some wealth that allows them to change their consumption not out of necessity but preferences, Cantillon's statements implies, their consumption patterns imitate that of landlords. Therefore, rather than challenging the consumption patterns of landlords, their demand patterns could only accelerate the effect and influence of the landlord class. Therefore, the purchasing power of this group that act due to need and necessity alongside the potential influence of their demand pattern on the socio-economic organisation of the economy seems to be of a negligible nature for Cantillon<sup>47</sup>.

Put differently, whether they are living under feudal constraints or in market society, the landless class are economically dependent to the landlord class. It is only a change in landlords' demand that could trigger a real and sustainable change both in the economic organisation in general and the lifestyles and occupations of the landless classes in specific.

A due examination of the importance of demand from landlords, however, requires us to look more closely at Cantillon's remarks about the (non-)independence of landless classes. Thus, in the rest of the chapter I will assess Cantillon's handling of the subject and the arguments he put forward to refute the independence of non-landed groups.

#### *1.4.3.1 Independence of landed and non-landed groups in the *Essai**

The passages of the *Essai* with respect to the independence of the landowners are often quoted. In these passages Cantillon discusses whether the labourers, entrepreneurs and the financial class could be considered independent or whether such a title is exclusive to landlords. His answer could not be more explicit. He unequivocally declares that "all the Inhabitants of a State derive their living and their advantages from the property of the Landowners and are dependent" (H131<sup>48</sup>), allowing him to write that;

I will then lay it down as a principle that the Proprietors of Land alone are naturally independent in a State: that all the other Classes are dependent whether Undertakers or hired" (H137).

Such a claim put a qualitative difference between landlords and the rest, and arguably between land and other sources of income. That means if all economic and commercial stock or capital of a nation, or production factors of humanity, may be (re-)categorised under the five classes of land, labour, entrepreneurial ability, commodity/capital stock and money *per se*, it can further be argued that the *Essai* is an attempt to prove that among all these form of capital-

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<sup>47</sup> Even in the modern times the consumption patterns of the societies seem to be still shaped by a wealthy few. Thus "while the affluent consumption is the privilege of only a small percentage of the population," as Peterson says (2003, p.144) "it shapes the choices (and valorisation) of those without affluence"

<sup>48</sup> Such sentiments could be found both in Physiocrats and non-Physiocrats such as Benjamin Franklin, who declared agriculture as "the most honorable, because the most independent, of all professions" (quoted in Albertone, 2014, p.39).

stock/production-factors it is only land(ed capital) that deserves to be called sustainably independent, and landlords, as the owners of this form of capital, are the only independent class in the society. Hence, even though Cantillon may not be the only, nor the first, economist refuting to ascribe any (long-term) independence to the independence of the non-landed classes, he seems to be the economist who has done this in the most systematic way. Nonetheless it must be asked and examined first the question ‘what does independence mean in the context of early 18th century in which the *Essai* was written?’

Research into the background of the term gives the impression that the term has socio-political connotations as well, alongside its economic implications. One may even argue that the term independence then had a predominantly socio-political connotation, gaining its main sense only when it is examined against the socio-political background then prevailing then in pre-modern Europe and England. “A remarkable network of dependence” as Blum (1982, p.34) puts forward, “held European society for a thousand of years” until early modern times. In this “network ... of a hierarchical structure ... each order was dependent upon and deferential to the orders above it in the hierarchy”<sup>49</sup>. Likewise, Richard G. Wilson (2002, p.158) sets in the opening sentences of his article on “The Landed Elite” a task for the historians related to our debate; “[t]he basic task of the historian of landownership in eighteenth-century Britain”, Wilson states “is to explain how, in an economy increasingly driven by industrial and commercial forces, the landed classes retained their traditional influence”. Whatever the reasons behind this phenomenon, the landlord class then managed to keep its traditional economic and political power and influences. Thought against this background Cantillon’s examination of dependence among the members of the society apparently gains more sense. Thus, the *Essai* seems to uncover and further scrutinise the economic facet of the socio-political dependency among the landlords, the old masters and the rest, by particularly focusing on the problem how and in which ways the “orders” of upper classes shape the market, economy, income and living standards of the landless rest. In the rest of this chapter, I will look in detail how Cantillon depicts that dependency between the master landlords and the landless rest and how he grounds his claims.

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<sup>49</sup> “The question can be put another way” Blum states by extending the time frame in question a little: “Did their [landlords’] political authority, their social and cultural embrace of Britain’s industrial and financial leaders, create a brake on Britain’s early economic supremacy? Was the world’s first industrial nation forced to carry the weight of a traditional seigneurial class?”

### *Non-independence of working class and employment levels<sup>50</sup>*

In comparison to other classes, it is arguably far easier to consider the dependency between the working classes and the job-givers, the ones who demand their labour force. It is so mainly because the working class can barely survive for a certain time without finding someone demanding his/her labour.

Indeed, the necessity is so desperate for the working class that some scholars, both before or after Cantillon, referred the job-givers as the masters of the working class, likening the worker to a servant working for his own master which is a feudal terminology.

Adam Smith, for example, by raising the necessity as a crucial factor elucidating the actions in the market argues that

Many workmen could not subsist a week, few could subsist a month, and scarce any a year without employment. In the long-run the workman may be as necessary to his master as his master is to him; but the necessity is not so immediate. (WoN, I, viii, pr.12, p.84)

He even adds that “the poor ... *in order to obtain food, exert themselves to gratify those fancies of the rich*, and to obtain it more certainly, they compete one with another in the cheapness and perfection of their work” (WoN, I.xi.b, pr.7, italics added).

It is not necessary to mention at this point that Smith’s terminology, preferring the term ‘master’ over the ‘employer’ or ‘job-giver’, resembles feudal times and terminology, giving a strong inclination that Smith himself occasionally comes closer to a reading of market economy through hegemonic relations.

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<sup>50</sup> Indeed, even the existence of a working class may be attributed to landlord decisions as some modern scholars do. In a way supporting but arguably exceeding Cantillon’s assessments, these scholars identify the gentry class also as the key factor behind the existence of what is called as a working class, and thereby the great transformation from feudalism to capitalism. Through a series of acts, for example Joseph R. Stromberg (1995) claims the “large landowners” eventually turned England into “a classic land of great, well-kept estates with a small marginal peasantry and a large class of rural wage labourers.”

Among all the scholars, however, Rober Brenner requires as specific attention. In his discussions with other Marxists over the 1970s he identified landlords as the main force behind both existence of waged labour, transformation to capitalism and changes in political system. Putting in his words,

“... capitalism in England developed within a landlord shell. ... Landlord capitalists, who had in a sense already emerged as the ruling class on the basis of their control over the economy’s surplus, but who still did not entirely dominate the state, were the ones most threatened by the absolutist offensive. So, the capitalist aristocracy provided the fundamental social base for the anti-absolutist revolutions of 1640 and 1688, which definitively overthrew the old order. (Brenner and Harman, 2006)

Brenner’s reading suggests that it is the new form of landlords and their desire to rule the state, more than anything or anyone else, that had caused the great transformation from feudalism to capitalism. The reader can easily perceive where this reading converges to Cantillon; if there appeared a transformation it could only be due to the fact that landlord class picked a form of organization, capitalist organization, over the another, feudal organization, whereas the great socio-political and economic transformation can come only from and by the gentry class. (See also a recent doctoral thesis by Rhodes, 2019, for a work taking a “farmer-centred” methodology to analyze the development of agrarian capitalism in 18<sup>th</sup>- and 19<sup>th</sup>-century England)

Cantillon himself seems to share a similar view in his stress that it is the demand and fancies of master class that encourage or discourage different forms of occupations, making the work opportunities and employment level, for both workers and entrepreneur classes, as factors tied to the preferences of landlords. “It is always the inspiration of the Proprietors of Land”, Cantillon states, “which encourages or discourages the different occupations of the People and the different kinds of Labour which they invent” (H196). “The Labourers, Handicraftsmen and others who gain their living by work,” Cantillon further claims “must proportion themselves in number to the employment and demand for them in Market Towns and Cities” (H58, see also H155).

Upon closer consideration, however, despite such similarities, his analysis nevertheless diverges from that of Smith crucially on a few points. Firstly, his master class is a more well-defined class: the gentry class. Secondly, he does not confine the master servant dialectic to the specific situation of the job-giver and his workers. More generally, even manufacturers, farmers and other undertakers are conceptualised as people working for the master landlord class. Thus, we may say his perspective is far more extensive than that of Smith. Thirdly, unlike Smith who thinks there is a mutual relation and need between master and servant classes in the long run, Cantillon seems to assume only one master class in the long run: the gentry class (Smith’s observations are quoted above. For Cantillon see most specifically, H137, and also below for further examination of the subject.)

That makes him arguably the first person to analyse the economic organisation through the hegemonic relations between a propertied class of masters, the gentry, and the rest in which all the landless multitudes seem to be conceptualised as non-independent servants, being in strong need of appealing to the desires and fancies of the same class, who are stimulated in a market created by their aristocrat masters<sup>51</sup>.

### *The (non-)independence of commercial/entrepreneurial classes*

Cantillon is generally considered as the economist bringing the concepts of the risk and the entrepreneur into economic discussion in a competent way, making him, allegedly, the first economist contemplating the great transformation from the feudal economy in which there is barely any risk-taking entrepreneurial activity to the market economy where the entrepreneur class becomes arguably the main actor shaping the economy.

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<sup>51</sup> Similar sentiments to that of Cantillon could in fact be found in the 18<sup>th</sup> century literature, being generally in political context though. In his *Estimate of the Manners and Principles of the Times* (1757), John Brown, for example, likened “multitude” of landless classes to “a lifeless Ball sleeping in the Canon” waiting to be fired by the aristocracy (quoted in Romani, 2002, p.161, italics original). According to Romani (ibid) Brown’s comments were a “blend of Bolingbroke and Montesquieu”, arguably implying the role of Bolingbroke upon the development of Cantillon’s ideas that puts the aristocracy as a stimulating factor in total economic activity.

If we look at the details, according to Murphy (1986, p.17), Book I of the *Essai* depicts “the old feudal landlord world that Cantillon born into”, whereas Books II and III depict “the new banking world he [Cantillon] was forced to adopt when he migrated”. Thus, Book I becomes a book inspired by the aristocratic background of his family in Ireland and book II and III by his personal life in commercial and financial centres of the age, including London, Paris and probably Amsterdam among others.

Moreover, for Murphy (1986, p. 253–254) there is a “contrast” in Cantillon’s *Essai* “between a centralized command economy and a competitive market economy”: in the first, the landlord is “the sole decision-maker, communicating his decisions to the work-force via the intermediation of the overseers”, whereas in the market economy “... the entrepreneur is at the centre of the production and exchange process.”

A similar view to Murphy is shared by Rothbard (1995, p.351–352) who thinks that in Cantillon entrepreneurs are the main group enforcing equilibrium points, that is final output level and prices etc.

Unlike them, however, the entrepreneur of the *Essai* appears more as a passive respondent to market responding the demand preferences by landlords. Thus, rather than being the person making the critical decisions or actively enforcing the final level of output, employment, price levels or land allocations, Cantillon’s entrepreneur occurs as a person responding to the demand patterns of landlords and could at best be the one who manage to increase his wealth by following the patterns. Rather than dictating development, advancing living standards or shaping the market, as claimed in the literature on Cantillon (Murphy, 1986, p.253-4: Rothbard, 1995, p.351-2), the entrepreneur class of Cantillon seems mainly as a secondary class of servants working in the market created by landowners. They diverge from the wage-earners only in the way they get their income: unlike fixed income wage-earners this group gets more riskier occupations, making them live on unfixed incomes.

The responsive, rather than active, character of the Cantillon’s entrepreneur appears in the absence of technological improvements and advancement in the *Essai*. Indeed, Cantillon’s text seems to depict a relatively static society in which the advancements and technological developments barely had any great impacts. Still, the absence of any in-depth analysis of the technical aspects, alongside improvements and advancements in production do not have to be directly categorised as a sheer necessity of the day or the society in which Cantillon lived. Given the great pursuits by Petty and Hartlib circle and other economists after them who meticulously endeavoured to advance the production technologies both in manufactural and agricultural settlements, the lack of technological development and their allegedly influence on socio-economic organisation may be treated as a deliberate choice given the general framework Cantillon endeavours to establish: if the entrepreneur had been conceptualised as

a person somehow responsible of market transformation by initiating innovations and developments, this would have put his conclusion seeing landlords as the only class that can both transform market society at great risk.

A comparison with Schumpeterian entrepreneur would be helpful here. Unlike the Schumpeterian entrepreneur who is responsible for the creative destruction or destructive entrepreneurial activities transforming the long run socio-economic perspective, Cantillon's entrepreneur seems to be conceptualised by no means as a challenging, transforming or upsetting factor to the old social system as being a person endeavouring for his day-to-day needs/incomes.

Indeed, such a concept of entrepreneur occurs to me also why we also do not encounter a well-developed analysis of profit in Cantillon's *Essai*. If the difference had been so great, and Cantillon had made, as literature allegedly claim, a tripartite division of society according to the sources of income, we would then expect and find a more meticulous and in-depth analysis of profit in the *Essai*<sup>52</sup>.

In Cantillon, despite the variance in their occupation, the size and wealth of entrepreneur class as well is tied, like that of working class, to the demand from landlords. In the nations where, he says,

“the Nobility of the State live economically and buy at first hand so far as they can, ... they diminish the profits and numbers of the Undertakers in the State and therefore of Borrowers as well as the rate of interest, because this class of Undertakers working on their own capital borrow the least they can, and contenting themselves with small profits prevent those who have no capital from embarking in these enterprises on borrowed money.” (H 470)

Additionally, in the nations, such as “Germany, Poland, France, Spain, England”, he continues, “the easiness and expense of Noblemen and Landowners always keep the Undertakers and Master Craftsmen of the country accustomed to large profits enabling them to pay a high rate of interest”, making profit rates a derivate, in his view, of expenses of landlords (ibid). The reasoning appearing in these passages arguably makes entrepreneurs dependent on landlords and their consumption patterns. This form of profit, that is based on the expenditure, is apparently different to the more modern concepts of profit, like that of classical school, which has its root in production and improvements<sup>53</sup>.

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<sup>52</sup> For “some scholars capital does not enter into story at all” (Brewer, 1998b, p.494), giving us a good claim to refute the alleged tripartite division. Nevertheless, the literature and opinions upon Cantillon's treatment of capitalist profits are diverging. For the absence of any distinct notion of capital and profit in Cantillon's thought, see also Brems (1978); Aspromourgos (1989, 1996, p. 116–123). For a different perspective see Prendergast (1991) and van den Berg (2014).

<sup>53</sup> Cantillon concept of profit may be regarded as monetary analysis of profit, whereas of classical economy the real analysis of profit. A due examination of that claim, however, requires another paper



Demonstrating thus why Cantillon's entrepreneurs, rather than being a promisingly disruptive members of the society, are conceptualised as people seeking for their daily income through riskier but peaceful activities, I will pass to the discussion as to the case of financial classes and their alleged non-independence.

Indeed, a review of *Essai* suggests that unlike the modern accounts highlighting mainly the 'entrepreneur' of the *Essai*, Cantillon seems to be concerned more with the financial sector and their alleged potential for transforming or upending the old socio-political system. One may even argue that the financial class, that had greatly consolidated its power in the early decades of the 18<sup>th</sup> century, is the main class whose independence Cantillon intended to refute.

Given the fact that he himself was a banker who managed to amass a great fortune from financial activities and speculations, such a refutation may seem strange or paradoxical. This is exactly what has been questioned by some scholars like Berdell (2009, p.234) who asks "how this 'aristocratic' attitude remained alive within the heart of a fantastically successful financier and active trader of commodities ranging from copper to wine." However, it may also be claimed that as a competent economist and financial speculator searching for the actual sources of his income/fortune, Cantillon managed to follow the sources up until their "fountain-head", resulting in a negation of financial independence. Thus, I will show that there does not have to be a logical inconsistency between his professional occupation and theoretical views.

### *Non-independence of Financial Classes*

Cantillon's assessment as to the case of financial class, or moneyed men as they were called in early 18<sup>th</sup> century England, starts with a reluctant acceptance of independence of these groups. "It is true" he says, "that if some person on high wages or some large undertaker has saved capital or wealth . . . he may be justly considered independent" (H132). The same person who saves a capital or money stock, he further elaborates,

may dispose of it to acquire a mortgage, and interest from land and from public loans secured upon land: he may live still better than the small landowners and even buy the property of some of them. (H132)

He accepts even that that although "the number of Proprietors of money" is significantly limited and the wealth under their command can

"barely exceeds the ninth or tenth part of the value of the produce drawn from the soil they often become so powerful a body that they would in certain cases rival the Proprietors of Lands if these last were not often equally Proprietors of money, and if the owners of large sums of money did not always seek to become Landowners themselves. (H135)

These passages arguably refer to post-War England, especially England of the 1720s, in which moneyed men consolidated their political and economic power against that of landlords<sup>54</sup>.

Later, however, Cantillon raises contra-arguments to refute the long-term independence and power of the financial interest groups. Firstly, such an independence, he warns, could only be "so far as this capital goes" (H132), thus of short-term. Secondly, the comfortable living standards the moneyed man enjoys, even when it is above that of the landlords of small estates, Cantillon reasons, could only be through the expenses of the landed class. In a passage worth quoting at some length he argues that

It is nevertheless always true that all the sums gained or saved have been drawn from the Land of the actual Proprietors; but as many of these ruin themselves daily in a State and the others who acquire the property of their land take their place, the independence given by the ownership of Land applies only to those who keep the possession of it; and as all Land has always an actual Master or Owner, I presume that it is from their [landlords'] property that all the Inhabitants of the State derive their living and all their wealth. If these Proprietors confined themselves to living on their Rents it would be beyond question, and in that case it would be much more difficult for the other inhabitants to enrich themselves at their Expence. (H136)

Therefore, if any member of either commercial or especially financial groups are able to get rich in a society, for Cantillon, it could only due to extravagant expenses of landlord exceeding in value their rent revenue, forcing them to issue additional debts from moneyed men. The

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<sup>54</sup> This conclusion in fact made on my own readings in the principal historical materials. Nevertheless, the reader could also see Holmes and Szechi (1993) for a work examining the rise of commercial and financial oligarchy from 1720s onwards and Carruthers (1996) for a work most especially seeking for the rise of finance in British politics during late 17<sup>th</sup> and early 18<sup>th</sup> centuries.

financial interest groups can “acquire the absolute ownership” of lands and landed estates of landlord class, Cantillon further elaborates, but it can only happen if “the Nobility and Landowners ruin themselves by extravagances,” (H477). Therefore, if they prefer to live within their rental income no financiers could enrich themselves at the expense of landowners. It is worthwhile noting that for Cantillon it is only the landlord who manages to hold on to “the possession” of his/her lands who deserves to be called “independent”. To lose land holdings, thus, means to lose one’s independence too.

In his analysis, Cantillon draws a relation between expenditure patterns of landlords and interest rates too. If landlords prefer to live within their limits rather than expend lavishly, he assures, interest rates would remain low, keeping the income of financier classes limited. Interest rates of the financier class, like profit rates of undertakers, were confined mainly to the (extravagant) expenditures of landowning class. (H, pr470).

To all that financial perspective we may add how Cantillon, himself a banker, examines the role of landlords in the presence and profit of the banking sector. For him, the principal wealth of the bankers was also derived from landlords, making the banking sector as well dependent on landowners. Since great amounts of money circulating within nation were passing through the hands of the landlords, Cantillon reasons, the preference of landlords between keeping money out of circulation or in circulation and preferably in a bank influenced, in his view, the face of economy directly. Even the first sentences of the *Chapter VI, Of Banks and their Credit*, starts with a reference to landlords who put their money at bank. It is so because in Cantillon the money stock that is circulated in the veins of the economy always retuned back to the hands of landlords who spend or save the same money according to their own preferences, making the money stock of the nation an entity somewhat at their disposal. Thus, landlords are the main actor that can supply banks with deposits. Additionally, although merchants and undertakers themselves could deposit some money with banks, still as these group cannot either enjoy so great a wealth as landlords, or it could be so only for a short-term period their deposit could only be either of limited use or for a short-term period. In the long run, it is the only independent class, the gentry class, that can tolerate to keep money with banks, making them the main actor setting the bank deposits in the long run.

Looking at what Cantillon says in this chapter on banking practices, “if a hundred economical gentlemen or Proprietors of Land,” Cantillon argues,

who put by every year money from their savings to buy Land on occasion,<sup>55</sup> deposit each one 10,000 ounces of silver with a Goldsmith or Banker in London, to avoid the trouble of keeping

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<sup>55</sup> Please also note that these savings are for nothing but to buy land, namely to become a member of the only independent class.

this money in their houses and the thefts which might be made of it, they will take from them notes payable on demand” (*Essai*, H, pr.628).

Given the facts that “it is enough as a rule for him [a banker] to keep in hand the tenth part of his deposits” (H629) and that it are generally landlords who supply the banker with deposits (hard money), even the total amount of credit that can circulate in an economy, so the total level of commerce and trade seems to be tied by Cantillon to the preferences of landlords. Hence even when we say the banking sector could create credit, by highlighting the role of landlord in supplying banks with metallic money, Cantillon apparently underplays the role of bankers, alongside other financial actors, within the economic system.

All in all, even a smooth circulation of money and credit, that is allegedly stimulating a greater confidence in entrepreneurial activities, and hence a higher level of production, seems to be indirectly confined by Cantillon to what landlords prefer to do with their money. The credit level bankers could issue, profit rates entrepreneur could attain and interest rate the moneyed men could get in return for his loans, all seem to be conceived by Cantillon as consequent upon landlord preferences. All these makes, in Cantillon’s view, the nature, extent and forms of economic activities in which the human capital, landed capital and commercial capital of the nation are occupied in accordance with landlords’ desires and decisions.

### 1.5 *Discussion and Conclusions*

In this chapter I have tried to give an account of Cantillon’s views with respect to the role of landlords in the socio-economic organization. By doing that I have tried to provide references to Locke, and Bolingbroke, so the reader could better perceive the background of the *Essai* and the potential source of influences of the text.

Kramnick (1992, 98) rightly locates the political opinions of Locke and Bolingbroke on the contrasting poles of a spectrum; the freedom and self-interest of Lockean individual were curbed in Bolingbroke with the power and role of family and role of gentry class in socio-political organisation.

Given the friendship and financial ties between Cantillon and Bolingbroke (see Murphy, 1983, p.151-2) we have good claim to argue that Cantillon seems to be influenced by Bolingbroke’s ideas including the force- and conquest-based perspective that highlight the battles between families, rather than Lockean explanations based on money or labour, as the main force behind the political entities and land ownership.

Even in the first societies known, he argues, it is the conquest that established landownership while even the first laws were designed particularly to settle land ownership. In these claims with no references to the alleged “natural laws” governing action within and of societies,

Cantillon apparently converges to what Murphy (1986, p.279) describe as the “Hobbesian position on the acquisition of wealth”, landownership and arguably laws<sup>56</sup>.

Most importantly, however, he seems to extend Bolingbroke’s class-based system, in which gentry and aristocracy is the master class, into the economic sphere.

In his reading he seems to particularly show, unlike Bolingbroke who painted the recently rising commercial and financial classes as the new masters, that the alleged political and economic independence and wealth of non-landed groups could only be for a short period deriving its existence from the expenditures of the propertied class.

Put differently, sharing with Lord Bolingbroke a similar distaste for the transformation experienced in the socio-political and economic situation of the Britain of his day, Cantillon, unlike Bolingbroke aiming to restore the power of gentry class in political sphere, was apparently seeking for revealing the economic principles locating the landlords at the heart of the economic life. His economic system could even be understood as a system that applies the Tory/Jacobite principles of the day, probably under the influence of Lord Bolingbroke, to the economic sphere. Thus, unlike the Lockean universalistic self-interested perspective that glorified democracy and commercial interests through individualistic perspectives, his economic system seems to take class, rather than the individual, as the unit of analysis, and assume only one class, landlords, as the master class whose consent and/or decisions matter.

Following Giacomini (1994) we may say if Lord Bolingbroke was the political philosopher of the gentry class and aristocracy, then Cantillon was the theoretical economist of this class who thought the right gentry-class-based socio-political order that had been around for centuries was destined to remain for the coming centuries too. The immediate threat from commercial and financial sectors, thus, rather than being a revolutionary and sustainable threat, could only be a short-term deviation from the right political and economic order caused by the careless and extravagant spending habits of the old masters who eroded their wealth to enrich these groups.

Evaluated from such a perspective the change from a closed command economy to the open market economy does not seem so dramatic or revolutionary as some of Cantillon’s

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<sup>56</sup> Similar views to Cantillon could be found in scholars from different spectrums including Karl Marx who said that “in actual history it is notorious that conquest, enslavement, robbery, murder, briefly force, play the great part” and Ludwig von Mises, for whom,

“Nowhere and at no time has the large scale ownership of land come into being through the workings of economic forces in the market. It is the result of military and political effort. Founded by violence, it has been upheld by violence and that alone.” (both Marx and Mises are quoted in Stromberg, 1995)

Nonetheless, whereas for Mises market itself challenges the land monopoly and “as soon as the latifundia are drawn into the sphere of market transactions they begin to crumble, until at last they disappear completely”, for Cantillon there is no ground to expect such re-distributive result from market *per se*. Being up to the decisions by landlords, the market mechanism may end in the opposite, that is, in a higher concentration of lands in fewer hands.

contemporaries claimed. Defoe, for example, by drawing a stark contrast between market economy and feudal economy claimed that in the latter “the people were divided into Masters and Servants; not Landlord and Tenant” (Defoe, *A plan*, 1728, p. 45 see also van den Berg, no date<sup>57</sup>). Cantillon, on the other hand, seems to show that the economic transformation might cover the master-servant dialectic of old times, but did not change it in essence. The economy was still under the full control of the master class under a new cover or face; the old feudal constraints demonstrated themselves now through the market mechanism, making the new economy a market-oriented feudal economy. In other words, “the market economy of the *ancien regime*” present in the *Essai*, I argue, following Giacomini (1994, p.153), “is none other than an up-to-date version of the feudal system”, making the change and allegedly great transformation only a formal one experienced in the tools, means and mechanisms rather than the essence of the system.

A review in the literature could demonstrate that Cantillon is not the only author drawing analogies and parallels between (capitalist) market economy and feudal society/economy through the monopoly of land-ownership<sup>58</sup>. Nonetheless he seems to be the first who grounded his reading systematically on the land monopoly and crucial role of landowners. My own reading that aims also to examine Cantillon’s *Essai* as a political text gives some conclusions that are in clash with some modern accounts of the *Essai*, most especially with some members of Austrian school like Thornton (2009). Unlike their reading, the market of Cantillon does not seem to me as an autonomous place that distributes the sources most efficiently, but mainly a place reflecting the ‘hegemony’ of landlord class in a different way through different tools than previous ones. New tools of price mechanism and open relations may prevent a coherent comprehension, but in the end, Cantillon aims to prove, the masters of feudal era based on closed economy, the gentry class, was still the main force shaping the face and relations in the marketplace and thereby society. Putting differently, ironically unlike Austrian economists Friedrich Hayek who thought a commanded economy is nothing but a “The Road to Serfdom”(1940) whereas only a free and open economy organised through price mechanism could ensure not only market efficiency but also a healthy relations among the members of the society in Cantillon even an open economy organised around market and through price mechanism, is nothing but an entity in which old master - serfdom relation demonstrates itself through new means. Thus, market itself cannot ensure neither freedom, nor non-hegemonic relations.

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<sup>57</sup> ‘Defoe and Cantillon on Socio-Economic Change’. Unpublished paper provided to me by the author.

<sup>58</sup> Franz Oppenheimer(1943, p.535), for example, far later than Cantillon identified “the monopoly of land”, alongside “the privileges of State-administration” as one of two “basic institutions” the “rising capitalism inherited from its predecessor, feudal absolutism”.

If the central thesis of the libertarian tradition is, as Miller (1989) argues, the principle of treating all to be “free and equal” and the Whiggish standpoint is the applications of Lockean individualistic and egalitarian principles to society and the economy, Cantillon’s presentation could be considered as the opposing pole of, or anti-thesis to, such Whiggish claims. Only a tiny population, that is, “the Proprietors of Land” deserve to be called “naturally independent” (H137) and free, whereas all the landless rest, whether “Undertakers and Hired people” (H131), a banker or financier, are nothing but servants of this class in the long run. Landlords could change, established families could lose all their wealth or some servants may live even better than the master class, or themselves turn into a member of the master class. In the final analysis, however, it is the income from lands which funds the economy, and the preferences of the propertied class that determine how the land, capital and human stocks of the nation are actually utilised.

Cantillon overall standpoint gives the impression that he deliberately neglect the independence or autonomy of non-landed classes in favour of his own reading of the socio-economic organisation. Thus, even though he accepts that keeping one-tenth of all deposits in hand would be enough for a banker<sup>59</sup>, suggesting that a banker could affect the market dynamics by investing the deposits of landlords, multiply money such a power of bankers in money/credit creation process, that can easily shift the main dynamics of the economy, alongside demand patterns, by supplying non-landed classes with credit seems to be deliberately ignored by Cantillon.

Additionally, when he neglects the role of money-owners in the system, he apparently underestimates, if not completely ignore, the crucial difference between a closed feudal economy, organised around a piece of land owned by landowner master, on the one hand, and a money-economy turning around money/liquidity that gives enormous advantages to money owners of money and liquid assets. Additionally, an open commercial economy let some actors like merchants to exploit arbitrage between locations and thereby escape from the hegemony of the gentry class. Hence, even if we neglect the long-term influence of undertakers in increasing living standards of human beings by making some developments in production techniques etc. still in an open economy merchants, even at worst, have multiple masters and can export one of them in favour of another, giving them more room to consolidate their power.

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<sup>59</sup> The passage in Cantillon reads “... [A] Banker will often be able to lend 90,000 ounces of the 100,000 he owes throughout the year and will only need to keep in hand 10,000 ounces to meet all the withdrawals”. Putting in modern terms, this passage suggest that a banker can multiply money supply tenfold, implying a great power of banking in credit creation. Whether Cantillon was aware of the multiplier effect or not aside, apparently as the principal of bankers were nothing but the deposits of landlords, he seems to neglect the role of bankers in affecting and shifting market dynamics as a whole.

All these peculiarities of open economics that are neglected, like commercial arbitrages, role of money and financial sector in the organisation of market economy, give me the impression that these are deliberate negligence's made by Cantillon so the analogy he puts between an open economy and closed economy can get more sense. Nevertheless, if this is not a deliberate choice by Cantillon made in favour of the ruling gentry class, I can then argue that although he is good at perceiving the role of landlords' decisions and expenses in the economy and enrichment of non-landed classes, he oversight the great socio-economic transformation that fatally changed the fundamentals of the existing society that eventually forced the gentry class to share their economic and hegemonic power with non-landed classes of merchants and financiers. Put differently, he can masterly perceive the role of landlords' decision in the economic transformation but overlook the role of the same transformation over landlords' decision.

It must also be mentioned, as a final note, that Cantillon's examination makes arguably more sense if evaluated against the background of English political culture, than any other European culture of the day, including France and the Dutch Republic. Then in England and Britain the landed class was the only class with a right to rule the nation. The same class had during the 17<sup>th</sup> and early 18<sup>th</sup> centuries enlarged its wealth and power by intermarriages with commercial and financial classes<sup>60</sup>. Additionally, my reading also implies that Cantillon's *Essai* is not so apolitical as it is generally assumed. The economy of the *Essai* seems to be conceptualised through the lenses of the gentry class and in a way favouring, if not overemphasising, their real role in and influence on the economic system and its transformation. A critique of such a view, however, is beyond the scope of this chapter.

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<sup>60</sup> In that respect, following Jerome Blum (1982) it might be claimed that during the same era the men of gentry were not only the rulers in both national and local institution, but "their economic position was constantly reinforced when men who have gained wealth in trade, law or royal service entered the gentry" (p.38).



## 2 Population Theory: Braddon, Dobbs and Cantillon

### 2.1 Introduction

Ten years after his first meeting with Quesnay, which made him convert to Physiocracy, Mirabeau in a letter to Rousseau stated how the germs of his previous ideas came from Cantillon and how he had luckily been converted by Quesnay to Physiocracy;

I had, I say, reasoned in this way: Wealth is the fruit which comes from the land for the use of men; the labour of man alone possesses the capacity to increase wealth. Thus the more men there are, the more labour will there be; the more labour there is, the more wealth there will be. The way to achieve prosperity is therefore: (1) To increase men; (2) through these men, to increase productive labour; (3) through this labour, to increase wealth. In this position I felt myself invulnerable, and I gaudily decorated my political edifice with marriages, sumptuary laws, and the rest, just as I wanted to. (quoted in Meek, 2003 [1962], p.17<sup>61</sup>)

Subsequently, he gave up those ideas which he had supposedly derived from his readings of Cantillon. Apparently, Mirabeau was not aware of the fact that these premises were not those of Cantillon but rather of the previous (British) mercantilist tradition. Moreover, even though it may be difficult to perceive at first sight, it is arguably that standpoint which Cantillon criticised in his *Essai*. His critique, however, is much more subtle than that of Physiocrats as a whole, which in the end says nothing more than that you cannot raise population without increasing land products. In Cantillon's *Essai* all points that Mirabeau listed as premises to wealth, are regarded secondary to landlords' decisions, one of the points, among others, that makes his analysis unique, and divergent from both previous mercantilists and later Physiocrats. Population, employment level, labour stock and wealth, for Cantillon were consequent, directly or indirectly, upon decisions of landlords.

In this chapter I will focus on his explanations as to the size and multiplication rate of population. Before starting the examination, however, I may briefly discuss the literature about Cantillon's population theory and the respects in which I will diverge from it.

Richard Cantillon's population theory has not escaped the attention of scholars. However, the literature about Cantillon's population theory, either give less space than it deserves to it or evaluates it only within the context of France, mostly neglecting the contemporary English and

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<sup>61</sup> As far as can be understood from the letter, during the conversation Quesnay even described "Cantillon, as a teacher of the public, was nothing but a fool", which is apparently a challenging description of Cantillon for scholars regarding Cantillon as a proto-Physiocrat (the letter of Mirabeau can be found Meek, *ibid*, p.17-9). To Aspromourgos (1996, p.113), for example, it is even an "irony [which] is compounded by the fact that Quesnay essentially shares Cantillon's actual view: that wealth determines population". A similar view is apparently shared by Spengler (1942) who thinks Cantillon reversed causality from mercantilist 'population determines wealth' premise to Physiocratic premise of 'wealth determines population'. As a person thinking such evaluations are unavoidably too simplistic to understand both traditions, I can only add that, none of those simplistic evaluations appears in Cantillon. As I try to demonstrate in this chapter, it is not wealth but landlords' decisions and preferences which determines population in Cantillon.

British economic pamphlets. As a result of that tendency, he is assessed rather as a member of French economic theorists, so his writings upon population are considered as a part of the French, rather than British, tradition and theoretical observations. In that respect, both the classical work by J.J. Spengler (1942) and more recent work by C. Blum (2002) have evaluated his ideas with a French background in mind<sup>62</sup>. Spangler (1904) also makes a similar reading of Cantillon in the French context, in relation to some French authors, such as Fenelon and Melon.

Such tendencies, however, result in a form of retrospective interpretations of Cantillon, intended mainly to identify his role within the French Physiocratic tradition, and arguably misses the works and circumstances to which he was mainly responding. Thus, the representation of his *Essai* becomes an account of whether or to what extent he converges to, or diverges from, the French scholars. Such an evaluation however, which is made in favour of the French context of later years come at a cost of missing the British context of his own day, namely the opinions and traditions established to which, I think, he mainly responded. Théré (2004), to which we will refer occasionally, may be considered as an exception to that rule since she clearly endeavours to find out the original contributions of Cantillon to population tradition, but still her work too evaluates Cantillon mainly in French context.

Here I will attempt to fill this gap mainly by re-evaluating his assessment as to population with the previous and contemporary English/British context in mind. My main concern will thus be why and in which manner his population theory diverges from the authors preceding him and to what extent we can find similar statements to that of Cantillon in the previous literature works written by previous authors. In other words, the overall aim is to read Cantillon's chapter on population (I.xv) in the context of the preceding British literature on population (its relation to national economic strength; population growth potential, living standards), and thereby filling an existing gap in the literature.

To do so, I will firstly look at how the population was regarded in the literature from Petty onwards. Thus, I will shortly investigate the importance attributed to population by English commercial authors and political arithmeticians to prove the thesis that population had already become a common concern for English/British economists so much that the wealth of nations was occasionally tied to the population size of the nations.

Secondly, I will look at two unknown authors, Laurence Braddon and Arthur Dobbs, who arguably put forward the first investigations as to natural limits for population growth. In that respect, Braddon brings the case of lifestyles into the picture whereas Dobbs makes statements as to what determines population growth in the final analysis. Their disagreement with

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<sup>62</sup> For the reader interested in the medieval account of the population, the work of Biller (2000) can be a good starting point.

previous arithmeticians and arguments bears some similarity to Cantillon's critique and raises the question whether there was any influence between them and Cantillon. Regardless of the question of influence, however, a consideration of their examinations is worthwhile for a due account of debates around population in the decades preceding Cantillon.

Thereafter, the focus will be shifted to Cantillon's observations not only for their own sake but also a) to see why Cantillon's discussion also goes beyond that of Braddon and Dobbs and b) to demonstrate why his theory of population is in line with his general and systematic analysis of the economy.

I will also try to show that even though there were some figures who came to similar conclusions as Cantillon, they seem to have a political or economic agenda in the sense that all their remarks and conclusions are apparently aimed at developing the wealth of nation and wellbeing of society. In this respect they may be called "projectors" who endeavoured to get approval for their socio-economic projects, promising to make some contributions to the society they lived in. In fact, given the fact that once approved these projects would bring them more fame, one can even claim that there was also a personal and careerist desire accompanying their endeavours.

Cantillon's research, however, rather than aiming for increasing the wealth of any nation or boosting his career, seem to be particularly designed to demonstrate the crucial role of landlords and their preferences in population. Thus, his standpoint seems mainly as an extension of his hidden political agenda, demonstrating the role of landlords in socio-economic organisation, to population studies (see chapter 1). In other words, rather than these projectors who speak either for their own career or the wealth of the nation, Cantillon appears as a person speaking for the political interests of the class, the gentry, his family has historically been part. In this regard, this chapter is a continuum of and advancement on the previous one in which Cantillon treat landlord as the main force setting population dynamics of any nations. Additionally, this chapter is also paving the way for the upcoming chapter on the his par theory in the sense that while studying par Cantillon's reasoning seems to utilise the role of landlords to indirectly set a par between land and labour values. Most specifically, as the main components setting par, living standards and wages (chapter 1), and population of a family (this chapter) are both under the direct or indirect command of landlords, Cantillon's par as well becomes a concept set by landlords' direct or indirect preferences, I shall endeavour to demonstrate.

## 2.2 Population and Mercantilism

More than a century ago, Stangeland (1904, p.118) put forward that “the mercantile system of politico-economic was substantially, indeed almost entirely, favorable to large and increasing populations”. A review of the mercantilist literature of the 17th and 18th century England and Britain seem to support Stangeland’s claim.

One of the most prolific minds of the era Sir William Petty, for example, declares in an unpublished manuscript that “enriching a nation is encrease of people, men of industry and skill in producing such commodities as the whole world generally esteemes’ (BL, Add. MS 72,880, fo. 20v quoted in Fox, 2009, p.395). Petty was not the first to make such remarks. Prior to him, his intimate friend and teacher Thomas Hobbes and Bacon made similar statements. To Hobbes the labour of human beings was secondary only to God, whereas for Bacon the “true greatness consisteth essentially in population and breed of men” (quoted by Fox, 2009, p.394).

Indeed, research in the continental authors demonstrate that such sentiments were not exclusive to English economists. Johann Joachim Becher (1635--82), for example, asking in 1688 the provocative question “What has made Paris, London, Amsterdam and similar populous cities so powerful?”, found the main reason in their great population: “Nothing other than the large numbers of people who mutually support one another, so that the more there are, the more want to come’ (Political Discourse, 1688. p. 305-6 quoted in Hutchison, 1988, p.92). Nevertheless, our examination will be exclusive to England and Britain in the coming pages, and a review of that literature, from second half of the 17th century, shows how great a concern population (growth) was among English/British commercial authors of the day. Although the precise justifications for a bigger population changed from author to author and from time to time, the population and ways to increase it was a concern of them all.

It was the people, they argued, that defended the nation, it was their consumption that raised the rents of landlords, it was their production that was sold abroad by merchants and it was their labour that advanced the land values by improvements. Put simply, it was people who do everything, a larger population was thus preferred to a smaller one.

We may start our quotations, with Robert Filmer, who declared in *Patriarcha* that

It is the multitude of people and abundance of their riches [...] which are the strength and glory of every Prince. The bodies of their subjects do him service in war, their goods supply his public wants (quoted in Rashid, 1993, p.130)

Sir Josiah Child, one of the most read and quoted authors in the late 17th and early 18th century, identified the “multitudes of people” as the main factor which “principally enrich any country”, whereas “whatever doth increase the stock of people [to him] must be a procuring

cause of riches". He also advocated higher wages, at least some "better Rates" than other nations, so that the population could be kept within national borders. [Child, 1693].

William James likewise claimed in 1689 that "it is manifest by experience that where a manufacture and much people are settled in any part of the nation, there the lands are not only occupied, but yield the greatest rents, and the fruits thereof the greatest price" (quoted in Pincus, 2008, p.127).

The desire for high population levels went occasionally hand in hand with Biblical references. Since it was the mandate of God to "Be fruitful and multiply, and replenish the earth and subdue it" (Genesis I.28), any observant Christians should raise their number. Such reasoning appears in the works of great minds of the age too, including Petty. "The first command of God was to increase and multiply", he stated, "Wherefore the law for marriages is that which will cause the most increase of people" (Petty Papers, vol II, p.49). To promote the marriages and multiplication in the kingdom, he also advises for "Women that can produce 3 children on 3 years" or the ones that bring "10 children, ...15 children... [or] 20" children to be rewarded "put of public stock (*ibid*, p.51). Indeed, for him increasing the population was not only a desire of faithful Christian, or a necessity of economic and political strength but also of intellectual knowledge, and spiritual wisdom given the fact that "art and sciences are better cultivated than in desert" (quoted in Slack, 2015, p.126)

Indeed, the main arguments behind religious tolerance may be re-interpreted through the lenses of population. To embrace different religious groups was also to embrace their population potential. "As trade cannot be managed ... without multitude of people" and as "small country well peopled, will be able to effect things of more advantage and grandeur, than a great Dominion ill stocked [with population]" Slingsby Bethel asserted in 1679(p.15) it would be prudent to invite Foreigners into this Nation" (see also *ibid*, p.21).

Similar sentiments could be found in nearly all the economic tracts of the later 17th century, while appealing to different aspects of high population. Thomas Sheridan's *Discourse* (1677, p. 185-6<sup>63</sup>) highlighted their importance for saving manufactural stock. William Petyt's widely read *Britannia Languens* (p.153) regarded it the only way to maintain competence abroad as wages could not be kept low without a big population. John Cary's Essay treated the consumption of one citizen as the income of another, which is why a large population size was, in his view, prone to create a higher income for the state and employment for the people. Another economist H. Mackworth's *English Glory* identified a mutual relations between trade

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<sup>63</sup> Indeed, even though none of Petty's works, except Treatises, published officially before 1690s, still some of them were published unofficially while others circulated in manuscripts. A review of that work of Thomas Sheridan demonstrates, as Slack (2015, p.123-4) previously highlights, that Sheridan himself had find a chance of reading Petty's then unpublished *Verbum Sapienti* and apparently used some figures from *Sapienti* in that work.

and people the main “glory and strength of the kingdom” (Mackworth, 1694, p.11-2, see also 21-22, 31).

Arguments in favour of high population appealed apparently to all segments of society, including landlords. As the value of their lands were set by the demand for the produce of the lands, the argument went, a higher population meant, through a demand mechanism, a higher value and a greater rent for the lands of landlords. The argument is used many times over 17th and 18th century by numerous authors, including Carew Reynell who declared that:

“If we were once full of people and full of trade, rents of Land would quickly raise, the Kings revenue would be greater, the Nobility and Gentry richer, the Commonality more substantial, and the poor be all employed to advance”. (Reynell, 1674, Preface)

The clearest articulation of the correlation between the population and the value of land (rent), however, seems to come from Sir William Petty which evaluated the value of lands by nothing but the total population it maintains (Treatise and Political Arithmetic, ch. IV in Hull, vol I, 286-7). His arguments, however, will be examined in more detail later.

### *2.2.1 When did an interest in population start?*

Considering all these remarks, we can argue that a great population was esteemed by a large majority of British mercantilists as a beneficial phenomenon for the wealth and riches of their nation. Nonetheless, the remarks tend to express more of desire for higher population rather than systematic investigations into the subject of population. The question ‘when did a systematic interest in population start, both economically and/or politically?’ is apparently a question upon which the literature diverges.

According to Michel Foucault it is only in the 18th century that ‘the population’ was invented in the sense of “not the act of government, but the welfare of the population, the increase of its wealth, longevity, health etc.” Since such a discovery of population required an environment “free from the great military, political and economic tensions,” such a discovery of population was not possible for him in the 17th century which was full of such tensions from the “beginning to end”. Before the 18th century when there is no political entity in the sense we understand it today, what had been in place to him was family whereas “the art of government” had no references beyond the “economy [that was] conceived as a management of family” (quoted in Pincus, 2001, p.273-4).

These claims have been refuted by Pincus arguing that during the 17th century not only population but also “the notion of economics, or more properly political economy, does in fact become a central and publicly acknowledged object of the English state” (Pincus, 2001, p.274). Hence, the discovery of both population and political economy, to him, are the discoveries, or inventions, of the 17th century England.

Another point about which the literature diverges is the question ‘why’ an interest in population started in England. Both sharing Pincus’s thesis that the population, as a political entity, is a discovery of 17th century, Kreager (2018) and McCormick (2007), for example, differ in their assessments as to “how” and “why” “the earliest systematic and quantitative inquiries into population, ... came into being” in England (Kreager , 2018, p.254). Krager pinpoints “classical and humanist ideas of polity and society as composed of diverse but linked memberships” that aimed to create a “relative proportion and balance amongst [different] groups” as the main cause behind “quantitative inquiries into population”

McCormick (2007), however, identifies Baconian “experimental methodology”, combined with a desire for “reformation” of society and confirmation of English colonial power to be the main pursuits that invoked both political- and population-arithmetic. “In short”, he argues, “political arithmetic”, a term referred also to population arithmetic, “was not embryonic political economy informed by a scientific outlook. It was a Baconian science of colonial improvement and social engineering”. In a more recent article about population, he elaborates his observations and identifies the Baconian agenda as the main reason behind the transformation in perception of population during the 17th century. With that agenda in mind the authors of the Hartlib circle, including Petty and Graunt, he claims, the perception of population turned from a concept referring only to multitudes of people to both a potential source of improvements and to an entity upon which scientific investigations can be made<sup>64</sup> (McCormick, 2014).

One may argue that each author highlights different aspect of population studies so there does not have to be a contradiction between their claims. Still, Krauger (2018) seems to highlight the classical ideas and ideal of (universal) citizenship aiming for a better society for all, whereas McCormick (2007) emphasises the colonial desires that aimed at creating a hierarchy rather than balance as the main cause behind population studies.

Still if the Baconian agenda could be comprehended as an aim for improvements, rather than as a tool for colonial and hierarchical rule over nation and other societies, then a continuum appear in British population traditions, as Slack aims to prove in his work (2015). The political arithmetic of Petty, Slack (2015, p.117) argues, “evidently owed something to Bacon, to earlier notions of justice and proportion and the utility of number, and to Petty’s mathematical computations”. Going a bit further, Endres points to Baconian experimentalism and Newtonian method, which meant compiling experiment with mathematics, in addition to Hobbesian political philosophy, which had shaped in response to the social uncertainties of

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<sup>64</sup> When commenting upon the confrontation of Petty with James Harrington that ““Sir William Petty was a Rota man, and troubled Mr. James Harrington with his arithmetical proportions, reducing polity to numbers”, John Aubrey probably had referred to a similar transformation of ‘rough’ multitudes of peoples to proportion of different segments to each other (*Brief Lives*, II, 148 quoted in Amati and Aspromourgos, 1985, p.131, fn. 17).

the age, to constitute “streams of thought [which] had a formative influence on political arithmetic”. (Endres, 1985, p.247).

Buck (1977, p.77-8), however draws attention to a potential source other than Newton or Bacon: Thomas Hobbes. The political/population arithmetic of Petty and Graunt, to him, “has its roots less in these Baconian visions than in the more austere concerns of Hobbesian political theory, and it derives especially from Hobbes' view that a science of politics could be constructed on the model of geometry”.

To all these intellectual sources, Harris (1998, p.84) and Fox (2009, p.390-1) one more: Ireland. At least in the case of William Petty “it was not the intelligence networks of Samuel Hartlib or the London bills of mortality or the gatherings of the Royal Society”, Harris affirms, “which were Petty’s chief sources of intellectual stimulus; it was Ireland”. Fox shares the same belief that “it was Ireland that galvanized his principal insights, furnished his most immediate raw material, and provided the essential context for his proposals and policies”. It was Ireland, Fox continues, which was “responsible for turning him into a practising political economist”.

Indeed, the desire to exceed their rivals, such as the Dutch Republic and France, in terms of both wealth and power, may also be named as the main reason that invoked an interest in population and political arithmetic in the 17th century England. Additional phenomena such as the discoveries of Americas, colonial activities or the potential found in the foreign markets also may be of particular importance in invoking such endeavours. Such questions and examinations, however, are beyond the scope of this chapter.

It should suffice to say at this point that there seem to be multiple intellectual sources and political causes that form the background of political and population studies. By the day of Graunt and Petty these studies seem to take on both a more practical and scientific form. This relatively new and arguably more scientific branch of enquiry was called by Petty “political arithmetic”

## *2.3 Political Arithmetic and Population: a succinct account of the 17<sup>th</sup> century*

### *2.3.1 Graunt*

Although the first usage of the term “political arithmetic” came from William Petty in the early 1670s<sup>65</sup>, and it is Petty who is occasionally credited with the discovery of political arithmetic, the first work of political arithmetic is due to John Graunt (1620-74). His work *Natural and*

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<sup>65</sup> According to OED, it appears first in a letter by Petty to his close friend the diplomat and government official Sir Robert Southwell (1635–1702), dated 10 March 1672 (The Oxford English Dictionary Online, entry “Political arithmetic”).



*Political Observations and Conclusions on the State and Condition of England* (1662), in which he compares the birth- and death-rates, though occasionally attributed to his close friend William Petty<sup>66</sup>, is regarded to be the first book written on demographic studies, and an exercise in political and population arithmetic.

“[P]rior to Graunt,” as Maddison (2004a, p. 5) stresses, “nobody had thought of using the mortality bills to reconstruct the demography of London”. Graunt himself, thus, by drawing “the first calculations of mortality and fertility rates and the first life-tables”, as Slack describes, “found a new science, statistical demography” (ibid, p.118).

According to his observations, “by the ordinary proportion of breeding and dying,” the population not only of London but even of humanity since “Adam and Eve” had doubled itself in every 64 years<sup>67</sup>. This was clearly a universalist and extremely generalist perspective.

*The Observations* pioneered the economic literature in another way too. After calculating the population of England and Wales to be around 6.4 million, it also concerned itself with the research question of how great a population the lands of that kingdom could sustain at most. His investigation into the question supplies the first comparative analysis of population versus land stocks. Assuming the total acreage of England and Wales to be around 25 million acres and population around 6 million, he identifies that “about four acres for every head” is required in England and Wales (Graunt, in Hull, ii, p.371-2). This method of considering the population and land stock in a comparative way was a noteworthy innovation, utilised by all political arithmeticians succeeding him.

*The Observations* was not only a work in demographic studies but, as Buck (1977, p.72) highlights, demonstrated a keen interest in economic affairs too. Indeed, the hidden agenda behind all the great research seems to be making England as great and wealthy as Holland of the day. After clarifying that the nations are “not only powerful but Rich, according to the number of their people” (quotation from Stangeland, 2004, p.142<sup>68</sup>), he identified “the

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<sup>66</sup> The opinions of the students of the era vary in terms of authorship of *Observations*. Some historians such as Fox (2005) and accepts an influence of Petty on Graunt, others are denying that possibility. To Slack (2015, p.118), for example, as one of them “the major part of the text, if not all, was Graunt’s”. In a similar way to Slack but with a more confirming tone Glass (1963, p.23) assures that “In sum, therefore, neither direct testimony nor internal evidence furnishes much support for the contention that Petty contributed in any substantial measure to Graunt’s *Observations*”.

In that respect a manuscript by Petty, in which he says “Gra[un]t has proved in his Bills of Mortality” gives both Matsukawa who discovered that manuscript and us the inclination that the *Observations* was indeed written by Graunt (quoted in Matsukawa, 1977, p.36 and 43-43, point [f.6]).

<sup>67</sup> Indeed, he was also using this rate to support the Scripture’s claim that the world was created by around 5,610 years earlier. If the case had been otherwise and the world “about one hundred thousand years older, as some vainly imagine” then population would not be so low for him.

<sup>68</sup> The full passage reads; Now forasmuch as princes are not only powerful but rich according to the number of their people (hands being the father as lands are the mother and womb of wealth) it is no wonder why states by encouraging marriage and hindering licentiousness advance their own interest as well as preserve the laws of God from contempt and violation” (quoted in ibid)

greatest work in the world” to be “the making of England as considerable for Trade as Holland”. Thus, demography and population were analysed for the sake of wealth as well.

Graunt’s *Observations* went through four editions in just three years, and according to Kreager (2018, p.258) it was this work which “shaped the principal topics and lines of inquiry in population arithmetic in Europe for the next 150 years”. In the case of England and Britain, this work, by establishing a novel research discipline, novel questions and even methods to get a comparative perspective, seems to have opened a new path for later arithmetician to advance. Most importantly, from an economist’s perspective, it can be argued, it was particularly this work that suggested not only a correlation between wealth and population but also a method and methodology to compare the wealth of nations.

### 2.3.2 W. Petty

Even though *population arithmetic* started with Graunt, it is arguably with Petty that it turned into *political arithmetic* in which the wealth, riches and population of nations were compared more comprehensively both politically and economically.

A review of Petty’s career gives the impression, in Brewer’s words that for Petty “the most important of the state’s resources is its population, so population estimates were the backbone of [Petty’s] political arithmetic” (Brewer 2003, p.83).

The “fewness of people” is not only regarded as sort of “real poverty” for nations in the *Treatise* (1662, ch.3 point 12.8 and 13), but also “the speedy Peopling of the Earth” was identified as the desire of God and princes: it “would make for the good of Mankind”, “to fulfil the revealed Will of God” and “to what Prince or State the same would be most advantageous” (Petty, 1682, in Hull, vol II, p.455). In fact, even the merits and desirability of alternative ruling systems were contrasted and qualified in terms of population by Petty. In order to decide whether democracy or monarchy is preferable, Petty argued we look at population potentials under both types of government and particularly at “whether the same number of parents ... may produce more offspring in exactly the same time?” and “further, whether more people join the state than leave it?” (quoted in Amati and Aspromourgos, 1985, p.130).

Graunt’s hidden agenda, increasing the wealth and riches of his nation by population studies, seems to furnish the background of Petty’s works too.

Refuting the then-popular “opinion” that “England ... is full peopled”, Petty claimed that with help of improvements “to the utmost of known Husbandry” England could double its population to 12 million, whereas “by Extraordinary arts of Husbandry, by parsimony and

Temperance, ... England might with Holland and China, maintain 24 million or quadruple its present number [of 6 millions]" (*Petty Papers*, vol I, p.208). Given the fact that England's land stock was thought to be 24 million acres, it can be claimed that Petty considered one acre per head as the utmost limit for population increase.

This comparative method relying on per head land usage, which is apparently taken from Graunt, was generously used by Petty to decide whether a nation is under- or fully-populated, as seen in a specific application of it to the case of Ireland:

by comparing the Extent of the Territory with the number of people, it appears that Ireland is much underpeopled; for as much as there are above 10 Acres of good Land to every Head in Ireland; whereas in England and France there are but four, and in Holland scarce one. (*Report from The Council of Trade, 1676*, subpart, *Inferences from The Premises*, point 1)<sup>69</sup>.

### *Revisions and Amendments*

Over his long career, however, Petty made amendments to his observations about population, total land stock and per head land usage by mainly relying on the updated information supplied by Sir Matthew Hale (1609-1676) and Edmond Halley (1656-1742).

The information supplied by Sir Matthew Hale and Edmond Halley is of particular importance for our discussion. Hale's calculations were used by Petty to construct his figures as to years required for a population to double itself, in the case of both England and the world, whereas the Halley's work stimulated him to revise his observations as to acreage of lands, and personal land usage.

If we look more closely at Petty's *The Multiplication of Mankind* (1682), which was not published but circulated among his friends in 1680s, we see that it was written mainly, in his words, by relying on the work of "my Lord Hale's *Origination of Mankind*" (1677) and the "good *Observations*" of Graunt". In this text he used computations that "London doubles in Forty Years, and all England in Three hundred and sixty Years" (Petty, 1682, In Hull, vol II, p.456 and p.463).

In this work he also gave a table for the progression of population from the Flood of Noah onwards<sup>70</sup>. By assuming an exponential rise in the years required for the population to double

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<sup>69</sup> The searches for the potentials of and limits to population (growth) were so decisive factors in Petty, for Slack, it was "partly" the reason why Petty," though with incomplete success", seeks in the Treatise for setting up a par between land and labour (Slack, 2015, p.120). For me, however, it is not in the Treatise but in the *Political Anatomy* both searches finally overlap with each other.

<sup>70</sup> For the whole table see Petty, 1682 (in Hull, vol II, p.456)

itself, starting from 10 years, to gradually rise to hundred years<sup>71</sup>, he thought “by this time, 1682,” the world population must have reached “320 million”.

Thus, Petty himself in a similar way to Graunt aimed not only to estimate the world population but also to discern its growth pattern from ancient times, or even creation onwards. For Slack (2018, p.306) “Petty’s incorporation of these immediate and local concerns into a history of the population of the world from the Creation to the Last Judgement” ... “was new in the 1680s”.

The second novelty of the 1680s was Petty’s revisions of his calculations in light of the computations by Edmond Halley who in the early 1680s, using John Adams’s new map of England and Wales, measured the total land acreage of England and Wales to be slightly less than 40 million<sup>72</sup>. Relying on the figures of Halley, but not merely imitating them, Petty arranged a paper demonstrating land and population of the kingdom side by side (for the table see Slack, 2004, p.617<sup>73</sup>). In doing so, Petty arguably attempted to determine the ‘novel’ limit for the population of England and Wales.

In these fresh computations both the total acreage and population of England and Wales had been revised; the total acreage was no more around 25 million acres, as previously declared by Graunt, but 38,660,000 (Fox, 2009, p. 393 fn24) whereas the total population, which had previously been assumed to be 6 million, was revised to be more than 7 million. The personal usage of land was no longer 4 acre per head, as previously thought, but more than 5 acres (Slack, 2004, p.632<sup>74</sup>), meaning a higher margin for the kingdom to increase its population and wealth.

### 2.3.3 Gregory King

Gregory King appears as another political arithmeticians who had made some independent observations upon the population and growth potential of his kingdom.

In 1696, in the middle of Anglo-French war, in order to demonstrate that England did not have enough land and population to maintain her fight against France, he made some computations

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<sup>71</sup> That exponential growth assumption of years for population to double must be made under the influence of Sir Matthew Hale, which makes a similar postulation in *Origination of Mankind* (for his own table look at Stengeland, 1904, p. 148).

<sup>72</sup> The entry for Edmond Halley in ODNB does not supply any information about the computation of acreages by Halley.

<sup>73</sup> That table, which “has received little attention” so far, can be found in the appendix to Slack (2004).

<sup>74</sup> Fox, by referring some unpublished works of Petty, says these new data demonstrated the land stock of nation was nearly double the “three acres of land for every head” which he thought as a requirement for “sufficient peopling” (Slack, 2004, and Fox, 2009, p.393). Given the fact that three acre is pinpointed as the level of “sufficient peopling” we may suppose either a change in Petty’s evaluation or regard that ratio as a convenient ratio whereas the utmost limit, which could be gotten with extraordinary measure, was still the one acre per head.

of the population size. He identified the total population of England to be five and half million with each house accommodating 4 people (King, 1696, in Chalmers, 1802, p.411).

According to his figures relating “to France, and Holland, to Europe and to the World in general”, England and Holland were better populated than France of the day: “England having but 7 Acres of Land to each Head”, meant not only that it had better populated than her rival France, where 9 acres per head was used, but also “twice, but not three times better ... than in Europe in general”. Among “all the nations in the world”, he affirmed, “England was “exceeded only, in populousness, by Holland and China” where “4 acres per head” was enough (*ibid*, p.413-4)<sup>75</sup>.

He did not only set a pattern for the past of the kingdom, saying that “the people of England have doubled in about 435 years last past”, but even believed that he could discern a growth pattern for the kingdom for the coming thousands of years, ending in his prophecies foretelling that the population of England could never exceed “22 millions” whereas that figure could never be attained before the year “3500 or 3600” (*ibid*, p.417). Given the fact that “the kingdom containing but 39 million acres”, King therefore contemplated, “it will then [in the year 3600] have less than two acres to each head, and consequently will not be capable of any further increase” (p.418).

### 2.3.4 Concluding Remarks

A review of the course of population arithmetic over 17th century gives the impressions that in its emerging days, the population arithmetic was utilised not only to find out the population size of the kingdom but also to unlock the economic and demographic potentials of the kingdom.

Nonetheless, starting from Graunt’s population estimates, arithmeticians seem to have, probably under the influence of the Scriptures, universalist tendencies as well<sup>76</sup>. In their searches for universalist patterns for population trends, these arithmeticians relied on the doubling method, aiming to identify the years required for a given population to double. This method had regarded population, as McCormick (2013, p.841) states, “not just [as] a number, but a dynamic entity whose growth was subject to natural laws (however unclear these were)”.

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<sup>75</sup> Regarding the world in total, he said, there was a land usage of a third of an acre per head, given the fact that the world population, which is over 600 million were sustained by 230 million acres of land. For a work demonstrating how close were King’s computations to modern estimates as to the world population in the last decade of 17th century, see Stone (1997, p.232-3)

<sup>76</sup> Petty, for example, declared the world population to be somewhat 320 million in his day, whereas for Gregory King, as appears in Notebook, it was around 626 million towards the end of the 17<sup>th</sup> century (for a table comparing their computations see table 6 in Maddison, 2004a).

Thus, for McCormick (2013) it was their endeavour to defend scriptures, through that doubling method, that initiated the search for natural laws of population growth.

Their universalist tendencies and searches for the allegedly natural and general laws governing population appears to limit their approaches as well.

So, they end up declaring China or Holland, rather than being varying examples or even extreme cases of population growth, as role-models for Britain. Thus, all variances in life standards, economic or political structures, along with the structure of the population seem to be completely neglected, making the per head usage of acres in China and Holland as the universal aim. Petty, in this regard, labelled one acre per head as the ultimate aim for his kingdom whereas it was around two acres per head for Graunt.

Such a universalist approach, seeking for the allegedly natural laws governing population of the nations of the world was, however, arguably simplistic and naïve in the sense that all the variances between nations, alongside their probable influence on population trends of different nations were completely neglected.

Such a naïve and universalist approach was abandoned by the younger generations of political arithmeticians who in the early 18th century searched more meticulously for actual laws governing population trends of the nations without losing the sight of the variances in the socio-political and economic factors of the nations.

Richard Cantillon, who studied such subjects most systematically and criticised the 17th century political arithmeticians most harshly for their negligence of such socio-political factors, is arguably the most renowned of the early 18th century economist-arithmeticians<sup>77</sup>. I will nonetheless attempt to show in the coming pages that Cantillon himself had some predecessors. Two authors predating him, Laurence Braddon and Arthur Dobbs, seem to share similar concerns and conclusions. Thus, I will first examine how these arithmeticians conducted their analyses and what their divergence was from and critique of the previous arithmeticians. Then, I shall examine why and how, or in which way, Cantillon diverged even from these younger arithmeticians.

## 2.4 Laurence Braddon

From, at least the second part of the 1710s, up until his death on 29 November 1724, a relatively unknown economist, Laurence Braddon (?-1724), proposed some schemes, including *The*

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<sup>77</sup> For the course of *political arithmetic* over 18th century, see Hoppit (1996).

*Miseries of the Poor* (1717)<sup>78</sup>, that proposed the establishment of a Corporation to ease the desperate conditions of the poor and improve the sluggish national economy, *The Regular-Government* (1721, in which he revised his proposal of 1717 in light of new circumstances triggered by the South Sea crisis and *Particular Answers* (1722), which summarised his previous proposals and answered some objections made against such proposals. In all these proposals his aim seems to have been to find new ways of setting up workhouses in which the labour and work of poor people could be turned into productive activities for the wealth of nation.

In these practical proposals, however, he made some computations not only as to the potentials of the poor labourers, but also with respect to the land and labour stock of the nation alongside the total wealth that could be raised by right policies. Among all these figures and calculations, his investigations as to population and the living standards of the members of the societies are of particular importance for our research. In the coming paragraphs I will deal mainly with his observations with respect to population and living standards.

A review of his works shows a good knowledge of both political and economic affairs. We can find references to political thinkers, such as Thomas More (1717, p.12), Lord Bacon, (p.124), commercial authors, such as Mr Smith, the author of the *Improvement of England* (p. xxiii), , Sir Walter Raleigh (1717, p.130), and Sir Josiah Child (1717, p. ix), alongside a “German doctor” who had written upon improvements of lands (p. xxi), the authors of the “*History of Trade*” (p.vi), and “several ingenious Discourses in Husbandry, Gardening &c.” (p. xiii-xiv), alongside political arithmeticians including Sir William Petty (p.33), Lord Chief Justice Hale (p.11), Charles Davenant (p. xxiii and p.35) and Gregory King (p. xxiii).

Given the fact that he had also a fascinating personal background both the literature<sup>79</sup> and this project may have benefited from a more extensive summary of his life and comprehensive account of his opinions on commercial and economic affairs. Nevertheless, for the sake of space such points will be excluded from the discussion and the focus will be exclusively on his politico-arithmetical computations and the conclusions he had made upon them.

#### 2.4.1 *Political Arithmetic for his own project*

Throughout his schemes, Braddon relies heavily on political arithmetic to prove his claim that if the poor of the nation are being supplied with stock and employment, rather than being a

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<sup>78</sup> Apparently, that work republished in 1723 when national debt became a hot topic, under a new title appealing to the debt debates too: “To pay old-debts without new-taxes, by charitably-relieving, politically-reforming, and judiciously employing the poor, under one new general law”.

<sup>79</sup> Furniss (1920) and White (2001, ch. 2 part 2) allocate some space for his economic views, but not as much as he deserves.



burden upon the shoulders of the nation, he can turn them into a source of great profit for the nation.

To support his claim, he does not only make computations as to individual and total costs of the poor to nation (1722, p.55), but also for the projected total cost of his Corporation (1722, Two Estimates) and the total profit he expects from that Corporation if his scheme be enforced (1722, p.63-4).

Assuming the total number of poor of the nation to be around one and half million, of whom one-fifth is not able to work, he thinks the number of people who can actively work is 1,200,000<sup>80</sup>..

By further assuming the workforce of half this number to be enough for supplying all the necessities and maintenance required, he concludes the workforce of the remaining “6000,000 supernumerary Poor” can be easily turned into a source of profit by increasing “our MONY and our universal Wealth, by tilling (at least) 500,000 Acres every Year”.

If his project be approved and some “College Cities and Towns” where the poor can be collected and works be established near “some See-port od Navigable River”, he asserts, not only can “SIX MILLIONS Sterling per ann. More” be added to the national wealth but also the total cost of the poor to the nation can be far reduced from 7,5 million pound to 2,5 million pounds, making an expected profit 11 million pounds sterling per year (Braddon, 1717, p.62-3).

In addition, it must also be calculated how much land stock is required for these “College Cities and Towns”. Braddon’s calculations as to the land requirement leads him to consider not only the personal land usage of a British citizen but also the average consumption patterns for varying segments of both the nation and different European societies. It is also in these passages that he develops his critique of 17th century political arithmeticians, including William Petty.

#### *2.4.2 His critique of William Petty’s population analysis*

As Braddon himself summarises, in his “*Political Arithmetick*”, Petty assumed a straightforward correlation between the value of a given piece of land and the population it can sustain and claims that “*if any Man would know what a Country is worth, it must be by considering what number of People it would maintain*” (Braddon, 1717, p.33, italic original). Starting with quotations from Petty, Braddon attempts to show why his maxim, which

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<sup>80</sup> This figure is apparently derived from other arithmeticians of the day, as indicated by his statement that the number of the poor that can be “industriously employed” is around “Twelve hundred thousand”, according to “probable Calculations” made “by some Ingenious Gentlemen” (1717, p. xxix and 7). No name, however, is given as the source of that figure.



completely neglects the varying life standards and preferences of societies, is extremely misleadingly:

But if any Man should ask me what Number of Acres ... would maintain One Hundred Thousand Men, Women and Children, with their own Labour ... Before I could give any satisfactory Answer to that Question, I would know of that Querist, AFTER WHAT MANNER he did propose those Hundred Thousand Men, Woman, and Children, should be maintained in Lodging, Diet Rayment and all other necessary and contingent Charges in Sickness and in Health (Braddon, 1717, p.33-4)

Thus, an appropriate analysis of the alleged value of land stocks first required a due consideration of varying lifestyles and living standards between societies:

In a passage worth quoting at length he supplies a comprehensive account of living standards both for Britain and Europe and judges that if the workers in these working towns are supposed to

live as the POOR HIGHLAND NORTH-BRITONS do, upon Oatmeal and Water and be clothed in coarse Plads; Then Seventy Thousands Acres ... with their Own Labour would maintain One Hundred Thousand Men, Women and Children, with Food and Rayment, without buying any thing from abroad.

If ... they should live as the Wild Irish, upon POTATOES AND BONY-CLABBER [Sour Milk] and drink Water and be clothed as they are; Then Fifty Thousand Acres ... would so support them

If ... they should live as the Poorest French (in France) ... upon CESNUTS and WATER for their Meat and Drink, and be clothed in coarse Canvas and wear Wooden Shoes: Then Thirty Five Thousand Acres... would afford them such a miserable and starving Maintenance

If...they should live as the poor, but proud Spaniard, upon Salleting, Onions and and Garlic, and very little Flesh, but the best Bread in Europe; and wear coarse Bays, long Tilters, and patched Clokes; Then it would require One Hundred Thousand Acres...

But if ... those Hundred Thousand should be as well maintained ... as the best sort of our Sober, Ingenious and Industrious Mechanics in and about London...; Then it would require Two Hundred and Fifty Thousand such Acres... (1717, p.34-5)

In this way, Braddon gave comparative accounts not only for countries such as Ireland, France, Spain and England, but also for Scots, and Londoners *etc.*

Among all these lifestyles, he said it would be the lifestyle of an ordinary Londoner that would be picked and considered in computations. “Two Acres and half per head, judiciously managed” thus he assures, “will produce all necessary Eatables, and Materials for Wearables” per head. That meant all the poor of the nation, estimated to be one and half million, “cannot

be maintained” with a land stock less than “Three Millions Seven Hundred and Fifty Thousand Acres<sup>81</sup>” (1717, p. xxxv, p.37, look also p.31-5)<sup>82</sup>.

If two acre and half per head can be dedicated for his scheme, he also affirmed, the Corporation could supply both the working and unable poor “with much better Necessaries and Conveniences of Life, than any other Commonalty in Europe now enjoy” (1717, p.74). Thus, rather than reducing the quality of their diet, raiment or lifestyle etc., in these cottage-cities, Braddon confidently declared, “these Poor shall eat, drink, wear and lodge BETTER, and under Wounds be provided for, than any Communalty in Europe now living” (Braddon, 1717, p.63-4).

After making these various computations and observations, and with great faith in his conclusions, he returns to Petty’s remarks in order to demonstrate why Petty’s own assumptions are not credible and why it is impossible to live according to the proportions he had set in his works, without compromising the actual life styles;

Although “Sir William Petty, in his Political Arihmetick, doth assert ... That Twelve Millions of Acres will Supply Nine Millions of People” with the necessities of “regular Families”, Braddon assures, “if Sir Williams Nine Thousand People were to have the before-proposed Allowances to the Fifteen Hundred Thousand Poor; those Twelve Millions of Acre would be very deficient, if managed in the NOW COMMON COURSE OF HUSBANDRY”. (1717, p.36<sup>83</sup>)

Indeed, given the references to living standards of “regular Families” Petty’s remarks give the impression that he too considers the varying life standards between societies/nations. Nonetheless, such remarks are never properly qualified and seem to be completely neglected in his general perspective.

Arguably it is in Braddon that we first encounter an arithmetician who does not miss the crucial role of lifestyles and living standards upon the limits to population and wealth that can allegedly be accrued by it.

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<sup>81</sup> Reframing that cost in monetary term, he also says a land stock amounting to 975, 000 l. in value is required (ibid)

<sup>82</sup> Later in his work of 1722, however, he seems to reduce the land required to raise all the personal necessities, at least for the first steps of the proposal. At these stages, while the chargeable Poor of three or four of the largest Parishes will be covered under the proposal, it will require “such a Quantity of Acres of Lands, as may be about a half Acre per Head, for each of those Inhabitants”, except the acres upon which “Hospitals and Cities” will be built. (1722, p. 36-7). He declares at once in this work that even “Sixty Thousand Acres” of Land located around “the Navigable Part of the River Themes ... may by Art and Industry, be MADE sufficient for maintaining all the Poor, both impotent and able, which are chargeable Poor, within the weekly Bills” (1722, p. 40).

<sup>83</sup> The only way both for Petty’s observations to be reliable and increasing the population of the society without sacrificing the lifestyles, he affirms, is to make improvements and advancements in husbandry and mechanics, which is the reason why we find so many computations as to the actual productivity of lands and the advancements that can be done with right policies (1717, p.36-7).

### 2.4.3 *Marriage and Multiplication rates*

In his works Braddon speaks of multiplication rates as well. His opinions on the multiplication rate however, unlike the great merit within his observations as to relations between the living standards and limits to population, seem to merely repeat the words of previous arithmeticians. Also they offer nothing novel in terms of population analysis.

Starting with the general concerns of the arithmeticians of his day, asking how the population of the nation can be increased, Braddon identifies two legal or legitimate measures as the surest way for an ever-increasing population: encouraging the immigration into the nation and stimulating marriage and multiplication (among the poorest segments of the society).

Regarding the first, the Dutch who “by some proper Bills... invite Foreigners to live among” them, were once again identified as the role model (1721, p.47). For this to be a viable option, he warns, the domestic actors must first be supplied with employment so that the foreigners can also be a source of profit rather than burden. Therefore he says “We should never invite over Foreigner Poor... until we have made proper Provisions [and employment], for all our Native poor” (1721, p.50).

In respect to the second, he underscored especially the marriage patterns among the poor segments of the society. Describing the population in general, and “Children [of the poor]” specifically, as “the main Instrumental Cause of the future Riches, Strength, Glory and Happiness of their Native Country”, he labelled the best measure for the population and “our National Interest, by proper Law, to ENCORAGE all (especially the POOR) to MARRY” and then “to beget MOST CHILDREN” (Braddon, 1722, p.122, 12-3)<sup>84</sup>.

He suggests some connections between the proper encouragements to marriage and multiplication rates:

an ingenious Gentleman hath judiciously observed, That If Great Britain gave proper Encouragement to Marriage, this Kingdom, from thence, might double its People, in less than one hundred Years” (1722, p. v<sup>85</sup>).

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<sup>84</sup> All these observations seem extremely parallel to those of Thomas Sheridan (1677, p.189) who does not only list two “ordinary ways of increasing the People, that of Generation and that of drawing them from other Countries”, but also who demands the establishments of “Hospitals for Foundling” which, on the one hand “would prevent the many Murders and contrived Abortions now used” and, on the other and “would likewise be Encouragments to the poorer sort to Marry, who now abstain to prevent the Charge of Children”.

<sup>85</sup> Multiplying, for Braddon, was also what God asks from human beings. In his statements, however, he does not only refer to the Bible to support his claim that “No Nation can ever be Rich and Powerful without being Populous”, but also makes some estimation as to multiplication rates of human beings by relying on “the Sacred Histoy” in the Scripture, teaching that “within 216 Years, from less than One Hundred, they [believers] did increase unto 603,550, besides their Women and all under Twenty” (Braddon, 1717, introduction, p.iv). He does not qualify who this “ingenious Gentleman” is.

These passage gives the impression that unlike Petty and Grant who thought there are some universal laws governing the multiplication rates of humanity, independently of socio-political factors, Braddon was aware of the fact that there is a direct correlation between encouragement given to marriage among the young, especially the poor young, and multiplication rates. Nonetheless, this insight was not properly qualified. Additionally, changes in lifestyles and living standards that may completely change over “the hundred years” in question seem to be completely neglected while referring to calculations by Petty and Graunt<sup>86</sup>. Thus, his analysis of the alleged trade-off between living standards and population, which is one of his merits of his population analysis, seem to be completely neglected in his intertemporal analysis of population. Additionally, the factors behind marriage patterns neither economically nor socio-politically are analysed by Braddon.

## 2.5 *Arthur Dobbs*

Arthur Dobbs (1689-1765) was born in Scotland to the family of Richard Dobbs, an army officer. When the Great Revolution took place in 1688 his parents were living in Ireland, but in fear of rebels and battles, Richard Dobbs sent his pregnant wife to Scotland, who returned later with Arthur. By the time of his father’s death in 1711, he had already served in the British dragoons in Scotland. Moreover, as the eldest son of Richard, he inherited all the properties of his father upon his death. Around eight years later in 1719, he married Anne, the daughter of John Osburn, a London silk dyer, just before being the sheriff of Antrim the next year (Calhoon, 2008). By 1728, he had already become the deputy governor of Carrickfergus, whereas by 1733, he was appointed by Robert Walpole as the engineer-in-chief and surveyor-general in Ireland (Calhoon, 2008)<sup>87</sup>.

Dobbs was also among the founders of the Royal Dublin Society, which was established mainly to promote the economic development of Ireland, primarily via agricultural and manufactural improvements (Clarke, 1957). Over his life he remained a loyal protestant and attempted to improve the relations between England and Ireland throughout his career in Ireland. Hence, he endeavoured, on the one hand, to improve both land and trade of Ireland, and on the other to advance the Anglo-Irish contacts. Although some of his friends including his early patron Lord Hertford, warned him that his visions for Anglo-Irish relations may cost him his career, rather than taking a step back he advocated fervently the reform of Irish policy of England during his whole career (Calhoon, 2008). In that respect, he seems to have shared the opinion

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<sup>86</sup> “Sir William Petty believed, that “by the common Course of Procreation, England may double in 360 Years: but Mr. Digory [Gregory] King (as published by Davenant) doth suppose that England did not double less than 435 Years” (Braddon, 1721, p.45-6).

<sup>87</sup> According to Webb (1878), in 1730 he was appointed Survey-General of Ireland.

of more renowned Irish authors of the day, such as Jonathan Swift and Thomas Prior that Ireland could assist England and the United Kingdom in her desires to overthrow her enemies, and that the interests of both nations did not have to be in conflict with each other. A “hearty Concurrence in promoting the Welfare of both” nations was could even be considered as a requirement given the fact that it was only Ireland that could supply England with cheap labour that was necessary for maintaining competition in foreign markets. (1729-31). Therefore, he claimed wholeheartedly the harmony between the interest of both nations and stated in the concluding paragraphs of the second part of his *Essay* that

“our Prosperity and Wealth contribute vastly to the Prosperity and welfare of Britain; and as long as a Harmony is promoted between us, our mutual happiness and riches will increase; and what ever we do in promoting each others welfare contributes in a great degree to the prosperity of both” (I, p.146)

All in all, he was of the opinion that once Ireland be given the freedom to freely trade with England and third nations, it could unlock its full potential and be a second Scotland to Britain.

### 2.5.1 *The Essay*

Although Arthur Dobbs wrote some additional works, including *An account of the countries adjoining to Hudson's Bay* (1744) or unpublished *'Scheme to enlarge the colonies...'* (c.1730) the work I will deal with in this chapter is his two-part *Essay on the Trade and Improvement of Ireland* (1729-31). In this publication he examines the way of advancement for Irish, on a range of topics from population to land improvements and employments. The publishing dates of the work, dedicated to “HIS GRACE LIONEL, Duke of Dorset”, mostly coincidences with Dobb's representation of Carrickfergus in the Irish parliament, between 1727–30 (Calhoon, 2008). Thus, the work seems to be written during his first years of membership in the Irish parliament.

The work demonstrates a comprehensive knowledge of Ireland, trade and manufactures of it, alongside a general acquaintance with economic affairs. As far as can be understood from the dedication, after reviewing the Custom-Houses of Ireland, Dobbs “made some Inquiry into the Numbers and Employment of the People” and attempted to find out some ways to advance the lands of Ireland, “to make us[Ireland] frugal, employ our Poor, improve our country, extend our Trade, and consequently increase our Numbers and add considerably to His Majesty's Revenue”, which also sums up the “the Scope and Design of” the *Essay*.

In the first part of the work he looks at the trade of the nation with foreigners, and how much the trade revenue of the nation can be raised by alternative usage of Irish lands, whereas in the second the concerns as to population and employment levels are brought into perspective. In that respect, it can be argued that the main point of the *Essay* is to demonstrate how the alternative uses and improvements of the land stock of the nation could foster the population,

employment level and the revenues of the kingdom. In his words, “Trade and Improvements of Ireland”, upon which “little as yet written”, are the main subjects of his enquiry (part I, p.4).

The figures he relies on are taken mainly from the Custom-Houses and are allegedly collected personally while he was a member of the Committee of Trade, making tables arranged in the Essay the result of his personal efforts. (part I, p.4).

In the work, he also compares the potentials of different form of land occupations not only in terms of money but also for population arithmetic. Whereas “ten Acres of Tillage” can reasonably supply “one Family with full Employment”, he argues, “in Pasture 200 [Acres] would not”, Thus, a land stock of “200,000 Acres” dedicated to Tillage, for example, could employ around 20,000 families whereas in the pasture it could not supply even “1000 Families” with employment. (Dobbs, part I, p.27).

Similar observations and conclusions are drawn for “Gardening and Planting” lands as well. Thereby he endeavoured to demonstrate the potentials of these land stocks not only for the population but also for manufactural products and the economic wellbeing of the nation as a whole. In his words, his overall aim was to demonstrate “the Proportion of our Trade in each Branch, and the proportional Benefit thence arising to the Kingdom, by their increase of our Numbers and Employment” (*ibid*, p.36-7<sup>88</sup>). Indeed, all his calculations apparently aimed in the end at convincing the landlords and the member of the parliaments to re-allocate the land stocks of Ireland toward the economically more beneficial and promising occupations so that these land could have supplied more hands with work, thereby stimulating a bigger working population and higher revenue for the nation. Among all occupations he particularly advocated the flax and linen production; “those Countries”, he said “where Trade and Commerce Flourishes, and particularly where the Linen Manufacturer is established, are by far the most populous [countries]: tho’ some of them being the least fertile”.

That being so, Arthur Dobbs seems, like Braddon, as a projector seeking to raise the revenue and living standards of both the kingdom and Ireland. He also attributed, like Braddon, great importance to improvements and the potential they promise for the wellbeing of the kingdom. He even demanded some workhouse to be built, in which children can be educated for 2 or 3 hours a day not only in the literacy and numeracy but also in improvements in land cultivation and manufactural production. Thereby he thought, they could be indoctrinated with “a Taste and inclination for Improvements, and to be industrious” which would have help them to get their livelihood “when grown up, with Comfort and Satisfaction” (*ibid*, II, p.54-5)

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<sup>88</sup> His examination in the first book covers also how much the nation gains from sea products, fishery, and exported products. These points, however, are excluded from my discussion.

While making all these observations he touches on multiplication and population growth rate as well, which is the subject of the next section.

### *2.5.2 The Critique of previous 'steady' multiplication rate assumptions*

The discussion of population occurs mainly in the second book of Dobbs' Essay. There, by relying on some books returned by the collectors of heart-money, supplying the data for the years of 1712, 1718, 1725 and 1726, he prepares a table showing "the Number of Inhabitant, with the proportion they bear to the quantity of Land, not only in this Kingdom but also in the several Provinces and Countries", so it can be perceived "how we have increased since the late happy Revolution and Reduction of Ireland". (*ibid*, II, p.3-4).

Then he interprets this table in comparison with the observations made by William Petty around half a century earlier in 1672, ending in a straightforward refutation of Petty's observation regarding Ireland and population trends of humanity as a whole.

In his computations of 1672, William Petty estimates the population of Ireland to be 1,100,000, assuming the number of houses to be 200,000 and allowing five-and-half people for each family. In his computations he also supposed a stable increase in population over time, or "an Increase by Natural Generation" as Dobbs calls it. In response, Dobbs warns that "we must be under the great uncertainty" and be careful in our computations and assumptions, especially on two points. Firstly, "if Sir William's Computation be wrong, the Foundation is destroyed" so neither Petty's nor his own observations, he says, would lose credibility.

The second warning goes beyond the bounds of the practical observations as to Ireland and gives a more universal and subtle critique of Petty's assumption. In his in-depth analysis, which is worth of close attention, Dobbs argues;

Besides the Climate, Constitution, Manner of Living, Government, Trade, and accidents of War, Famine, Plague, Persecution, & make so great a difference, that same Countries when tolerably peopled may never double, and other Countries thinly peopled, by Good Government, Liberty of Conscience, Trade and Accession of Inhabitants, may double in a very short time, even by Natural Generation in less than 50 Years. But on such Computations, the Incidental Causes being so various and uncertain there can be dependence without facts to build on. (*ibid*, II, p.11)

The passage seems to refute the credibility of stable population growth assumption of previous arithmeticians and brings the so-called "Incidental Causes" into perspective which prevent someone from setting such globally inclusive ratios for population growth.

The same stance that highlights the role of Incidental Causes and changing multiplication rates from time to time appear in his critique of Tables by Mr. Gregory King as well. Revising the tables, he says, King "is highly probable ...wrong in his Computations of the time of England's doubling Numbers since the Norman Conquest". Unlike King, who assumes a

nation doubling in every 435 years, Dobbs divides the timeframes and discusses them separately. Between Norman Conquest and the reign of Henry the 7th, he argues, they required more than 400 years to double, whereas after Henry's reign England required only 240 years to double. The causes of that change, to him, were the political, legislative and economic transformation experienced in the English society of the day (II, p.12). More specifically, the "Establishment of their Liberties Civil and Religious and the Increase of their Trade and Commerce upon" these foundations, all stimulated population growth and consequently made 240 years enough for a doubling of the population (*ibid*).

If one of the greatest advancements Dobbs made on the previous tradition, especially on the observations as to multiplication rates, is his underscoring the crucial role of "Incidental Causes" in multiplication, the other can be his relating the multiplication rates to the micro-concept of family in a way setting the ease and/or difficulty in getting life necessities as the main regulator of population trends and multiplication rates;

The quicker Increase before Countries are thoroughly inhabited, is occasioned by the Ease they find in maintaining a Family where Provisions and other necessary are cheap. As Numbers increase, the difficulty in providing for a Family increases in proportion; so that People grow cautious in marrying, until they have provided somewhat to maintain a Family with tolerable Satisfaction(II, p.12-3).

Here, Dobbs does not qualify what he means with "tolerable Satisfaction" (a point that was first addressed by Cantillon). Nonetheless he makes a further point which claims that although there is "the Possibility of doubling in a short time" when the world was not inhabited so much and lands were not taken, such a possibility is "very different from the Manner of Increasing in this [his] Age" (*ibid*, p.12).

By referring to the role of religious attitudes in multiplication, he judges that since fornication is a "Venial Sin" among Catholics and it is "a principle of Conscience [for Papists] to increase their Number" and their girls can be most easily persuaded to "have children very early, and take care of them when they have". Catholic countries have already been well populated and have a higher growth rate than Protestant nations in which the encouragement must generally be given for marriage and multiplication. Hence, he continues, in the countries where Catholicism has been well established for centuries the population has already converged to its limits, whereas in Protestant nations and recently discovered lands there is still a higher potential for population growth.

In his analysis the migration of Irish people to Americas, we have found an elegant application of such "Incidental Causes" and family perspectives to the realities of the day. Highlighting the role of effort required for obtaining subsistence, in the migration, he reasons that if "the



great of our Protestant Poor for want of employment to go to America”, it is because, “they heard Provisions were plenty and Cheap” there.

## 2.6 *Richard Cantillon's Population Theory*

In the preceding sections I have attempted to demonstrate the developments of the arguments of the population arithmeticians during the 17th and early 18th centuries. This section aims to demonstrate how Cantillon utilises the insights found in Braddon and Dobbs as well to analyse varying living standards and the role of lifestyles, set by landlords, in his population analysis without losing the sight of general economic perspective. Most attention will be given, however, to Cantillon's original contribution to population studies; integrating land ownership and the preferences of landlords into the picture.

### 2.6.1 *Cantillon's analysis*

In the chapter dedicated to population (*Essai* I.xv), Richard Cantillon, in a way reminiscent of Braddon, and especially Dobbs, finds something to criticise in the attitudes of English political arithmeticians since Petty. In a passage apparently condemning the 17th century political arithmeticians, he states that

Sir Wm Petty, and after him Mr Davenant, Inspector of the Customs in England, seem to depart from nature when they try to estimate the propagation of the race by progressive generations from Adam, the first Father. Their calculations seem to be purely imaginary and drawn up at hazard. On the basis of what they have seen of the actual birth rate in certain districts, how could they explain the Decrease of those innumerable People formerly found in Asia, Egypt, etc. and even in Europe? If seventeen centuries ago there were 26 millions of people in Italy, now reduced to 6 millions at most, how can it be determined by the progressions of Mr King that England which today contains 5 or 6 millions of Inhabitants will probably have 13 millions in a certain number of years? We see daily that Englishmen, in general, consume more of the produce of the Land than their Fathers did, and this is the real reason why there are fewer Inhabitants than in the past. (*Essai*, in van den Berg, 2015, pr. 175)

Since a general rate of multiplication can be established neither for different countries nor for ages, it is better, Cantillon seems to argue, not to attempt to make such computations, but to search for actual causes behind the trends of population. Thus, the main question is not “what is the precise multiplication rate?”, but “why, and if possible how, do the multiplication rates vary?” across places and times. In that respect, the actual causes, rather than so-called universal ratios applying equally to all societies and ages, are the focus of his attention. His analysis of the main causes governing population trends, however, unlike Dobbs who mainly highlighted the “Incidental Causes” seem to mainly underscore the role of landowners and their personal preferences in determining population and multiplication rates of societies

Cantillon starts chapter XV of book I, which is dealing with why landlords are the key proponent of the population with drawing some parallelism between population in human beings and animals. “Experience shews”, he states that not only “Trees, Plants and other Vegetables” but also “all kinds of the Animal Creation are to be multiplied to any Quantity which the Land allotted to them can support.” Thus, alternative allocation of lands could change the number of both plants and animals. If sheep are fed on “Turnips, as in England” then “an acre of land will go further for their nourishment than if it were pasture” (H149). Likewise, he infers, “if all Land were devoted to the simple sustenance of Man the race would [then] increase up to the number that the Land would support in the manner to be explained” (H150).

China, for example, can be a good example of such a situation. People live there on basic things, feeding on nothing but “rice and rice water” and working “almost naked”. Looking “upon it as a Crime to lay Land out in Pleasure-Gardens or Parks”, in China land is “never fallow and yields a hundredfold every year” producing almost exclusively products for the nourishment of human beings. In addition to all this great produce from land, their rivers as well supplies them with a great amount of further nourishment. All these sources of nourishment, accompanied by their religious doctrines, which oblige them to marry and multiply as much as possible, ends in a situation where a single Acre of Land will support many of them” (van den Berg, 2015, pr. 151-2<sup>89</sup>) Nonetheless, he warns, as they already live on the extreme margins, a bad harvest means that Chinese will “starve in thousands” resulting in deaths if masses<sup>90</sup>.

If China sits on one pole of the spectrum, native Americans are on the other pole. Contrary to the case of China, Cantillon says, negligence of agriculture and land improvements, living “in Wood and on Wild Beast” discouraged the population among native Americans so much that among all the societies of the world, America has the most sparsely-populated lands where “50 or 100 acres supply only enough food for a single Indian”. This extreme land requirement per head, accompanied by the absence of agriculture and cultivation techniques, for him, is also the main reason forcing them to “wage regular and bitter wars over” land.

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<sup>89</sup> For a more detailed analysis of Cantillon’s opinions on China, alongside their possible sources, see Richard van den Berg, (Non-European Sources of Richard Cantillon) unpublished paper provided to me by the author.

<sup>90</sup> The extreme case of China draws the attention of both François Quesnay (*Despotisme de la Chine*, see Beer, 2009, p.107) and Adam Smith who thinks it is mainly “the liberty of destroying ... [their babies] in time of famine” which stimulate Chinese people to multiply so abundantly, ending in an extreme case where “the poverty of lower ranks of [its] people ... far surpasses that of most beggars in Europe”.

After mentioning these extreme cases of the Chinese and Native Indians, he starts his analysis of the Europe where neither the populations nor the “quality and fertility” of land stocks are the same across the different nations.

According to his observations and figures, the lifestyles and standards are so varying across Europe that if a man consents to consume goods of low quality, “like many Peasant in South of France, [then he] can live on the produce of an Acre and a half of Land of medium goodness” whereas if he demands goods of average quality that are consumed by a person from Middlesex<sup>91</sup>, then he “sufficiently and yet moderately needs for all that the produce of 4 to 5 acres of land of medium quality”(H157-60).

All this, however, is just the introduction to his main discussion as to the actual causes behind population and multiplication trends.

As previously mentioned, the integration of varying lifestyles into population analysis had already been accomplished by Laurence Braddon who related land usage per head to the varying living standards across Europe. The correlation between, on the one hand, “Incidental Causes”, together with the ease and/or difficulty of getting life necessities, and on the other hand, raising families and multiplication rates, had been already made by Arthur Dobbs before Richard Cantillon.

The ground-breaking part of Cantillon’s analysis, however, is the introduction of two research questions into population analysis; firstly, why do the lifestyles and manners of different nations depart from each other so dramatically and secondly, and maybe as a complementary question, ‘why does the ease and difficulty of getting provisions diverge so dramatically across societies?’ Both questions apparently end in the same phenomenon picked as the main cause; the distribution of lands across members of the society and preferences or tastes of their owners. Thus, the introduction of land ownership into both population analysis and economic system is original with Cantillon, as affirmed by other students of Cantillon as well, including Spengler (1942, p.128-136), Théré (2004) and Berdell (2009).

## II

The integration of land ownership into population analysis, as Théré (2004, p.153) points out, “does not appear in the works of any of English thinkers” up to Cantillon, so it should be regarded an innovation made by him. With such an integration of land ownership his population theory exceeds, according to Théré, the preceding accounts, at least, in three ways;

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<sup>91</sup> “In some southern Provinces of France the Peasant keeps himself on the produce of one acre and a half of Land and the value of his Labour may be reckoned equal to the product of Three Acres. But in the County of Middlesex the Peasant usually spends the produce of 5 to 8 acres of Land and his Labour may be valued at twice as much as this.” (H89)

firstly, Cantillon incorporated the influence of “landed proprietor upon both the distribution of income and the growth of population”. Secondly, he demonstrated how foreign trade and again “the distribution of wealth and income affects population growth” and lastly, in Théré’s view, the questions as to “causes and effects of the variations in living standards and ways of live” is examined first by Richard Cantillon.

My findings, it should be noted, do not support her second conclusion. As I have tried to demonstrate above, in the works of some political arithmeticians predating Cantillon, including Braddon and especially Dobbs, we have encountered not only an analysis of foreign trade on population growth but also of a number of factors including “the Climate, Constitution, Manner of Living, Government, Trade, and accidents of War” etc on population rates and trends of nations (Dobbs, 1729-31, II, p.11).

Such points aside however, I completely agree with her that Cantillon is the first economist who put the influence of landlords on the population rates and trends. Thus, he puts the tastes and preferences of landlord class as the driving factor behind the population growth rates in a given nation and the variances in living standards across nations, without losing sight of the economy and its general framework. Thus, likewise Berdell (2009) we may regard Cantillon’s system as a “distinctively ‘demographic’ approach to economic interconnectedness”(p.223) in which “landlord tastes determine the economy’s equilibrium position” in terms of employment, land usage etc. (p.248).

For a due analysis of this point however we should examine in detail how landlord’ tastes affect the actual population and its growth rate.

Firstly, landownership, for Cantillon, was a privilege that is bestowed on only a tiny part of the population. No matter how society is first organised, and thereafter transformed “the ownership of the Land they inhabit [must be] ... necessarily belong to a small number among them” (H8).

Secondly, by nature, the population concentrates, according to Cantillon, where landlords prefer to live. The location they pick to live have also had, for him, some far-reaching implication as to the distribution of land stocks among varying occupations. In fact, earlier authors had observed that the cities landlords prefer to live in tend to increase their population at the cost of other cities. Such observations, nonetheless, are mainly remarks about the distribution of population within a nation, rather than the total amount of population it has. Cantillon’s observations, on the other hand, examine also how landlord taste change not only how the population disseminate across the nation but also the actual population in total.

If they prefer to “reside in the Cities far away from their Land”, he observes, then the commodities of their lands should be transported into the City, meaning a certain sum of lands

must be dedicated to feed Horses rather than human beings. “The more Horses there are in a State”, thus he concludes, “the less food will remain for the People” (van den Berg, 2015, pr.164). Thus, even the location picked by the proprietor class to live has some impact on the population potentials of the nation<sup>92</sup>.

Thirdly, the landlords’ preferences may cost the population potential of a nation in a case when a nation has nothing to export but land produce to meet the demand by the proprietor class. In this case the demand patterns of landlords will not only “diminish extraordinary the food of the People”, and consequently the population of the nation but will also “increase that of Foreigners who often become Enemies of the State” (ibid, pr.166), which is a clear mercantilist argument that can be abundantly found in the British mercantilist literature of the late 17th and early 18th centuries.

The last reason seems to be most influential and has arguably more direct effect on the population size. As the landowners are the sole owners of the land stock of the nation and it is their preferences that determine how the land stocks are used, Cantillon reasons, if they prefer to raise provisions on their lands then the population would be always high. However, if they decide to have land used “for other purposes than the upkeep of the People” and “Maintenance of Man” (H163) then a great population potential could never be unlocked just because of their decisions.

More importantly he indicates some connections between landlords’ preferences regarding land usage and the marriage patterns and multiplication rates of the society. Before jumping to marriage patterns, however, it could be beneficial to look what Cantillon thought of the projects advocated by his contemporaries, including Braddon and Dobbs, and how he integrated land ownership into the picture, ending in a critique of such projects.

Indeed, his explanations can be listed as the fourth point of how landlords could alter the total population of the nation. However, it should be noted, that point is more immediate compared to the first since it explains why it is not so easy to increase the employment stock of a nation without consenting landlords to raise their demand accordingly.

In the *Essai* Cantillon appears to prefer to focus on actual cases and refrain from making any estimation as to potentials of the lands, or the promises of the kingdoms. That attitude appears

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<sup>92</sup> It should be noted that although Johan Heinrich von Thünen (1966) is generally depicted as the originator spatial economics, a branch of economics which focuses on the influence of geographic factor on economic consequences, some students of Cantillon, like Hébert (1981), have drawn attention to spatial aspects of Cantillon’s economy. This conclusion by Cantillon could be regarded as one of these passages in which Cantillon makes some deductions as to the role of geographic aspects, alongside the preferences of landlords, in the wealth and population of the nation. Indeed, the first parts of the book I, in which Cantillon examines how societies are established are clearly in line with the context and framework of spatial economics. Human societies could not be away from land, for Cantillon, and even if we assume that, the distance must be compensated with better means and channels of transportation.

in his handling on such projects too. He refuses at once all the promises of projects by bringing the role of demand from landlords into the perspective; unless the landlords prefer to increase demand so much that such project can be brought forward, he argues, all such projects are destined to be inefficient in increasing the wealth of the nation.

In explaining his reasons, he argues that as the number of handicraftsman and labourers “are always proportioned to the employment which suffices to maintain them” In observably argues, in his explanation as to reasons, “from this it is easy to understand that the Charity-Schools in England and the proposals in France to increase the number of Handicraftsmen, are useless”, unless the nation could create so great a demand to maintain them all (H60-1). Hence, even if we assume all the handcrafters and manufacturers are perfectly trained, such labourers would have no market to sell their talents unless landlords, the main stimulator of demand in any nation, prefer to buy their talents<sup>93</sup>. (The relation between employment level and the demand from landlords will be further analysed in the next chapter)

Additionally, unlike the projectors of the day who meticulously searched for improvements and advancements, especially, in land cultivation and manufacturing techniques, he says nothing as to such potential improvements. This seems to be a deliberate ignorance made to maintain the focus, firstly, on actual cases, and, secondly, on the role of landlords.

### *Marriage Patterns and the role of landlords in their establishment*

Since population was encouraged by mercantilist, it is not surprising to find a strong advocacy of marriage in the works of mercantilists, including Braddon and Dobbs. Nonetheless, a systematic investigation as to marriage investigating the causes behind the marriage customs and rates as well as the laws regulating it seems to be a subject that had to wait until Richard Cantillon. In that respect his survey of the subject seems to examine what determines the marriage patterns and which role the landlords play in their establishment.

To do justice to the earlier literature it must be acknowledged that we have found some surveys made prior to Cantillon as to marriage patterns of England. Sir William Temple, for instance observed in the second part of the 17th century that “our marriages are made, just like other common Bargains and Sales, by the meer Consideration of Interest and Gain”, which was, to him, an emerging “Custom of no ancient Date in England”. That novel way of marriage, he continues, is introduced first by the “Noble families that married into the City for downright Money, and thereby introduced by degrees this public Grievance” (quoted in Valenze, 2006,

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<sup>93</sup> Although Cantillon makes the point that “it would be a great advantage to a State to teach its Subjects to produce the Manufactures which are customarily drawn from abroad”, still he does not elaborate further that point, leaving it aside by saying “but I am considering only at present a State in relation to itself. (pr. 61).

p.231). In that respect the marriage between daughters of merchants and sons of landlords became a common way of marriage over time, enabling both merchant families and landlords to extend their wealth, power and influence in the society in which they lived. In this passage Temple apparently draws attention to the role of economic concerns in the establishment of novel marriage patterns among the British.

The later arithmeticians and economists also seem to touch on the subject of marriage. Their analysis, however, appear as a policy-oriented one in which the marriage patterns are to be manipulated by state interventions to increase the total wealth of their nation. Thus, the subject of marriage was examined not for its own sake, alongside the rules or laws regulating it, but mainly for the sake of the power, wealth and revenue of the nation in question.

Cantillon, on the other hand, spends efforts to find the natural laws or causes governing marriage patterns in a given society. In that respect, he investigates when a young person decides to marry, what determines the number of children in a family and how landlord preferences influences, either directly or indirectly, these decisions.

The first point is apparently the most difficult part of the investigation since it aims for an arguably universal benchmark for marriage decision. Indeed, to do justice to Dobbs, I can claim that, he once seems to come close to examining such a benchmark for marriage patterns when he states, in a passage already quoted above that “People grow cautious in marrying, until they have provided somewhat to maintain a Family with tolerable Satisfaction(1729-31, II, p.12-3). Nevertheless he does not qualify what he exactly means with “tolerable Satisfaction”, a query that Cantillon gives more attention to, ending in an analysis of the main causes behind the marriage decisions by the young, which reads;

most Men desire nothing better than to marry if they are set in a position to keep their Families in the same style as they are content to live themselves. That is, if a Man is satisfied with the produce of an Acre and a half of Land he will marry if he is sure of having enough to keep his Family in the same way. But if he is only satisfied with the produce of 5 to 10 Acres he will be in no hurry to marry unless he thinks he can bring up his Family in the same manner. (pr.169).

Thus, a belief in a sustainable income to raise a family without compromising the accustomed lifestyles is identified by him as the point determining whether a young man will prefer marriage or remaining single. Formulating the marriage patterns thus, Cantillon may probably become the first thinker who set a universal maxim for marriage patterns among low-income groups. He also supports his conclusion by stating that, the majority of population in society “would consider themselves to do an injustice to their Children if they brought them up to fall into a lower Class than themselves”, meaning the established life standards will be kept for generations and, unless there be an external shocks, it could go only in one direction for a better life standards for humanity as a whole (Essai, H, pr.171). This simple but



sophisticated remark upon marriage pattern suggests something incompatible with, if not contrast to, Malthusian population concerns. In fact, unlike Malthusian pessimism and gloomy predictions, it forecast optimistically an arguably ever rising life standard for the majority of human being. Nevertheless, for the sake of the main question in hand, the full implications of this great insight and a comparison of Cantillon with Malthus is postponed for further studies<sup>94</sup>.

Leaving aside such comparative perspectives and implications of his observations, I may return to the subject at hand and ask how Cantillon ties the marriage decisions up to the attitudes of landowners, or how he explains the alleged relations between both.

Cantillon's reasoning implies that no matter whether the people are living in a closed or open economy and society, the landlords' decisions affect the population density, marriage patterns and growth rate.

Starting with a closed economy, in which there is a feudal type of economic organisation, the effects are more immediate, so more easily discernible. "If the Proprietors of Land had at heart the increase of Population," in such a society, and

they encouraged the Peasants to marry young and bring up Children by promising to provide them with Subsistence, devoting their Land entirely to that purpose, they would doubtless increase the Population up to the point which the Land could support... (H162)

Thus, both the decisions as to marriage and number of children are influenced from the actions, desires and promises of landlords. Although in the market economy the economic organisation of society is more distributed and difficult to follow, the main idea and cause is the same in the final analysis. If the landlords do not urge to support a population then the low income groups, Cantillon's reasoning follows, can barely afford the costs of marriage and raising children, meaning a lower population growth for the decades ensuing, whereas if they deserve a higher population and support the landless class accordingly a higher population can be attained in a far shorter time<sup>95</sup>.

In sum, Cantillon's analysis seems to assume that the affordability of necessities, without compromising the accustomed lifestyles, are the main factors taken into account in marriage decisions. He thus affirms that "the Proprietors of Land" are "at heart the increase of

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<sup>94</sup> For further investigations of Malthusian population theory and controversies about population in his day look at Griffith (1926) and Eversley (1959). For a more comprehensive work, covering 10 volumes and including the responses from early 19th century to Malthus's work, see "Malthus and the Population Controversy 1803-1830 (1994, Abingdon: Taylor & Francis). For a recent work dealing with the reception of Malthus across different European nations see Faccarello et al. (2020)

<sup>95</sup> A similar view appears in the *Analysis* version as well, which reads; the "Support and Maintenance [of the kingdom] depends on our great Proprietors of Land ... on them depend the Increase and Decrease of Population" (*Analysis*, 1759, p.4)

Population” and they “might multiply the Population as far as the Land would support them” by rendering marriage easier or difficult for young generations (pr. 162-169).

### *Actual Marriage Patterns of the early 18<sup>th</sup> century Britain*

At this point, to give a better perspective to the *Essai* and the background against which it was written, we may look at the actual marriage patterns of early 18th century Britain. Such a picture apparently supplies us with a similar picture that is depicted in his *Essai*.

In the early 18th century Britain, marriage meant for young couples setting up their own households rather than to continue living with the parents, making marriage less affordable for young generations in comparison to the rest of the world. Professor Amanda Vickery (2010) summarises these differences in marriage patterns with a comparative perspective:

In Southern Europe or China, a married couple was simply absorbed within the parental unit, and young brides were ruled by their mother-in-law. In Eastern Europe, multiple families tended to live together, but sharing a hearth was anathema to the British idea of marriage. No respectable Anglo-Saxon marriage could go forward without an independent establishment. As a result, there was always a sizeable majority of people who simply could not afford to wed; no home meant no wedding bells. So, British couples only married when they had saved sufficient capital or felt confident enough about cash flow to set up an independent home, and therefore the average bride and groom are much older than you might expect – over 27 for men, and 25 for women, before 1750 (see also Hajnal, 1965).

It must be noted also that this great variance between the Anglo-Saxon marriage pattern and of the rest (of the world, including southern and eastern Europe) has been identified by some scholars as “a major contributor ... to the eventual upsurge in real wages” in England, which is considered to be “the defining characteristic of the English industrial revolution”, making the Anglo-Saxon marriage pattern one of the key driver factors paving the way for the Industrial Revolution (Foreman and Zhou, 2018, p.1096). The relatively high income and saving rates of England that partly caused by the same marriage pattern, argument goes on, had rendered some of the capital accumulation required for the Industrial Revolution -while the Revolution itself boosted in return further income and saving per head.

Even if we assume the marriage patterns were one of the key factors behind the industrial revolution in England, from Cantillon’s perspective landlords, by setting this marriage pattern in Anglo-Saxon world, becomes an indirect contributor to industrial revolution in the long run. Nevertheless, putting aside such these long-term consequences, it could be argued that, the marriage pattern depicted in Cantillon’s *Essai* seems to be that of Anglo-Saxon world in which a new home must be established for the recent couple/family. Thus, I may say he observes the marriage patterns of his day and idealises it in the *Essai*. While doing that, however, he locates the preferences of landlords at the heart of his analysis of marriage patterns, that sustain the

population of the kingdom. Thus, the question as to the marriage and population, like the marriage age, family size, actual multiplication rate etc. all are tied to the preferences and tastes of the landlords.

## *2.7 Discussion and Conclusions*

Cantillon's population theory has been generally examined within French tradition and thereby the literature more focus on his influence on, and deviations from the later French population theories. In this chapter I have studied his population studies against British background and thereby aimed to illuminate the similarities and variances between Cantillon and previous British mercantilist. Thus, while the literature on French tradition takes Cantillon as a forerunner or earlier figure heralding some theories, I treated him as a the end point who, on the one hand, has some debts to previous British political arithmeticians and makes, on the other, some innovative and generic contributions to previous mercantilist tradition.

Some statements by the 17th century population- and political-arithmeticians give, at first sight, the impression that they considered even the socio-political variances between societies. Petty's two references, both quoted above, are of particular importance: in one he treats the living standards of "regular Families" as the benchmark of his analysis and in the other he assesses the best administration in terms of their potential for population growth, implying that he is well aware of the fact that population can greatly vary in societies with different socio-political structure. Nonetheless, such remarks, which seem to be made in passing, are never properly qualified and adequately incorporated into a more developed analysis of the role of living standards in different nations. Recalling his observations on China, Holland and England, there he advocated the population to be increased in England to the standards of China, so one-acre per head were set by the ideal ratio, without any due consideration of great variances between the living standards of a common Chinese, Hollander and Briton. The same rough and ready reasoning appears in the works of other 17th century political arithmeticians too, including Graunt who likewise demanded the population density to be increased to as much as that of Holland with no consideration of varying political and socio-economic structures of the societies. This was arguably the result of the universal desire of the 17th century mercantilist tradition to increase population rates as much as possible without examining the real causes regulating it. Thus, population seem to be conceptualised by them as a means to wealth and power, that can be promoted by constant endeavours and right policies.

Likewise, while attempting to calculate the multiplication rates for societies, they thought they could discover multiplication rates not only for their time and kingdom but for humanity as a whole and all times. Indeed, Gregory King even tried to set a growth rate for the future of his kingdom. Their examinations of multiplication rates seem to rely on rough and ready methods of doubling which takes no account of varying socio-political, economic and tastes across nations or over time.

The later generations of politician arithmeticians seem more cautious in their conclusion. In this chapter I have analysed two of them; Laurence Braddon and Arthur Dobbs. In Braddon we encounter for the first time an analysis of varying living standards across European nations and a proper application of it to population potentials of a given nation. Without reducing the acre per head used, either by decreasing the consumption level or increasing the land productivity by improvements, it would be impossible for all the nations to get the same population density. Leaving alone increasing population to as much as Holland, it could be impossible even to significantly increase it without either decreasing per head land usage or making further land improvements. Nonetheless, when it comes to multiplication rates and doubling methods, Braddon seems to have nothing to add to the previous literature, making his analysis arguably a static comparison of living standards across nations that neglects the intertemporal aspects of population analysis.

Such an analysis appears at length, arguably, for the first time in Arthur Dobbs. Thus, Dobbs makes two great contributions to the discussion of multiplication rates in the previous literature. Firstly, he underscores the importance of “Incidental Causes”, such as natural disasters, wars, socio-political or religious factors, in the establishment of marriage patterns and multiplication rates. Thus, rather than being a dynamic entity subject to similar rates of growth always and everywhere, it become something that may greatly vary across time frames and societies.

Secondly, in his analysis of marriage patterns he suggests a direct correlation between, on the one hand, population, in general, and marriage patterns and multiplication rates specifically, and on the other hand, the ease and difficulty of getting provisions that “somewhat ... maintain a Family with tolerable Satisfaction”(II, p.12-3). In this regard, he seems to predate Cantillon. Nonetheless, he never qualifies or even examines complimentary questions like ‘what is the satisfaction point for the majority?’ or ‘how is it set?’ etc.

Such questions seem to be examined for the first time in detail by Richard Cantillon who ties them to the landownership and the tastes of the landowner class. Some points of connection between him and previous generations must be noted.

Firstly, since the previous political arithmeticians had already drawn attention to the varying lifestyles and living standards, to “Incidental Causes” and to the weight of life necessities in the establishment of families and population growth, none of these factors occur to me as a contribution of Cantillon to the literature<sup>96</sup>.

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<sup>96</sup> According to Brewer, for example, Cantillon’s success is in his reversing the correlation put by Petty, in his assumption “that population could only increase if the supply of food and other necessities” (Brewer,1992a, p.715-6; Brewer, 1988b).

Cantillon's success, or main achievement lies, for me, in his advancing an analysis that includes land ownership and tastes of landlords, and using these aspects in his analysis as the main factors affecting the actual and potential rates of population in a given society. In that respect, his main thesis seems to argue that the landowners "are at the heart" of the marriage patterns and population growth, so, they could easily stimulate both the marriage-rates and population growth-rates in a society, mainly by reallocating their lands, towards necessities of life.

Secondly, in a stark contrast to previous generations of political arithmeticians who attempt to find out more lucrative ways of land usage both economically and demographically, he refers the preferences and tastes of landlords to demonstrate that it is landlords, as being the sole owners of lands, who decide whether the lands will be accordingly reallocated or not. As a result of reallocations and shifts, the population of nation can increase, remain stable, and even decrease, which makes a stable assumption of population growth unreasonable. In all these changes, the main initiative, in his view, is in the hands of landlords.

Thirdly, it must also be noted that, unlike most, if not all, previous arithmeticians who had an ideal nation, like China or Holland, in their minds and made comparisons with this ideal nation and meticulously sought to 'improve' the nation so much that the population or life standards of their kingdom would achieve a par with this ideal-nation, Cantillon seem to refrain from making any such normative statements as to living standards, populations and per head land usage. Being aware of the, *ceteris paribus*, trade-off between the high living standards per head and population, he affirms that

It is also a question outside of my subject whether it is better to have a great multitude of Inhabitants, poor and badly provided, than a smaller number, much more at their ease: a million who consume the produce of 6 acres per head or 4 millions who live on the product of an Acre and a half (H182).

All this requires some further discussion of the modern literature on Richard Cantillon.

Although some scholars like Schumpeter (1954) have regarded population studies as one of the areas in which Cantillon followed Petty very closely, as Brewer (1992a, p.714) highlights, a review of their works challenges Schumpeter's interpretation so much that his comments turns into a "mystery" which is difficult to resolve. The difference between Cantillon and Petty have been stressed by Théré (2004) and Berdell (2009) too.

In the opinion of Berdell (2009), the differences between the two men stem from their general economic perspective. Unlike Petty who was a "demand-led" economist, Berdell argues, Cantillon was a supply-side economist regarding land as the key constraint, ending in a refutation of Petty's stable growth rate for population. Brewer (1982a, 1998) and Spengler (1943) seem to share a similar view to Berdell in the sense that land was the main constraint

of Cantillon's economy and that such a perspective was the main reason, for both, why he rejected Petty's conclusion<sup>97</sup>.

Unlike these scholars who straightforwardly treat land as the binding constraint of Cantillon's economic system, Thomas (2018, p.21, 24-5) observes more cautiously that there is "an absence of definitive statements as regards whether the land constraints are binding". Quoting some passages from Cantillon, he even argues that "there is an ambiguity in Cantillon theory ... [since] they do not conclusively point to the existence or absence of unused land". Indeed, a similar concern has been raised by Brewer as well (1992b, p.16) who supposes in the end, arguably to escape from the alleged problem caused by unused lands, that "Cantillon [...] assumed that the land was fully used".

Some further points have to be made; firstly, unlike Thomas and Brewer (1992b), I argue that "the existence or absence of unused lands" does not change anything in Cantillon's system since it is again the pleasures of landlords which determine whether the lands stay idle or are used, so it is their pleasure which decides, in the final analysis, how lands are utilised in a given society. Also, Cantillon's handling of the subject suggests that the unused or idle lands should be treated in the same manner as both find their usage according to the pleasures and tastes of their owners. This point has been previously stressed by Negri too who says in Cantillon's model, "leaving land uncultivated could have appeared as a use in the sense that it could have been seen as the effect of a proprietor's decision" (Negri, 1995, p.133). Seen from that perspective, there appears no categorical difference, in Cantillon, between used and unused pieces of lands.

Secondly, a point in which my reading diverges from that of Negri must be stressed. While for him, "if the extent of land let to the farmers were smaller than that owned by the proprietors, we could not say that land was fully used", to me, there is nothing something like "idly" used or "fully used" land in Cantillon's system. An appraisal of Cantillon's treatment of lands bring me to the conclusion that there is no "idly" or "fully" usage of land in Cantillon, but only the forms of usage, including non-usage. Hence, each and every piece of land is used in the way chosen by the landowner, regardless of their actual or potential effects population.

Thirdly, in Cantillon the established lifestyles together with the tastes, preferences and demands of landlords seem to be equally important constraints on population growth as the available stock of land. Since in all its usage land reflect the preference of landlord class, one may even argue that it is the landlord class that set the land available for the maintenance of the society as a whole.

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<sup>97</sup> Apparently, the literature diverges upon whether Cantillon's economic model is a demand- or supply-led economic model. Thomas (2018, p.28) for example, in opposing Berdell, considers Cantillon's economic model as a "demand-driven" one whose "limits set by the land constraint.

### 3 *Par Theory: Petty and Cantillon on natural denominations of value*

#### 3.1 *Introduction*

Arguably, since, at least, Schumpeter (1954) many scholars have agreed on the existence of a continuum between the ideas of Petty and Cantillon. To him, on a number of topics, ranging from the approaches to value and the par to surplus analysis and population theory, Cantillon took “the fundamental features of the general theoretical set-up”, as well as the methods, from Petty: “Cantillon’s econometric zeal derived its direction from Petty. ... it was Petty’s problems—mainly the ‘par’ between land and labor—and Petty’s methods which inspired them.” (Schumpeter 1954, p.212) Additionally to him “what Petty failed to accomplish ... lies accomplished before us in Cantillon’s *Essai*.” (Schumpeter, 1954, p.210)

Dooley (2005, p.62), like Schumpeter, identifies a continuum and similarity both in the research questions and methods of both economists. “Cantillon” for him “followed Petty in his theory of value and in his methodology”, and “adopted and extended Petty’s theory of value”. Even though we do not have the ‘supplement’ today, Dooley claims, the accounts of *Essai* suggest that Cantillon “evidently employed Petty’s inductive method of political arithmetic to make statistical estimates of the par between land and labour” (ibid, p.52). Both economists, in Dooley’s view, identified land and labour to be the sources of wealth and so attempted to measure “values in terms of either land or labour, by establishing a par” (ibid, p.52).

Similarly, Groenewegen and Valdi (2003, p.46) argue that “Cantillon’s analysis of value ‘solved’ Petty’s measurement problem”, thereby cracking a problem first formulated by Petty more than half a century before (see also ibid, p.34).

According to Berdell (2009, p. 237) too, even though there were some striking differences between Petty’s “demand-side” and Cantillon’s “supply-side” economic framework, “Cantillon appears to follow Petty fairly closely in regarding the amount of ‘land and labor’” to decide on the so-called “intrinsic value” of commodities<sup>98</sup>.

However, unlike such accounts who highlight similarities and continuum between the analyses by Petty and Cantillon, there are also some scholars who highlight divergences. Naldi (1995), for example, as one of the voices opposing the view of a continuum between Petty and Cantillon, identifies at least three point in which Petty and Cantillon significantly diverge; First, that Cantillon reversed Petty’s depiction of rent as a surplus accruing to the proprietors even if land was not treated as scarce. Second, that Cantillon assumed that no part of the population was unemployed. Third, that the gap which separates Petty’s and Cantillon’s

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<sup>98</sup> It must be noted however, Berdell (2009, p.236, fn.29) also seems to reject Schumpeter’s view of a direct continuum between Petty and Cantillon. “[T]he connection between their work is in my view a strong one,” he claims, “but it is one in which Cantillon is usually found opposing Petty’s assumptions and results”.



schemes is such that the latter cannot be regarded as a development of the former. (Naldi, 1995, p.136)

Naldi who apparently prefers to look at the general perspective and frameworks, does not specify some further points in which the two economists diverge, including their population theory (which was the subject of our first chapter), their monetary views and opinions about the velocity and alleged optimal amount of money in a nation (which are not examined in this thesis) and also their par theories and value theories (which will be, respectively, the subject of the present and next chapters).

The literature devoted more specifically to the par, like Gerkhe (2016, p.131) or Thornton (no date<sup>99</sup>), has already drawn attention to Cantillon's critique of Petty's par, but does not address the question why Cantillon criticised William Petty, or what were, if any, the variances and divergences between both.

Brewer (1992a, 1992b), who offers a detailed analysis of the divergences between the theories of Petty and Cantillon, including their par theories, concludes his article with the argument that "the connection between them are considerably weaker than is often thought" (1992a, p.712). Although "Cantillon presumably took the notion of a par, or at least the term, from Petty," he states, "beyond that, his use of the notion was entirely original" (ibid, p 722). Thus, Brewer refutes to idea of Cantillon's research project as a continuum Petty's research agenda. Nonetheless, his article does not adequately qualify why he thinks so and what are the vital differences between them. (A similar ambiguity can be found in his book on Richard Cantillon as well).

Indeed, when it comes to the par theories, modern scholars seem to neglect the discussion of the 'par' per se by focusing mainly on its implication for their value theories. Thus, the par theories of Petty and Cantillon seem to be eclipsed by their value theories.

Arguably the only exceptions to this neglect are Naldi (1989), who investigates the transformation of the par and value theories of Petty over his career, and Davila (1982) who compares both par and value theories of Cantillon with those of Marx<sup>100</sup>. Nonetheless, neither of these articles gives a comparative account of par concepts of Petty and Cantillon together. So, a comparison between par theories of the two economists is yet to be done. This chapter

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<sup>99</sup> Thornton, Cantillon the Anti-Mercantilist, [no date] p.13-4 "Cantillon ridiculed Petty's notion of the importance of par value and belittled his research as fanciful, and even attacked his methodology (i.e. empiricism) and then extended this criticism to Locke, Davenant, and "all other English authors who have written on this subject." Thus, Cantillon assailed the subject, content, and method of the English mercantilists". In another article which aims to find the root of Smithian invisible hand in Richard Cantillon, Thornton (2009 p.33) says "the issue of a par value between land and labor is now considered an intellectual black hole in economics".

<sup>100</sup> Davila positively contrast Cantillon's value theory to that of Marx; "In short," and in its general framework, Davila argues, "Cantillon's analysis is consistent and conclusions are correct in terms of his model" unlike Marx's inconsistent model. (Davila, 1982, p. 16-17).

aims to fulfil this gap. The principal claim is that Cantillon's and Petty's handling and utilising of the 'par' are so dissimilar that it is hardly possible to claim a continuum between both but perhaps a re-utilisation, if not reinvention, of the par concept by Cantillon within a crucially dissimilar framework and for different aims.

In the first part of the chapter, I will specifically examine the par theories of Petty. The alterations Petty made to his concept of 'par', over his long career, has invoked in the literature some debates as to his value theory as well. Still, throughout my research I will try to stick to his par theory without examining the implication of his par for his value theory. Such implications as to his par could be the subject of an independent paper,

Thereafter, Cantillon's approach as to par will be examined. I will claim that Cantillon did not solve the par problem left unresolved by Petty. What Cantillon examined indeed, it appears to me, was a different research question having little in common with the research question Petty first put forward. Cantillon's research questions, alongside his aims and methods, regarding the par, does arguably not owe much to Petty. I will also try to assess the limits and shortcomings of Cantillon's par before concluding the chapter.

Additionally, the role of landlords in the par of Cantillon seems to be neglected. In the chapter I will also highlight this and demonstrate how the method utilised by Cantillon to solve the par problem in fact underscores the role of landlords in the establishment of the par. This point is significantly crucial for our study that highlights the role of landlords in his economic system. Additionally given the vital position of par in transforming labour values to land values, making it a crucial element of his value theory, such a discussion is also required for a systematic analysis of his value theory.

Put differently and shortly, the chapter has a threefold aim: a) to demonstrate the divergences and variances in both the par concept and methodology of Petty and Cantillon and b) to point out the limits and flaws of Cantillon's par and c) to show the crucial role he attributes to landlords' references in the establishment of the alleged par between land values and labour values.

Thereby the chapter aims not only to go beyond Brewer (1992a, 1992b) by specifically identify the variances and divergence between the par of Petty and Cantillon, but also making some further contributions to the literature by specifically demonstrate the particular context of par in Cantillon, and the role of landlords in the method he utilises to get a par between land and labour and flaws and shortcomings of his par.

### 3.2 Sir William Petty

#### 3.2.1 The 'par' of Petty's 'Treatise'

*A Treatise of Taxes*, Petty's third work, following *Advice to Hartlib* (1648), and *Rejections upon Ireland* (1660) was originally, as Slack (2004, p.612) states, "designed to display his credentials as an expert on the whole topic [of taxation], capable of painlessly increasing the revenue of the Crown". Later generations of scholars have often considered it as Petty's greatest work. C. H. Hull, the editor of Petty's work, does not only describe it as "Petty's masterpiece" but also observes that

"it is scarcely too much to say that English economic literature before Hume can show no tract of such range and force, characterised by such wealth of suggestion and such power of analysis, as the *Treatise of Taxes*" (Hull, 1899, I, p. lxx).

In that "masterpiece", Sir William Petty endeavoured also, for the first time in economic theory, not only to design a measure to assess the value of lands in different parts of the nation, but also to find a natural measure of value that could be utilised in his words, an alternative to "the common artificall Standard" of silver (*Treatise*, ch, XIV, point 17). His investigation culminates in so-called "natural Denominations"; "I would say upon this matter is, that all things ought to be valued by two natural Denominations, which is Land and Labour" (ibid, ch.IV, point 18). Hence the commodities and land produce must be measured via these natural denominations, and preferably by one, for "there may not be two measures [at the same time], and consequently the better of many must be the onely of all". (ibid: point 17). "This being true," he later affirms, "we should be glad to finde out a natural Par between Land and Labour, so as we might express the value by either of them alone as well or better then by both" (ibid, point 18). Apparently, the problem could be solved by some methods such as a) reducing land to labour b) labour to land or c) by picking a third 'natural' entity which could measure both land and labour<sup>101</sup>.

Throughout his career, as we will see later, Petty seems to search for a reliable solution to this problem and occasionally changed his par.

Arguably, money and its value in the market is a good starting point for an examination of Petty's arguments in the *Treatise*.

If we look more closely, after defining the *rent* to be the surplus, that is, what is left after the cost of production removed from total yield of land, he attempts to find a natural par to

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<sup>101</sup> The reader could also read Foucault (2005) for a more philosophical discussion of measure of value, most specifically Chapter 7.2 in which not only Cantillon was discussed but also food, most particularly "agricultural production, wheat and land" as identified as the main measure of all "the Classical age" (ibid, p.241).

measure the monetary equivalent of that rent. In a thought experiment by assuming some lands dedicated to corn, he asks,

“how much English money this Corn or Rent is worth? I answer, so much as the money, which another single man can save, within the same time, over and above his expence, if he employed himself wholly to produce and make it; viz. Let another man go travel into a Countrey where is Silver, there Dig it, Refine it, bring it to the same place where the other man planted his Corn; Coyne it, etc. the same person, all the while of his working for Silver, gathering also food for his necessary livelihood, and procuring himself covering, etc. I say, the Silver of the one, must be esteemed of equal value with the Corn of the other: the one being perhaps twenty Ounces and the other twenty Bushels. From whence it follows, that the price of a Bushel of this Corn to be an Ounce of Silver (*Treatise*, Ch.IV point 14).

Later he adds the cost of production to the analysis and endeavours to demonstrate that neither the abilities of workers nor the hazards undergone does challenge the accuracy of his conclusion, which equalises surpluses; “there may be more Art and Hazzard in working about the Silver, then about the Corn, yet all comes to the same pass” (*Treatise*, IV:15).

Basing themselves on such paragraphs, some economists and historians -following Karl Marx- (Christopher Hill, 1961, p.307; Matsukawa, 1965; Fox, 2009, p.388 Beer, 1938, p.232<sup>102</sup>) have attributed a labour theory of value to Petty. However, such claims has been refuted by other scholars (including Slutsky, 1914 [2005], p.314; Roll, 1923, p.10; Schumpeter, 1954, p.207; Bowley, 1973; Aspromourgos, 1996, p.49). Here I will not supply an extensive summary of the literature on Petty’s value theory but will try to keep the discussion limited to the par so much as possible and touch on Petty’s value only so much as required for a due analysis of his par. I can nevertheless say that his examination in the *Treatise* leaves, for me, hardly any doubts that the value theory of the *Treatise* is a labour(-regulated) theory of value (searching for the measure of the natural and optimal values not of actual), since the natural value of money and commodities are confined to the labour required for their production.

Returning to the main discussion, Petty summarizes his investigation into par and ‘natural’ value towards the end of the *Treatise*. There he lists some points that give the impression that Petty thinks he had finalised his research into par and value. “First” he says there “the goodness of badness, or the value of Land depends upon the greater or lesser share of the

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<sup>102</sup> Max Beer, himself a Marxist economist, by referring to that paragraphs argues that no one up to Sir William Petty had ever asked or endeavoured to answer the vital question “how did money ... equates the values of the work of the builder and cabinetmaker?” (1938, p.232). It is only with Petty, he continues, “we have [found for the first time] the real equation between commodity and money. The equal amount of labour bestowed on the production of commodity and on a number of grains of silver makes them commensurate” (1938, 169). Therefore, for Beer there is a labour theory of value in Petty’s treatise.

To me, what is present in Petty’s *Treatise* is not a labour embodied, or labour quantity theory of value but a labour-regulated theory of value. An appropriate investigation of the subject requires, however, an independent research postponed to further studies.

product given for it in proportion to the simple labour bestowed to raise the said Product”. In other words, the value of Lands is proportioned to his productivity for a given level of labour. After warning that “the proportion between Corn and Silver signifie only an artificial value, not a natural, because the comparison is between a thing naturally useful and a thing in itself unnecessary”<sup>103</sup>, he reaches the striking conclusion “*That natural dearness and cheapness depends upon the few or more hands requisite to necessities of Nature*: As Corn is cheaper where one man produces Corn for ten, then where he can do the like but for six” (ch 14, point 17, italics added).

By doing so, Petty apparently thinks he had finally resolved the vital question of finding “a real and not an imaginary way of computing the prices of Commodities” (ch 14, point 16) which is labour-force executed in a given time, so let us call it ‘*day’s work*’ by relying on the observations he made upon corn and silver values. “Now the price of labour” as he also declares “must be certain, (as we see it made by the Statutes which limit the day wages of several work men)” (ch.5 point 15). All these gives the strong impression that the silver prices and even the “natural dearness and cheapness” of commodities, are apparently tied by Petty to labour required for their production, whereas labour, the day’s work, had also been picked as the measure of both value of commodities and lands. In other words, labour had been picked both as the regulator of market values, and measure of land values. Thus, Petty seems to think he had finally resolved the problem of value and par in the same way by picking the day’s labour both as the natural regulator of value and the natural denomination or par on which value can be measured.

Petty’s analysis of value in the Treatise does not end there though. He also warns the reader that prices in the market can diverge from the natural values, which is the “natural dearness and cheapness” that is fixed by labour required in their production. All these divergences are considered by Petty as factors affecting, in his words, the “Political Price” of the commodities. Thus, although the natural cheapness and dearness are determined by how many hands are required for the production, the “Political Cheapness”, to him,

depends upon the paucity of Supernumerary Interlopers into any Trade over and above all that are necessary, viz. Corn will be twice as dear where are two hundred Husbandmen to do the same work which an hundred could perform: the proportion thereof being compounded with the proportion of superfluous expence, ... then the natural price will appear quadrupled; and this quadruple Price is the true Political Price computed upon natural grounds.

Hence, unnecessary labour force used in production, or excessive demands for what is produced could divert the price from its natural grounds and, quadruple, in that example, the

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<sup>103</sup> Probably as a result of that tendency of excluding the term ‘natural value’ for the thing naturally useful, in the *Treatise*, Petty never uses the term “natural value” for the comparative value of money to corn, since the monetary value did not imply a ‘natural value’, to him.

prices of the given commodity, corn. However, these are treated by Petty as accidental causes reflecting only the political not the natural dearness or cheapness of given commodities. That quadruple price, he warns, will be reflected in monetary price as well. In other words, the market value of corn measured by “the common artificial Standard Silver” will be quadrupled in case of that nation, as “the true price Currant” (ch. 14, point 17), meaning the money price of corn will be four-times as much in this market as the other. Nonetheless, it must be noted, that price is its political price, not natural price.

Once we exclude all the accidental and political causes, including the superfluous workforce used in the production, or excessive demand for a given product, then it seems reasonable to ascribe Petty a labour-regulated theory of value that claims value is regulated or value is ‘naturally’ regulated, in the absence of accidental circumstances by labour.

In sum, Petty seems to think that he had already solved the par problem by refining value and par in terms of labour. Thus, while labour is identified as a regulator of natural value of commodities, it also picked as the measure of value of commodities and lands. Therefore, for example, a labour force executed in a given time, say day’s labour or day’s work, is apparently picked by Petty as not only the regulator of natural value but also the measure or par of the natural value. Nevertheless, some points must be made; Firstly, Petty himself accepts the point that he cannot measure the political prices (this is actual prices in marketplace), since there are so many concurrent factors that simultaneously affect the final prices in the market. Secondly, even though he picks labour as both regulator and par in the *Treatise* he did not establish a parity/ratio between land and labour so the value could be measured in terms of the natural denomination alone. Thus, even if we assume, at best that Petty managed to establish a natural measure, or a natural denomination for value, he could not achieve to put a par between land values and labour values so the value could be measured without referring to artificial standard, money. Hence, he arguably managed to set a natural measure and even regulator of value, i.e. a unit of labour, but not a par/parity between land and labour values so total value can be reframed in terms of one.

Later in his career, Petty seems to dramatically change his notion of the par at least twice. In the next sections I will investigate these changes.

### *3.2.2 The ‘par’ of the ‘Manuscript’*

A review of Petty’s works gives support to Aspromourgos claim that “the nature and significance of the par, to Petty’s mind, has undergone a distinct change” between *Treatise* and *Political Anatomy* (Aspromourgos 1996, p.93). In the coming paragraph I will focus on the

changes Petty's par had undergone over time. In that respect, I will look firstly at the par concept of a relatively unknown manuscript written by Petty, arguably in 1670, and then the par concept of his *Political Anatomy*.

A pamphlet discovered by Shichiro Matsukawa and dated by him to 1670 is important for our debate about the nature and development of the par concept of Petty. The manuscript is noteworthy both to comprehend the transformation in Petty's assessments as to par after the *Treatise*, and to see the roots of the par of the *Political Anatomy*. Additionally, the par of manuscript has merits of its own that are worth mentioning. It is convenient, therefore, to devote some passages to that work before proceeding to the par of the *Political Anatomy*.

The par computed in the manuscript is exclusively the par of national wealth and in that respect seems to divert from the par of the *Treatise*. The method "to Measure ye Naturall & Intrinsic strength of any Country", the manuscript assures, must rely on how many hands the nation could spare to do non-necessary work.

If nations could produce the food stock easily, the argument goes on, then they may be regarded rich and wealthy, since they can use superfluous labour force in further alternatives to boost the wealth of their nation. Exemplifying the argument, Petty says, if, for example, a quarter of population can produce all the provisions of the nation, then the three-quarter rest "are Spare hands & may bee employed to luxury Ornament War Sciences, Superstitions &c." (Matsukawa, 1977, [f. 9r], p.45-6 and If. l(y), p.47).

Put in simple terms, the greater number of hands a country can spare from the "Necessary labour" "the Stronger the Country". Hence, supplying the necessities with the fewest hands to him is a sign and requirement of wealth. Petty's evaluation signifies that he regards the "spare hands" [f.10r], which constitutes the surplus labour stock of the nation, as the real indicator of the wealth of nation, which is not surprising given his treatment of labour or hands as the father of wealth and land as the mother of it.

For our discussion, however, the most important passages are those that are dealing directly with the "par". Relying on the abovementioned observations he also assumes in the manuscript a "method to make finde y' a Par between lands and hands. So as to talk of both by one denomination".

The course of reasoning looks at first parallel to that of the *Treatise*. Firstly, money is identified as the "Common denomination by which the Par is made", and the standpoint of the *Treatise* is summarised;

I was once [thought] that 12 parts of silver was Equall to One of Gold, because a Man could in a day make or find 12 times as much silver & gold, and an (Ounce) of bushell of wheat worth 5s

because it was Equal labor to produce a bushell of wheat as an Ounce of silver. & when the difficultyes change Prices change also. ([f,10v], p.47)

After that, however, he puts forward a different method to that of the *Treatise*, to establish a par between land and labour without referring to the common measure of money. That novel method still compares surpluses with each other but no more the value of labour against each other but that of labour against land. Such a novelty also implies a change in method.

If we look closer at his method, he carries out a thought experiment in the case of Ireland where population is 1.2 million and arable land stock is 18 million acres. Identifying, for the sake of the simplicity, only wheat as their foodstuff and hemp as clothing materials, he reasons, if necessities of Ireland require, on average, a wheat consumption of  $\frac{1}{2}$  acre of land and hemp consumption of  $\frac{1}{12}$  acres of land per head, then a land stock of 700,000 acres could supply all the necessities for people of Ireland. By adding to that the amount the land required to produce the foodstuff of horses, 300,000 acres of land, he estimates 1 million acres as the minimum land requirement of Irish people. The remaining part, 17 million acres, is identified as the surplus land stock, which the nation can capitalise on to advance its wealth.

Then, what should be done is to find out the proportion of the labour force required for producing these necessities. If we basically assume, half a million people supply the requirements for all, then there remains a surplus labour stock of 0.7 million. If both forms of surpluses are redefined proportionately, Petty's method assumes, there established a par between land and labour.

After necessary computations, it can be realised that “7 men are Equivalent to 170 acres or One Man to 24 acres, Or rather One adult husbandman to 48 acres. So as if arable land be 6.8d per acre, the Rent or 16£ p[er] an[num], The wages of a good husbandman being thereabouts” (ibid, [f 10v] and [f11r], p.47-8). Hence the value of a skilled husbandman equals, for him, to 48 acres of land.

Even though Petty supplies the reader with a method to compute the par, Petty himself accepts that the figure of 48 acres of land is not an “exact” par, but only a rough estimation made to demonstrate the method to investigate the par. Thus, it might be argued, in this work as well Petty does not give a precise and practical ratio/par between land and labour but only a method to calculate it.

A few points should be made. Firstly, the par, of the manuscript gives the impression that to Petty that par is not to identify the comparative value of commodities in market, but more the comparative value of labour to land. Thus, this par occurs mainly as a *macro* par, if we can use that term, aiming to identify the contribution of labour to the wealth of the nation in terms of land.



Secondly, it may be noted that the passages in Petty's manuscript makes him arguably not only the first person putting forward a well-defined method to compute the par between hands and lands, but also the first who redefines the value of labour, namely the wage of husbandman, in terms of acre of land. That being so, unlike Matsukawa (1977, p.1) who claim that the manuscript "contains nothing novel", the work itself offers some novel interpretation while both the method and natural measure picked by Petty seems to be new. The same par, the acre of land, was used more than half a century later by Cantillon in his dealing with the same problem, as we will see. Whether Cantillon was aware of that manuscript or reached the same par independently of Petty could be a nice question for further studies. What I have tried to do in this section, however, was to summarise the par of manuscript. In that respect, the par of manuscript seems to be made for the specific cases of husbandman and takes the 'acre of land' as the common measure to refine the wage of agricultural labourer. Later, however, in *Political Anatomy* he seems to find another measure to compute *par*.

### 3.2.3 The 'par' of the 'Political Anatomy'

In *Political Anatomy of Ireland*, which is written in 1671/2, but not published before 1691<sup>104</sup>, Petty returns to the same subject of par. The par concept of Petty, however, seems dramatically changed there, as has been highlighted by a number of scholars, including Aspromourgos (1996, p.93) who thinks what was at play is “a distinct change” with respect to “nature and significance of the par”.

One passage from *Political Anatomy*, I think, is particularly helpful to comprehend the change experienced in Petty's par. In it Petty asks what determines the value of land, or from what or where lands take their values. Petty's answer and explanation indicates a change in his par. While previously in the *Treatise* it was the amount of labour required, namely the easiness of production, which indicates the “the goodness of badness, or the value of Land”, now Petty points to the number of people it maintains as the real indicator of value of a given piece of land:

If there were but one Man living in England then the benefit of the whole Territory, could be but the livelyhood of that one Man : But if another Man were added, the rent or benefit of the same would be double, if two, triple ; and so forward until so many Men were Planted in it, as the whole Territory could afford Food unto: For if a Man would know, what any Land is worth, the true and natural Question must be, How many Men will it feed ? How many Men are there to be fed? (*Political Anatomy*, ch. IV in Hull, vol I, 286-7<sup>105</sup>)

Thus, the measure of the value of land is no longer the easiness or difficulty of production but the population that it can sustain. Rephrasing, for the sake of analysis, the population or the total number of people as the total number of mouths, then we can reach a conclusion which is compatible with Petty's novel par of *Political Anatomy*; the values of lands, the new par apparently assumes, depend on the number of mouth they can sustain, or put differently, on the total food they can produce for human beings. That reformulation of intrinsic value of land suggests that while altering his par Petty changes how he evaluates the value of lands in a novel way compatible with his *par* as well.

But what was his new par? It is daily food, as he says in the *Political Anatomy*, more specifically the most easily obtained daily food on which a person can survive.

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<sup>104</sup> For a table demonstrating a historical account of Petty's works see (Aspromourgos, 1988, p.353)

<sup>105</sup> In the subsequent sentences, population is also identified as the core reason why the value of lands varies dramatically between Ireland England and Holland:

“But to speak more practically, Land of the same quantity and quality in England, is generally worth four or five times as much as in Ireland; and but one quarter, or third of what it is worth in Holland; because England is four or five times better Peopled than Ireland, and but a quarter so well as Holland. And moreover, where the Rent of Land is advanced by reason of Multitude of People; there the number of Years purchase, for which the Inheritance may be sold, is also advanced, though perhaps not in the very same Proportion. (ibid)

In the Table added to Chapter IX of *Political Anatomy* (in Hull, vol I, p.180 onwards) he states that his desire to “come to the knowledge of the Value of the ... Commodities, and consequently the Value of the Land,” brings him “to the most important Consideration in Political Oeconomies, viz. how to make a Par and Equation between Lands and Labour, so as to express the Value of any thing by either alone”.

To achieve this aim, he proposes a new method which considers the contributions of land and labour separately. Thus, the difference between what nature/land produces on its own without help of labour and what it yields when supervised and promoted by human labour, namely the “overplus”, is considered as the value or worth of labour (Hull, I, p.181). It should be noted, still the surplus, or overplus is the benchmark of the analysis of value.

In a similar way to how he identified the most easily gotten foodstuff as the measure by which the value of lands must be computed, he also identified the most easily obtained daily food as the measure of that “overplus”. “That overplus of days food”, as he puts it, “is the Wages of the Man” whereas the rent is the sign of the value of land “both being expressed by the number of days food” (ibid). Unlike the *Treatise*, he now declared that it is “not the days labour” but “the days food of an adult Man, at a Medium, ... , [that] is the common measure of Value, and seems to be as regular and constant as the value of fine Silver”.

Finally, a common natural measure that could assesses not only the ‘natural’ exchange values of commodities, but the contributions of land and labour seems to be established. To clarify his standpoint and to anticipate some criticism that could be raised against his *natural* par with respect to varying nature of daily food from society to society, Petty states

That some Men will eat more than others, is not material, since by a days food we understand part of what 100 of all Sorts and Sizes will eat, so as to Live, Labour, and Generate. And that a days food of one sort, may require more labour to produce, than another sort, is also not material, since we understand the easiest-gotten food of the respective Countries of the World.

Just after declaring days food as the common measure, he also applies that measure to natural market values of commodities and attempts to demonstrate how that measure can be utilised to compare the values of different forms of labour, including ingenious designs, improvements and artistic works. In a way that reminds of the case of the silver miner of the *Treatise*, he states

For an ounce, suppose, of Silver in Peru is equivalent to a days food, but the same in Russia is equivalent to four days food, by reason of the Freight, and hazard in carrying the same from Peru to Russia; and in Russia the price of Silver shall grow to be worth more days labour, if a Workman can by the esteem and request of Silver Utensils earn more than he can on other materials. ...

“By the same way” Petty asserts it could be made not only “a Par and Equation between Art and Simple Labour” or “between Art and Opinion” but with respect to roughly everything bearing a relation to human beings, meaning

“an Equation may be made between drudging Labour, and Favour, Acquaintance, Interest, Friends, Eloquence, Reputation, Power, Authority, &c. All which I thought not amiss to intimate as of the same kind with finding an Equation between Land and Labour” (ibid, p.182).

Hence, Petty seems to extend and deepen his investigation as to value in roughly ten years between the *Treatise* and *Anatomy* and now aims for a natural measure which could be touchstone or standard of value of almost anything, ranging from the wealth of nations, through the specific contributions of land and labour, to the worth of different kinds of labour or even non-economic phenomena such as friendship, favour, power etc.

Since the *par* is no longer a day’s work but a day’s food, the value of a given product, like “an Irish Cabbin” is estimated by Petty not in day’s work but “at the number of days food, which the Maker spent in building of it”. Thus, the value of a product is measured by his novel natural *par*, the day’s food.

### 3.2.4 Further Discussions and Concluding Remarks

Why, it may then be asked, did Petty change his notion of the *par* a number of times over his career? Perhaps it can be suggested that Petty’s changing *par* was a consequence of changes in his principal research question. Indeed, the changing nature of the *par* over his career implies that the focal point of his research also seems to transform over time. In this respect Petty’s research as to *par* seems to get a more universal character over time. Thus, even though there are some commentators, like Aspromourgos (1996, p.96) who thinks “Petty himself was not clear what the *par* was for”, my position is closer to McCormick (2009, p.141) who states, in passing though, that Petty’s *par*, was intended as “a sort of universal character or natural language of value ... [that] make all forms of wealth immediately commensurable”.

The *par* seems to aim for setting a natural measure by which we can compare and contrast different forms of value, including, first, the intrinsic values of lands, second, the comparative values of commodities in the market, third, the comparative contributions of hands and lands and fourth, total wealth of nations. Indeed, his *par* of the *Anatomy* took as objective the Herculean task of measuring the non-economic values and merits alongside all the economic values and wealth.

In the *Treatise* the focus seems to be on the first two points. Thus, a day’s labour is picked as the natural measure by which both the quality, that is intrinsic values, of lands and

comparative values of commodities in the market can be compared. In this respect, this par occurs as a more “market-oriented” par.

Such a par, however, clarifies barely anything as to the comparative contribution of lands and hands to national wealth, which requires a revision in the par theory. That revision comes in the manuscript that picks *the acre of land* as a reliable measure to assess the contribution of hands and lands. Thus, when Petty extended his research, in a way aiming for measuring the comparative contributions to total wealth, he accordingly modified his par from a *day’s labour* to an *acre of land*.

This was not the last time Petty modified his research question but. Later he extended the question once again so that not only comparative contribution of hands and lands could be compared but different forms of occupations and even non-economic phenomena, like friendship, favour etc. alongside the total wealth of nations could be numerically measured. All these changes in aim required a transformation in the par theory too. Thus, when he returned to the same question again in a more comprehensive way in the *Political Anatomy*, his par is no more a day’s work or acre of land but the most easily obtained foodstuff in a given society/state.

Hence, as Petty’s ambitions became more universal and comprehensive, his par was accordingly revised from an arguably local micro-par to a more universal macro-par by which nearly everything can be measured. Indeed, Petty’s ambition led him to overreach himself, which is arguably why he never managed to formulate a par by which we can measure the values of almost everything in natural denominations. Hence as mentioned by other scholars too, he had never finalised his great research of finding a “universal ...or natural language of value” (McCormick, 2009, p.141; Aspromourgos, 1996, p.93<sup>106</sup>). A more detailed examination of Petty’s writings, however, shows that there are further shortcomings in his analysis, some of which could be a direct result of his overly ambitious objectives.

Firstly, with respect to his method and assumptions, there are some concurrent, and occasionally problematic, assumptions in Petty. The ‘natural’ units he picks are so abstract and arbitrary that, leaving aside problems of measurement, even a precise understanding of their meaning is at times very difficult. In the *Treatise*, for instance, he says that the intrinsic values

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<sup>106</sup> For McCormick (ibid) despite his great ambition, Petty’s “pursuit of such a unitary measure took him in circles; [whereas] land and labour remained irreducible”, whereas for Aspromourgos (ibid, p.93), the aim of the *Treatise*, that is “to express the Value of anything by either [land or labour] alone” is never “achieved”.

Agreeing with them on Petty’s inability to finalise his research I should still make a further point. Unlike them I do not think Petty tied to reduce land to labour or otherwise, neither his reasoning seems ‘circular’ to me. In his works Petty seems to set a third measure by which we can measure the land and labour values. Thus, his standpoint does not seem reductionist to me. However, as the next chapter examine similar allegations and accusations against Cantillon, I am postponing the critiques to this chapter. After reading the next chapter the reader will see more comprehensively what I mean.

of land must be measured against the foodstuff that a given piece of lands could produce most easily. However, he fails to supply his reader with any method to identify this foodstuff.

The par he picks later in *Political Anatomy*, as well seems to suffer from the same problem. There the most easily obtained foodstuff is chosen as the measure of value. Nonetheless, it is perfectly possible for a nation not to consume the most easily gotten foodstuff but something else that requires more labour or lands. Petty says nothing as to what should be done then or how the varying forms of foodstuff, due to consumption and demand patterns, can be uniformly measured by his natural denomination. His method that relies on the allegedly natural value of lands leaves shed no light as to how the value can be measured in such actual circumstances, given the impression that Petty, either deliberately or not, ignores or neglects such actualities.

Secondly, Petty's observations are apparently made with the assumption of 'optimality'. So, lands produce the most optimal land produce while people consume the most optimal foodstuff. Additionally, in such a world, production conditions are optimal so both 'what is produced' and 'how is produced' are ideally determined. From this the natural value of lands determined, in the *Treatise*, by how productive land is, or how much it can ideally produce with a given amount of labour, whereas in the *Political Anatomy*, by how much of (the most easily gotten) daily food, the lands can ideally produce, that is, how many people it can ideally maintain. Thus, even though the par has apparently changed from *Treatise* to *Anatomy*, the assumption of ideal production conditions seems to remain untouched.

Thirdly, Petty's natural denomination is credible only when we assume such optimal circumstances. In the *Treatise* he himself admittedly accepts the vital point that the actual circumstances and prices in actual markets may so dramatically diverge from the ones of ideal circumstances that he has no method to measure market prices (*Treatise*, ch.14, point 18). Hence, when the prices considered are actual or, in his words, "political" prices<sup>107</sup>, his method as to natural values has nothing to offer.

Lastly, Petty never managed to devise a convenient parity/ratio between land values and labour values so that their respective contributions to wealth and the values of commodities can be measured. For some, the objectives of Petty's research agenda and the alleged parity were achieved only later by Richard Cantillon (Groenewegen and Vaggi, 2003, p.34). In the next section I will examine Cantillon's analysis.

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<sup>107</sup> Thus, even though he thinks he established "the foundation of equallizing and ballancing of values" still he cannot refrain from stating that "yet in the superstructures and practices hereupon, I confess there is much variety, and intimacy . . ." challenging his desire to establish a law for actual market prices too.

### 3.3 *Richard Cantillon's par*

Apparently, Petty could hardly identify a method to measure the actual values of commodities in market. Such a critique could be extended to the allocation and valuation of lands and questions about the organisation of the economy in actual circumstances. The lands usage and foodstuff produced could in reality be so apart from Petty's alleged natural measures that it can be next to impossible to discern any light from Petty's method to illuminate the valuations in the actual circumstances. Indeed, actual circumstances seems arguably alien to Petty's research agenda always seeking for the allegedly abstract and natural measure of value. To exemplify, societies may prefer keeping lands completely idle or instead consume a more expensive/costly foodstuff (requiring more lands) than the most easily obtained foodstuff. In either case, regardless of the so-called intrinsic value of land, the 'real' value of these lands in the market would be hugely different from their intrinsic values. In such cases the real market value of lands would by no means be at a *par* with the arbitrarily picked 'intrinsic' value of Petty.

These factors, in addition to the shortcomings summarised at the end of the previous section, may explain why Cantillon calls Petty's *par* "fanciful and remote from natural laws". To him, Petty's *par*, which is picked "in passing" without due attention reflects only that Petty had "attached himself not to causes and principles but only to effects" like all the English authors, including Locke and Davenant did after him (H103)

In the *Dictionary* version, "the method" of Petty was similarly condemned for being "very indifferently grounded". "But the principles which we have laid down", Cantillon continues, "seem to be very plain and natural, and may be applied to the eclaircissement of many political altercations" (D105). What is his 'measure' then, it may be asked, and what are the methods he offers to solve the *par* problem?

In his method Cantillon uses, presumably independently, a *par* that had previously been considered but later abandoned by Petty, namely *the acre of land*, as the natural measure of value.

Since "the value of the day's work has a relation to the produce of the soil," he is convinced that he has also identified a method to measure the value of commodities

that the intrinsic value of any thing may be measured by the quantity of Land used in its production and the quantity of labour which enters into it, in other words by the quantity of Land of which the produce is allotted to those who have worked upon it. (*Essai*, H97)

Thus, by measuring the day's work in terms of acre of lands, by which we can measure the value of land entered into production as well, Cantillon offers a method to compare values. Such a method, according to Cantillon, is also, perfectly simple in comparison to that of Petty;

given the daily food consumption in a society, or whatever the society produces or consumes, the acres of land required to produce these product can be a suitable unit to measure and compare them in terms of natural denominations. By doing so, Cantillon seems to finally find a way to measure different forms of labour and preferences, in short, a way to quantify the qualities. No matter the quality of labour and the forms of land products the acre of lands could equally commensurate them. More specifically both the different kinds of labour and varying products of lands, even when subsistence goods greatly vary, could be all expressed in terms of land, that is acre of land, required for their production<sup>108</sup>.

### 3.3.1 *How is the par computed?*

After finding a common natural measure to compute the value of commodities produced by both land and labour, and thereby commensurate the value of labour and land against each other, Cantillon goes further and endeavours to find a proportion or ratio between labour and land, a task left unresolved by Petty, which will be the subject of this subsection.

I will first look at how he sets up a par/parity between land and labour before proceeding to a critique of it, aiming to demonstrate the shortcomings of his par/parity.

How does he manage to get a parity between labour and land? In his examination Cantillon took the labour of the unskilled worker living in a closed economy, like the command economy of an agrarian settlement, as the main unit of his par analysis.

Assuming first a closed economy established on a landed estate run by slave labour, he reasons, “in this oeconomy” the proprietor of the estate, namely the landlord, “must allow his Labouring Slaves their subsistence and wherewithal to bring up their Children” (E79). Thus, the daily payment made in kind to slaves should meet both his own consumption and that of family as well.

To quantify the land requirements of the family Cantillon further assumes that the female worker, namely the mother of the family, gets barely enough for her own consumption<sup>109</sup>. Such

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<sup>108</sup> To prevent an otherwise highly probable confusion, it must be noted that Cantillon, unlike Petty, does not aim to measure the value of land *per se* too, but the value of land products, that is the value of land used in the production of a goods including the subsistence goods of the labourer. This difference, that implies a great difference in the research question of Petty and Cantillon as to par, is at least what I have inferred from my reading of Cantillon. For the sake of convenience the reader may think of land values of Cantillon as the value of matter or material used in production. Remembering the first words of the Essai, land is “the Source or Matter from whence all Wealth is produced” (H1).

<sup>109</sup> Modern accounts seem to support Cantillon's claim that the wage of unskilled labourer is barely beyond her personal consumption. According to the calculation by Clark (2011) women's earnings constituted, on average, 25 per cent of men's for six centuries from early 1200s.

A more detailed table by Humphries and Weisdorf (2015, Appendix, Table A1) demonstrate that the relative wage of female worker had been around half of a male counterpart, more or less, for the same period, with fluctuations between a quarter and two-thirds. More specifically for our study, but, the wage of unskilled female



an assumption allows him to measure the value of labour of the male slave by neglecting the workforce of the female slave and considering only the surplus required for the male slave to raise children. Thus, if he manages to find a proportional value between the personal requirements of male slave and that of his children then he can also find a par/parity between the labour (force) of this slave and land required for his personal consumption.

In his analysis of how much land is required to raise the children, he apparently utilised the computation by Edmund Halley which says only half of the babies born turn 17. As all the children must be fed until adulthood by their father, and only half of them could turn adulthood, Cantillon reasons,

“the labour of an adult Slave of the lowest class is worth at least as much as the quantity of Land which the Proprietor is obliged to allot for his food and necessities and also to double the Land which serves to breed a Child up till he is of age fit for labour” (H80)

Relying on this observation he reaches the conclusion “that the daily labour of the meanest Slave corresponds in value to double the produce of the Land required to maintain him” (H78-81)<sup>110</sup>. Hence the value of daily work of a slave could be finally reformulated in terms of land, making the value of labour, in terms of acre of land, double the amount of acre of land required for his own personal maintenance<sup>111</sup>. Thus, Cantillon seems to set a proportion between the value of a slave’s labour and land requirement for his consumption<sup>112</sup>.

Richard Cantillon considers this proportion, as Adam Smith perceptively observes, to be a universal ratio determining the value of low-skilled labourers everywhere, allowing him to extrapolates a parity for open market-based economy from the case of a closed slave economy:

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seems to have increased in relative terms throughout the 17<sup>th</sup> and early 18<sup>th</sup> centuries and made a peak in the decades between 1710 and 1730 that are greatly corresponding with the years in which the data required for the *Essai* and lost Supplement are supposedly collected.

<sup>110</sup> Apparently after Smith that assumption became a common opinion among economists. In that respect, the similarity between Cantillon’s observations and that of Friedrich von Storch leaves no doubt as to the influence of Cantillon on later generation:

The necessary wage amounts to most indispensable maintenance ... at least double the worker’s personal subsistence ... the wife’s work sufficing only for her own expenditure ... and the subsistence of four children (so that two survive) being equal to that of one grown man”(Storch, 1815, quoted in Emmanuel, 1972, p.51). In fact, to Storch, this evaluation was also a reduction of “the classical law to an equation” (ibid)

<sup>111</sup> To Schumpeter (1954, p.212 “the arpents of land per year (1 arpent=330 sq. ft.)” amounting nearly to 0.85 acres, “played exactly the same role in Cantillon’s analysis that days of labor played in Ricardo’s.”

<sup>112</sup> A further point is that the ratio for unskilled labour seems to be fixed by Cantillon since the early days of his examination as the *Analysis* version, which is, as van den Berg (2015) and Menegatti (2018) stress, probably written upon the earliest manuscript, identifies the same ratio for “the Value of lowest Peasant’s Labour” (pr. 100). The value of labour of artisans or handicrafts, on the other hand, appears to be reviewed and changed over time. In the later passages of the *Analysis* it reads that “the Labourer of the Artizan ought to follow the same Proportion”, whereas that ratio is altered in the *Essai*, refining the value of artisans and handicrafts to be, on average more than twice the value of land maintained them, and clearly defines the value of “Masters of Crafts in Europe”, who are sorts of undertakers, to be roughly thrice the produce of the Land which serves for their [own] maintenance” (*Essai* H pr.95).

A man must always live by his work, and his wages must at least be sufficient to maintain him. ...otherwise it would be impossible for him to bring up a family, and the race of such workmen could not last beyond the first generation. Mr. Cantillon seems, upon this account, to suppose that the lowest species of common labourers must every where earn at least double their own maintenance” (1776, I, viii, p.85).

As this was a universal ratio, in his eyes, no matter whether the society is a European, Chinese or American Indian society, or the Peasants personally consumes “the produce of one acre and a half of Land”, like in France, or “the produce of 5 to 8 acres of Land”, like the Middlesex, the rule he laid down is reliable, and the value of labour “may be valued at twice as much as this” (H89).

More skilled labour, however, including entrepreneurs, skilled manufacturers/artisans and “Overseers of labouring Slaves in other Countries” (*Essai*, H, pr. 93), alongside farmers, for Cantillon get triple their personal maintenance costs. These group gain more either because of their skills and abilities, or due to the risk and hazards they take in their endeavours.

Thus, despite all the variances in living standards and preferences across societies Cantillon argues, there must be a certain par between the value of the labour-force and the personal consumption of the labourer, being respectively around double and triple of personal consumption of an unskilled and skilled labourer.

Additionally, as it is treated by Cantillon as a universal ratio it could be conveniently used, for him, to measure the intrinsic values of commodities. Therefore, in his investigation Cantillon arguably managed to achieve a few things Petty had never done; firstly, he established a par and parity allowing him to give a comparative account of land and labour values entered production. Secondly, he managed to set that par without losing the sight of actual circumstances without references to problematic ideal circumstances. Thirdly, as we have now a parity between land values and labour values the value of commodities in real markets and societies could be measured in natural denominations.

### *3.3.2 The crucial role of landlord in the establishment of the par*

If we read Cantillon’s discussion as to par without losing the sight of our remarks in the first chapter, we can easily perceive the role of landlords in the establishment of his par. Firstly, in order to set a par between land values and labour values Cantillon returns back to a closed economy under the direct control of the landlord master. Secondly, he put s a proportional value between the value of labour of slave and his personal consumption. Nonetheless, we know in Cantillon the consumption level of the landless classes, including slaves, is set by landlords’ preferences, making the personal consumption level of the slave as well a dependant factor to landlords’ decision. Thirdly, the other crucial element of the par, the size of family,

that sets by the extend of the family, that is the number of children, the proportional value between the consumption level of the male slave and his children in fact does not seem to a factor external to landlords' decisions. As he clearly thinks even the family size in a given society is set by landlord class and their decisions, so all the factors influencing the final value of the par seems to be under the direct or indirect command of the landlord class.

Most importantly, his method seems to utilise the wage the worker get in return for his work as the sign of his value, whereas what he gets in return for his labour, as we know from the discussions above (chapter 1 and 2), is set by nothing but demand patterns of landlords, making his value of his labour a secondary factor to landlords' demands.

I think, all these crucial elements of his method and reasoning could demonstrate the crucial role he attributed to landlord class even in the establishment of par. Thus, Cantillon seems to solve the great research question of Petty by bringing landlords and their decisions into picture.

Reiterating the account given by Groenewegen and Vaggi (2003, p.34) that says "the problem of comparing the value of different commodities is not really solved" in Petty but in Cantillon, I can claim that if the problem has ever been solved by Cantillon it is by relying on a different method putting landlords tastes and preferences at the centre of the analysis.

Nevertheless, in the coming section I will take a step further and try to demonstrate why Cantillon's par cannot be labelled a genuine solution to Petty's par but a different formulation of the par problem made in a narrower context for the sake of the value of commodities alone., thereby leaving aside some of the greatest aspects of Petty's par. Additionally, I will also examine whether his computations regarding par are credible enough or have theory own flaws and shortcomings.

### *The nature and shortcomings of Cantillon's par*

A review of Cantillon's par gives the impression that there are some flaws and shortcomings in his research into par and value that can be subdivided into two categories; first, the ones regarding the method and calculations he conveys to get a parity between land and labour values and, second, the ones regarding the nature of his par and what he intends to achieve with this par.

To fix a parity between land and labour, Cantillon starts from a slave-based closed economy and thinks the same parity should be reiterated in a market-based open economy, making the value of both an unskilled slave and free unskilled worker double his personal consumption (H81). Such a ratio that is set for a slave-based closed economy, in which consumption patterns are limited and confined, more or less, to land products cannot be directly extended

to an open market economy with waged labourers who can more freely diversify his personal consumption<sup>113</sup>. Once we accept that the wage-earner in a free-market economy can consume the labour force of other workers as well, alongside the raw land products, then the parity Cantillon sets loses ground because now, unlike the case of a closed economy, consumption is so diversified that the relation between the value of worker's labour and his personal consumption of life necessities/land products is not so straightforward. Thus, the wage/income of a slave and free worker cannot be treated in the same way<sup>114</sup>.

Secondly, even if we assume the slave-based command economy can be a good model to analyse and compare the dynamics of an open market economy, still Cantillon's calculations seem to have fatal flaws. His calculations rely on Halley who set only half of the children can reach adulthood. From this knowledge Cantillon get the conclusion that a child can consume only half of an adult so the father should raise two children until his adulthood. Unlike Cantillon's contention however, the computations by Halley theoretically implies that at least four children must be raised simultaneously, given the fact that only half of them can reach adulthood. Indeed, this is exactly the reading and interpretation by Smith of Cantillon. According to the account given by Cantillon, Smith says, the family of "the poorest labourers" must

"attempt to rear at least four children, in order that two may have an equal chance of living to that age. But the necessary maintenance of four children, it is supposed, may be nearly equal to that of one man." (Smith, 1776, I, viii, p.85-6)

Unless we assume that Smith had another manuscript that we do not have today, which seems unlikely, his own reading as well is so misleading as the calculations made by Cantillon. It is so because Cantillon clearly declares that the "Proprietor" of land must allot land both to the personal consumption for his male slave and "to double the Land which serves to breed a Child up till he is of age fit for labour", which is 17 (H80), implying that a child consumes in total half of an adult until (s)he turns 17. In such a case, however, neither the family nor the society can survive beyond the first generation(s) as only one child could survive for both parents. If like Smith we assume that the income of the father must be, more or less, enough for the "necessary maintenance of four children" then Cantillon's par must be crucially different.

Indeed, a modern account of the late 17th and early 18th century France and Europe by Fourastie seems to be in line with Halley's observations:

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<sup>113</sup> Berdell (2009, p.194) expresses surprise that Cantillon thinks an open market economy follows feudal lines, but his observations are not particularly related to par.

<sup>114</sup> I think, when Adam Smith speaks in the WoN of the variances in the wages throughout the year and states just 6 pages after mentioning Cantillon by name that "A slave ... or one absolutely dependent on us for immediate subsistence, would not be treated in this manner" of a free wage-earner, he had somewhat a similar critique in mind (Smith, 1776, I, viii, p.91-2).

At the end of the 17th century in France, but probably in the rest of the world as well, the life of the average father of a family who had married for the first time at the age of 27, could be summarized as follows: born into a family of five children, he saw only half that number reach the age of 15; like his father, he too had five children, of whom only two or three were alive at the time of his death (Fourastie 1967, p.11).

Hence, even though Halley's observations appear satisfyingly reliable and credible, the conclusion Cantillon get from them does not seem so reliable.

Once we consider family size, however, Cantillon's calculations become more problematic, which brings us to our third critique. Cantillon seems to completely neglect in his par analysis the crucial point that the family size varies from society to society so a par/parity set for, say, a family of 10, with 8 children, cannot be the same with the par of a family of 4, having only 2 children. In the former the father should consume comparatively less so that the parity (between the value of his labour and his personal land usage) must be more around triple or quadruple, if not more.

Indeed, given Cantillon's harsh critique of earlier British political arithmeticians for their negligence of varying socio-political and demographic factors, including the lifestyles, family size and marriage patterns, in their naïve aim for setting somewhat universal ratios for multiplication rates, such a negligence of family size in his analysis of par seems surprising. This negligence occurs to me as a deliberate one made so that not only the value of commodities can be universally measured by relying on his universal par (that says the value of labour is equal everywhere double his personal land consumption) without going into further details and difficult calculations that may otherwise occur once the family size is being integrated into the analysis. In fact, one can even argue that this negligence is made in order to his own reading putting landlords at the centre stage. Nonetheless, given the fact that landlords are different nations vary in their actions, generousities and demands form working class he landlord class could have been easily integrated into picture and the par alongside its varying nature across societies could have easily be tied to the actions, generousities and demand patterns of landlords that varies from society to society. Here, Cantillon's treatment of the subject give the impression that he picked his value theory and desire to find a somewhat alternative measure of intrinsic value of commodities by establishing a universal par over the role he attributes to landlord class in establishment of the par<sup>115</sup>. In other words, if this not a deliberate negligence it is a one made, maybe unconsciously, for the sake of his par analysis

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<sup>115</sup> By relying on Cantillon's own reading putting landlord at the heart of the economic analysis, it can be argued that, the only way for the par to be a universal ratio is the assumption of the homogenous preferences by landlords; that means it is only if we assume landlord class has a universally homogenous taste and preference pattern across all nations, only then, the par could be considered as a universally valid par. In other cases, variances in the consumption patterns of landlords alongside its implications for the living standards and family size of the landless class should cause some variances in the par between land and labour values across nations.

and in his treatment Cantillon himself, in his aims to set a *universal* par, seems to fall into the same trap for which he accused previous British arithmeticians.

To all these shortcomings it may be added a further one, the one regarding the nature of his par. Indeed, this is not a shortcoming on its own but only a preference of the author. However, in comparing the research agenda and what their pars could achieve, it may be said, Cantillon's par seem to fall short of meeting what Petty would expect from a reliable par.

Cantillon's par, unlike the universal nature of Petty's par, seem to exclusively focus on the value of commodities (in the market). Therefore, in its aims it seems to neglect some of the greatest questions Petty desired to answer with his par. For instance, unlike Petty, Cantillon seems to never ask some questions like 'how can we measure the comparative wealth of nations?' or 'what is the measure by which we can assess not only the 'economic' value in marketplace but even non-economic values prevailing in other social domains including friendship, favour or artistic talents etc?'. Additionally, Cantillon's par can never analyse the distribution of total wealth between hands and lands of the nation, that is, how much the hands adds to the national wealth of a nation. Hence it can never give a comparative account of contributions by human and nature to the wellbeing of human societies. With Cantillon's par, for example, an unskilled farmer can measure, at best, the total value of his harvest in the market but never how much of this value is from his own labour and how much is of nature itself.

### *3.4 A comparative Account and Conclusions*

Since Schumpeter, scholars occasionally treat Cantillon's examination of the par as a continuation of Petty's discussions and have suggested that Cantillon managed to finalise the research agenda started by Petty about the par/parity between land-values and labour-values. In this chapter, I have revisited this debate in order to highlight the peculiarities of the par concept of both and to examine whether Cantillon's par can be treated as a continuum and solution to the problems Petty left behind unresolved.

Petty seems to spend enormous efforts to find a way to refine the value of people and land in a common measure, so two natural sources of wealth could be measured against each other. That natural measure, to him, could be also practically useful in resolving a range of questions varying from the ones regarding to the value of commodities in the market, through the total wealth of nations and comparative contribution of lands and hands to this wealth, to the value of contributions made in further creative (e.g. technical improvements, technological innovations or artistic talents) and social forms (e.g. friendship, favour etc.)

All in all, Petty's par has a historical and temporal facet in the sense that it seems to be under the influence of the great debates of his time turning around the comparative wealth of England/Britain versus its political and economic rivals like France and the Dutch Republic. On the other, however, it seems to have a universal and general character in its search for what McCormick (2009, p.141) describes as a "universal ... or natural language of value" by which economic, artistic, technical and social values could be equally measured in terms of a natural denomination.

Nevertheless, Petty never managed to finalise his great research question, which was to wait, according to some scholars (Schumpeter, 1954, p.210; Groenewegen and Valdi, 2003, p.46), for Cantillon to be completed most convincingly.

Indeed, Cantillon's research as to par seems, in the first sight, not only as a continuum but also the finalisation of Petty's research agenda. I have nevertheless tried to argue in a way following not advancing Brewer (1992a, 1992b) that a further examination into the variances between both makes it barely credible to regard Cantillon's par as final touch on Petty's research agenda. Moreover, Cantillon's own analysis seems to have not only its own peculiarities, but also its own flaws and shortcomings, preventing me from treating it as a genuine and dependable solution to the par problem of Petty.

Cantillon's investigation into par and parity between land- and labour-values seems independent research which significantly diverges from that of Petty both qualitatively in nature and methodologically in means and manner. What is done by Cantillon seems more like a reformulation of the par problem in the limited framework of what the labourer get in return from the landed class for his labour. Thus, on the one hand, he integrates landlord class into analysis by covertly making the wage they get in return for their labour from the gentry class, both in a closed and open economy, as the sign of the value of their labour. With further complementary factors all set by landlords in the long run (e.g., the family size and living standards) integrated into picture and relying specifically by some observations made by Halley, Cantillon apparently thinks he has finally set a universal par between land and labour (values).

None the less, his par seems to be conceptualised for the sake of his intrinsic value theory and can be used, as a result, only to measure the value of intrinsic values of commodities (see the next chapter for his intrinsic value theory and the last one for an application of his intrinsic value theory, by utilising the par he sets, into foreign trade). This, however, narrows the sphere of Petty's par by making it as a concept used exclusively in the context of the commercial or market value of commodities. Thus, Cantillon's seems to exclude the complementary queries of Petty that demanded to measure not only the comparative contributions by land and labour to total wealth of nations and humanity, but also non-monetary dimensions of human

relations such as innovations, friendships, favours or artistic talents etc. Thus, Cantillon seem to redevelop Petty's with both macro and micro perspectives in novel way with a specific emphasis on the value of commodities given. As a result of that tendency, the great ambition of Petty seems to be significantly curbed and confined by Cantillon to intrinsic value theories and market/exchange mechanisms, making his par, in my eyes, a *partial par* ignoring some of the greatest aspects of Petty's agenda.

The diversions as to what they aim for with their par and parity demonstrate their effects on their method too. Petty apparently aims to establish a universal absolute via which every commodity could be measured, so his research seems to be highly hypothetical and speculative. Cantillon on the other hand seems to reformulate the value of labour in terms of his maintenance costs. Thus, Cantillon does not look like a person searching for setting an absolute base and par for value so all forms of value could be measured, but most specifically to fix a ratio between land and labour by relying actual circumstances and established market conditions, so a ratio between land and labour could be empirically set. That being so, unlike Petty who conducted some 'fanciful' and untenable hypothetical and speculative research, Cantillon seems to concern only with actual circumstances. In that respect, Cantillon's search seems to never lose sight of actual circumstances and market relations, with no reference to so-called potentialities of production or natural 'intrinsic' values of land stocks etc.

Nevertheless, even within its own narrower context, Cantillon's par has some serious shortcomings both in method and computations. First, the assumption that the par set for the labour force of a slave in a closed- commanded economy is repeated in a market economy does not seem so credible. Second, relying on Halley's observations on death rates in children he concludes that a child consumes around half of an adult throughout his/her childhood. Such an analysis, however, does not let the family to survive beyond the first generations. A due analysis therefore requires either a higher number of children to be raise, so a lower personal consumption by each child, or a lower consumption bundle by the father of the family, suggesting a different par/parity between the value of male slave's labour and his personal consumption. Thus, even if we assume that the market economy reiterates the proportions set for slave-based commanded economy, still his par/parity, which claims that the value of a slave is around double his personal consumption, is apparently based on erroneous calculations. Thirdly, in his desire to get a par that is reliable in every society Cantillon seems to completely neglect the marriage patterns and family sizes. Therefore, no matter whether it is for a native American, a Chinese farmer or a British worker his par/parity sets the value of unskilled labourer at around twice his personal consumption. A meticulous research, however, requires family size, which may well vary from country to country due to preferences, life styles, socio-political and religious factors, to be properly considered. To all this a further critique may be added that even though he claims he had a par enabling to measure the value



of commodities in natural denominations, with no references to monetary values, Cantillon only once supplies his reader with a method as to how to calculate the intrinsic values in natural denomination. This analysis is made within international context, and for a specific form of trade (which will be the subject of the last chapter).

Additionally, Cantillon's analysis upon the par apparently neglects, or more precisely ignores, the intertemporal comparisons of value as well, by which one may compare the values in an ever-changing environment. That being so, it may be argued, his par or measure seems to diverge not only from that of Petty but of all renowned British political economists of (early-) modern ages. "Petty, Locke, Smith and Ricardo, among many others", as stressed by Dooley (2015, p.52) searched for a measure "that could compare the wealth of nations as total production and as relative prices changed". Cantillon's par and parity, on the other hand, seems to search exclusively for the intrinsic values of commodities, containing land-plus-labour, in a given timeframe. Therefore, Cantillon appears not only as a person curbing one of the most crucial aspect of Petty's par searching for a reliable measure that can be utilised across times, but also as an economist who does not share the ambition of other British economists for finding a numeraire that could be used for intertemporal analysis of both wealth and value.

All in all, although Cantillon's examination as to par and parity between the natural denomination of land and labour has its own merits, his investigation, methods and calculations have their own shortcomings. Hence, he seems far from conclusively finalising the research question put forward by Petty with great ambitions covering a range of topics from value of commodities, wealth of nations, comparative contributions by land and labour addition to an invariable standard of value by which intertemporal value analysis can be conducted. Petty's par, alongside the queries and issues accompanying it, are yet to be set, being, in my view, far beyond the capacity of a single mind to finalise<sup>116</sup>.

Before finishing a further critique may be addressed. It may be rightly claimed that Cantillon's measure the *acre of land* cannot be treated as a credible "natural" measure as acre of land too has a price varying across time and space. Nonetheless, some point should be made in this respect so that some of the question marks they may otherwise appear could be hopefully eliminated. Firstly, in his definition Cantillon seems to remain loyal to Petty's definition that seeks for a *natural* measure of value. Cantillon's natural measure could easily be reinterpreted as an alternative measure; alternative in the sense that it offers an alternative to

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<sup>116</sup> Similar concerns to that of Petty seem to appear in Ricardo too who was labouring centuries later still to find an invariable standard of value. Ricardo's invariable standard aimed, like that of Petty, to measure the contribution of technology and skills too. Not surprisingly however, Ricardo too "never found a commodity that could reliably serve as his invariable standard ... [and] when he died, an unfinished essay headed '*The Invariable Standard of Value*' was on his desk." (Foley 1999, p.62, italics added).

monetary measure. Secondly, as I will later highlight in the chapter on values, Cantillon apparently does not care about the prices that could fluctuate across time and in this respect diverge from other British scholars including “Petty, Locke, Smith and Ricardo” (see Dooley, 2015, p.52). Lastly, and most importantly, meticulous research in the Cantillon might demonstrate that Cantillon never use the intrinsic value in terms of acre of land. In other words, unlike Petty seeking for setting an intrinsic value for land pieces as well Cantillon never asks the question ‘what is the intrinsic values of specific land pieces?’ Instead, he uses intrinsic values only in the context of commodities bought and sold at marketplace whereas acre of land is utilised as an alternative to monetary measures. Thus, from a perspective of modern global economy in which every phenomenon, including land pieces, has been commodified, the acre of land may appear as an unreliable *natural* measure of value as it too has a price tag varying across time and places. Nevertheless, Cantillon’s approach still makes sense if we should not neglect the context in which it is made; if there is only two natural sources of wealth of nations, land and labour, and if the enquirer has no interest in the intrinsic value of specific land pieces but also of commodities produced by two natural sources of wealth, and if it acre of land used first and foremost as an alternative to monetary measure then it may even be called as a natural measure of value.

In the next chapter, by taking a step further I will aim to show that the acre of land is first and foremost a measure in Cantillon. There, I will also look at the implication of Cantillon’s par for his value theory by specifically asking if his value theory can be treated as a land-only or labour only theory of value. It will be argued in the end that unlike some reductionist interpretations treating it as a land-only theory of value, Cantillon’s value theory appears as a composite theory of value treating both land and labour as independent and irreducible sources of value, and acre of land as the *measure* not *regulator* of the intrinsic value.

## 4 Value Theory; Did Cantillon have a reductionist theory of value?

“[T]he question of value is fundamental. Almost every speculation respecting the economical interest of a society... implies some theory of value: the smallest error on that subject infects with corresponding error in all our other conclusions; and anything vague or misty in our conception of it creates confusion and uncertainty in everything else.” J. S. Mill (1848, p.436)

### 4.1 Introduction

When he rediscovered Cantillon’s *Essai* Stanley Jevons praised its “ingenious theory of value” that was in some respect superior to the value theories of the second-half of the nineteenth century (Jevons, 1881, p.69). Since then, the value theory of Richard Cantillon has drawn attention of a variety of scholars.

Some have found in it a theory predating Physiocratic value theory (Schumpeter, 1954, p.230; Cootz, 1965, p.16-7), others, and unlike Jevons, a value theory predating Smith’s natural value/price that became one of the backbones of the classical value theory and that set the natural or normal values as the determinant of long-term price level in the market. (Spengler, 1954, p.423; Brewer, 2010, p.5; Robertson and Taylor, 1957, p. 192; Marcuzzo et al., 2020, p.13).

Other scholars, in a way confronting such objectivist interpretations, have regarded Cantillon’s value theory as a subjectivist market-oriented theory (Rothbard, 1995, p. 349; Sieroń, 2019, p.135-6), while some have labelled it a specific form of subjectivist value theory: the opportunity cost theory of value (Mark Thornton, 2005). Such subjectivist readings come generally from scholars in favouring the Austrian school.

Still, most economists and historians refute such a subjectivist reading and ascribe to Cantillon a cost of production theory of value in which both land and labour are regarded as equally important sources of value. Such a perspective could be seen in the works of some authoritative voices like H. Higgs (1892:445– 6), F. A. Hayek [1931] (1967), J.J. Spengler (1954:406–7) or even S. Jevons (1931 [1881]) in addition to T. Hutchison (1988:167– 8), Aspromourgos (1989<sup>117</sup>) Grieve (1993 and 2016, p.1, 2021), and Dooley (2005, p.62)

Nonetheless, some scholars who regard Cantillon’s theory as a cost of production theory of value, still consider it as a land-only theory of value. This stance is represented mainly by

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<sup>117</sup> “Essentially, the intrinsic value of a commodity is a sum of the costs of the various kinds and quantities of labour and raw materials which are employed in its production” (Aspromourgos, 1989, p.364)

Brewer (1992b), Yong (1993) and Bowley (1993)<sup>118</sup>. For this group, Cantillon did not only try to reduce all the costs into one factor or unit, land units, but most problematically never considered the great problem caused by the heterogenous nature of land stocks, something which allegedly prevented such a theory from being a logically consistent and theoretically coherent theory.

In a series of article R.H. Grieve (2015, 2021) tries to challenge such readings. Unlike such claims, Grieve says, Cantillon was completely aware of the difficulty raised by the heterogenous nature of land and labour stocks and aimed to escape this problem through monetary values. As a result, Grieve proposes to read Cantillon's intrinsic values as denoting monetary values, rather than total physical inputs, making Cantillon's value theory, in his view, a *monetary cost of production*.

In this chapter I will revisit this discussion and in a similar way to R.H. Grieve I will try to examine especially if Cantillon's value theory can be read as a land-only or land-input-only theory of value and if really the heterogenous nature of land stocks and labour skills are really putting so unbridgeable a gap between land and labour of varying qualities.

In the end it will be argued that the economists who see Cantillon's theory as a land-only theory of value seem to converge towards a reductionist view. Cantillon, it will be argued, does not try to reduce either labour values to land values, or otherwise, but instead tries to find an alternative measure by which both land and labour values could be compared. In the conclusion it will also be claimed that given the circumstances of the day, in which the great wealth of Britain were from the workforce of skilled labour force, to expect from Cantillon to develop a land only theory of value in which labour is a sterile entity or completely "nothing" Giacomini (1994, p.132) is somewhat to neglect the socio-political circumstances of the early 18<sup>th</sup> century. Hence it will be argued his value theory accept both land and labour as independent source of value, whereas land is picked as the alternative measure of value.

Additionally, and despite the merits of Grieve's reading, I will develop an alternative value theory to Grieve's that regards Cantillon's value theory as a monetary cost of production. To him, the heterogenous nature of commodities cannot be compared without references to monetary values. Unlike him, I will claim that in Cantillon there is an alternative measure, the acre of land, that enables us to make comparisons between the varying intrinsic values. I will thereby endeavour to propose an alternative interpretation of Cantillon's value theory in which monetary values are the *artificial* indicator/measure of intrinsic values whereas the *acre of land* is the *natural* measure of the intrinsic values. These binary measures enable us also to re-examine Cantillon's value theory and foreign trade theory afresh. Such an examination is also

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<sup>118</sup> Some passages by Schumpeter (1954) and Spengler (1954) gives similar perspectives but as they do not clearly state, I do not count them among these scholars.

a pre-requirement of the next chapter in which I will examine how Cantillon advanced the foreign trade theories of previous mercantilist in the sense that even when the trade balance is even in monetary terms, he apparently claims, we can still discern a net gainer in such transactions once the intrinsic values are assessed in terms of the natural measure, namely the acres of land.

Moreover, as a requirement of politic-ideological reading of Cantillon's *Essai* I will also try to demonstrate that Cantillon's value theory as well reflect his politico-ideological standpoint taking landlords at the centre of analysis. In one version of the manuscripts, namely in the *Essai* version, as we will see, Cantillon puts landlords' "expense[s]" (H97) as the necessary and main cause, *causa sine qua* non, behind the existence of intrinsic value. This reading, however, crucially diverges from his other comments upon intrinsic values more specifically from the ones that says "[t]here is never a variation in intrinsic values" (H75) in the sense that if the things "have" any "intrinsic value" (H97) thanks to the expenses of gentry classes then we should accept the variation in intrinsic values as the expenses themselves could well vary over time and locations. Such contradictions could be the main reason why we do not seem a similar passage in the *Dictionary* version (see van den berg, comments for this paragraph), suggesting that Cantillon himself became over time more aware of the difficulty raised by such a comment for his intrinsic value theory, eventually ending in its being cut from the *Dictionary* -this is at least my impression. Nonetheless, existence of such a comment, in the *Essai* version of manuscripts, gives me impression that Cantillon tried at least for a while to integrate the gentry class into his value system even as the main actors setting the intrinsic value as well, which is fortunate for my reading highlighting the role of the gentry class in Cantillon's socio-economic system. It should also be noted that the stark contrast the passage consists for Cantillon's value theory and the implications of the absence of any similar remarks in the *Dictionary* version have not been properly studied so far. The chapter also aims, among others, to make this point succinctly and thereby fill the tiny gap in the literature on Cantillon.

Regarding the mercantilist reading of Cantillon's *Essai* this chapter attempts, by setting a non-monetary measure of intrinsic value in Cantillon, to connect Cantillon's par and value theory to each other and thereby introduce the reader to double measurement which is used by Cantillon in his analysis of foreign trade to pick the net gainer. As his value theory, as occasionally argued throughout this dissertation, occurs to me as a development made upon the previous mercantilist authors' comments on the foreign trade and most particularly to discern the net gainer in cases of trades with *even* balances, such a discussion upon his value theory and alternative measure, *acre of land*, becomes a necessity of the dissertation. The reader can thereby more comprehensively perceive how his alternative value theory and measure is later utilised by him (in the next chapter) in foreign trade analysis.

#### 4.1.1 *The discovery and background of the term ‘intrinsic value’*

A review of the mercantilist literature shows that the term intrinsic or “intrinsick” value had a great usage among them. Still, up until the early 18th century, the term seems to be exclusively used to differentiate the real metallic content of a money from its nominal or face value. That being so, the term referred the total real value a coin had as a metal against the face value it carries in market transactions.

In his first significant work Petty used it in the context of “the intrinsick Values of Land” which was followed by “extrinsick or accidentall” values. (Petty, 1662, ch.5 point 10). Although the usage of the term may imply that Petty made a differentiation between short-term accidental and long term stable value, it is not obvious whether Petty had a binary concept of short-term versus long-term in mind and especially in the context of fluctuations in market prices. Additionally, given the fact that the land is not a reproducible asset, Petty’s reference to the intrinsic value does not seem to be made in the context of the cost of production approach to value that was adopted by later economists.

In the early 18th century, however, the alternative uses of the term appears. For example, Archibald Hutcheson, an MP writing during the financial bubble, used the term in his severe critiques of South Sea Scheme to refer the real price a financial asset must bear in the market in absence of a financial bubble. As a critic of the South Sea Scheme he was also one of the keenest promoters of the idea that the value of South Sea stocks were “always capable” of mathematical proof. He did not only distinguish between real or intrinsic values and actual market values, which could well diverge from each other, but even meticulously attempted to calculate the so-called real value of such stocks, which he called their “intrinsic value”. His demonstrations and proofs indicated, for him, the fact that the stocks were overpriced. (see Deringer, 2018, ch.5). He was arguably aware of the fact that this great divergence between the actual market prices and their intrinsic value calculated could also persist for a while. All these insights make Hutchison arguably the first economists who used the term intrinsic value in the context of financial assets. It must also be noted that his usage of the intrinsic value apparently had no reference to the cost of production but only the underlying value of a financial asset.

Who was the first economists using the term in context of real economy? Most probably Richard Cantillon. In a similar way to Hutchison, he makes in the *Essai* a distinction between intrinsic values of commodities and their prices in the market. His observations as to intrinsic values and market values have, however, given rise to many debates among scholars. Postponing Cantillon’s observations and discussions to coming pages, I would first like to say some more about the background of the term “intrinsic value” in the works by Richard Cantillon.

In fact, it could be a fortunate chance for us if we had known how Cantillon came to his concept of intrinsic values as a concept that can be utilised as an analytical tool for the variance in the market values. However, as there is not enough data in our hands, there is barely anything to do but speculate on it by relying on the primary and secondary sources.

#### 4.1.2 *Background of the term in Cantillon's work*

Indeed, Archibald Hutcheson's popularity in the political and economic debates of early 18th century renders possible that Cantillon was aware of his writing and was influenced by Hutcheson's differentiation between intrinsic values and market values of financial assets, resulting in his usage of the same concepts for the goods market. Even if this is not the case and the distinction was a concept which Cantillon somehow independently reached, still his intimacy with financial markets and astounding fluctuations in asset prices that ended in collapsing bubbles with an erosion of the great part of their market values overnight, may have influenced him to distinguish between short term fluctuating market prices and long-term stable values.

Nevertheless, rather than being done overnight or under the influence of a person, the history and background behind the term shows that the term had occupied a great amount of time and efforts in Cantillon before finding its final version.

A review in the works attributed to Richard Cantillon raises doubts whether the meaning and usage of the term is consistent and coherent across such works, or had transformed over time, leaving behind, once evaluated in retrospect, some inconsistencies, and incoherencies. The scholars studying the subject seems to rightly tend to the argument that a retrospective analysis of the usage of the term has some inconsistencies, and incoherencies, proving a great transformation that took place over the period during which he composed his works.

Matteo Menegatti, in his paper presented in the ESHET conference (2018), endeavours to colour a picture of these transformations, or in his words, an account of "a whole range of 'inconsistencies'... [which] seem to tell a different story on the development of the notion of intrinsic value". Likewise, Richard van den Berg (2017) after bringing some parallel passages from three works attributed to Richard Cantillon, concludes that the differences in the passages, demonstrate that "Cantillon struggled with the formulation of his theory of intrinsic value", if they are not "due to tinkering with the texts by later editors" (comments to *Essai* paragraph 65)<sup>18</sup>. A review of the *Analysis* version, for example, could prove such claims. There "intrinsic worth" and "intrinsic value" are interchangeably used in the analysis, a practice that ceased later. Most importantly there the concept refers to different ingredients of value than we find in the *Essai*. In the opening passage of chapter XIII of the *Analysis*, Cantillon defines

“the intrinsic worth of every Thing” to be “proportioned to the Value of Land, Labour, Risk and Time necessarily had in producing it into Use and Form”. On another occasion, it is “proportioned to the Quantity of Land, Labour, and Skill necessarily had to produce them (van den Berg, 2015, *Analysis*, pr. 205). In another definition, skill also disappears and “intrinsic Value or Worth” of the commodities is proportioned to “the Value of the Quantity of Land, and the Value of the Labour” (*ibid*, pr.65).

In this respect, a review of his works, combined with the fact that the *Analysis* version is arguably based on an early manuscript (see van den Berg, 2015, Introduction), supplies the reader with the impression that Cantillon had started at first with a cost-of-production approach that considers all the ingredients/elements of the intrinsic worth/value separately as a factor setting the final intrinsic value/worth. Over time however, arguably under the influence of Petty’s ‘*natural denominations*’ and his desire to find a par, Cantillon came to the idea that all the factors determining the intrinsic values the value of commodities could be reduced to two natural denominations of land and labour, and that they could even be naturally ‘measurable’ if one established a par/ratio between both

But what is the intrinsic value and how did Cantillon utilize it to analyse market prices?

#### 4.1.3 *What is Cantillon’s intrinsic value?*

Although Cantillon’s works suggest changes in the description of the components of which the alleged intrinsic values consist, in its most developed versions Cantillon utilises the term “Intrinsic value”, in his words, “to signify... the amount of Land and Labour which enter into Production” of a given commodity (H220). Given the fact that during the mercantilist period land and labour were regarded as two sources of wealth of nations, we may even say he was referring to the total stock of wealth incorporated in a given commodity. Cantillon sets the intrinsic value also as the base or main value around which the long-term market prices gravitate. In a passage that is worth being quoted at length, he states that

There is never a variation in intrinsic values, but the impossibility of proportioning the production of merchandise and produce in a State to their consumption causes a daily variation, and a perpetual ebb and flow in Market Prices. However, in well organized Societies the Market Prices of articles whose consumption is tolerably constant and uniform do not vary much from the intrinsic value... (van den Berg, 2015, H pr.75)

This paragraph, among others, seems not only to define intrinsic value as a fixed, invariable amount but also as the value towards which long term market values converges, especially in the societies where production and market mechanism is well organized.



Due to such remarks several economists and historians have drawn parallels between Cantillon's intrinsic values and classical natural or normal values. The similarities between Cantillon's concepts and Adam Smith's distinction between "market price and natural price" has been drawn by numerous authors (Spengler, 1954, p.423; Brewer, 2010, p.2010, Robertson and Taylor, 1957, p.192, Walsh, 2018). Some have described even this value theory as "the Cantillon-Smith rule of market price determination" (Marcuzzo et al. 2020, p.13) whereas others have gone much further by calling Adam Smith "a shameless plagiarist, acknowledging little or nothing and stealing large chunks, for example, from Cantillon." (Rothbard, 1995, I, p.435). In short for these economists the classical cost of production approach to value in market has its roots in Richard Cantillon who developed the idea so well that even the founder of the classical school was significantly influenced from his examination.

It must be noted that there some scholars who refute the interpretation that Cantillon presented an objective value theory resembling the classical ones. Mainly commentators writing in the Austrian tradition attribute to him rather a somewhat subjective and more market-oriented theory of value than the one objective cost of production (see Rothbard, 1995, p.349, Thornton, 2005, Sieroń, 2019, p.135-6). Although the general Austrian reading of Cantillon's value theory seems misleading to me, still I will not discuss it in detail here since some masterly critiques of Austrian readings have already been made by scholars such as Peter Groenewegen (2012), Matteo Menegatti (2016) and Roy Grieve (2016)<sup>119</sup>.

That being so, the majority of scholars accept the term intrinsic value as the value referring to the total cost of production for a given commodity, which is also the base for the long-term market prices. Despite all the fluctuations in the market stemming from various factors, including supply and demand mechanism, the intrinsic value that is used by Cantillon, according to these commentators, is the total amount of fixed and/or unstable wealth/value used in production. Still, these commentators diverge on the question whether the cost of production of Cantillon is a multiple-factor cost of production, including both land and labour, or a single-unit cost of production that regards either labour or especially land as the main regulator of total costs and values.

In the rest of the chapter, I will not endeavour to show why it is rather an objective cost of production approach than subjective one as argued by Austrian economists. Rather I will focus on the debate within the cost of production interpretation and try to examine whether

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<sup>119</sup> For another article accusing Austrian economists of misleadingly handling the history of economic thoughts see Boettke, (2002). See Grenier (1996) for a non-Austrian refutation of the classical value theory in Cantillon.

There appear further articles that not only deserve attention but could supply our readings with further insights as to value theory of Richard Cantillon, like "The theory of value of Franklin and Cantillon" by G. Pietranera or "The Intrinsic Value, production and exchange in Richard Cantillon" by R. Arena. G. However, as these articles are in Italian and French, I cannot utilise them as an ignorant of both languages.

Cantillon's objective value theory can be treated as a single-factor cost of production. In the end, it will be argued that Cantillon's value theory is a theory that treats both land and labour as components or factors setting the intrinsic value of commodities and services, whereas the total value cannot be reduced or refined in terms of either land or labour alone. Economists and historians who attribute to Cantillon a land- or labour-alone theory of value, it will be claimed, seem to confuse the regulator of value with the measure of value. That means the land, more specifically a piece of land, the acre of land, is set by Cantillon as the natural or real measure of the intrinsic value but not the final determinant of intrinsic costs.

## *4.2 Cost of production and Value theory*

In this section I will examine whether Cantillon's value theory can be treated as a single-factor cost of production.

Due to Cantillon's regular reference to both labour and land as sources of value, most economists and historians, including some authoritative voices such as S. Jevons (1931 [1881]), J. J. Spengler (1954:406– 7), H. Higgs (1892:445– 6), F. A. Hayek [1931] (1967), in addition to other scholars like T. Hutchison (1988:167– 8), Aspromourgos (1989<sup>120</sup>) and Grieve (1993 and 2016, p.1) attributed him a cost of production theory of value. For some of these scholars, such as Dooley (2005, p.62, see also p.56) Cantillon “gave a ... cost of production theory of value, which eventually became the natural value of Adam Smith and the normal value in the long run for Alfred Marshall”. These economists, nevertheless, seem to consciously refrain from reframing Cantillon's theory of value either as land(-only) or labour(-only) theory of value.

### *4.2.1 Single-input theory of value?*

Despite the hesitation of these scholars, one may encounter some readings identifying Cantillon with single-input theory of value, either in terms of land or labour. Edgar Furniss, for example, states in his neglected book, written upon the subject of the (re-)discovery of labour and work of poor by the early modern English/British economists that;

The intrinsic value of manufactured Commodities, he [Cantillon] believed was predominately the result of labor expended upon them, while raw produce had an intrinsic value chiefly attributable to land. Thus far, Cantillon's analysis was but a repetition of what had been said before, but he went further and concluded that the market values of goods would in the long run and under normal conditions tend to equal their intrinsic values, or, in other words, to

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<sup>120</sup> “Essentially, the intrinsic value of a commodity is a sum of the costs of the various kinds and quantities of labour and raw materials which are employed in its production” (Aspromourgos, 1989, p.364)

conform to the labor cost of production. In applying this truth to concrete examples he translated his concept of 'labor-cost' into 'wages-cost'. (Furniss, 1920, p.162-3)

Thus, Furniss clearly makes Cantillon a 'long-run' labour-theorist who identify labour(-cost) as the only the regulator of long -term market values<sup>121</sup>.

There are further accounts classifying Cantillon, more explicitly, as an early labour theorist heralding the labour-value theory of later British political economists. Cardao-Pito (2020, p.4-5), for example, declares in a recent article most unequivocally: "although David Ricardo and Karl Marx are currently better known for having advocated labor theories of value," he argues, "Cantillon and Smith also promoted labor (and cost)-based theories of value", making Cantillon someone who "anticipated Smith's labor theory of value".

Interestingly, Foucault himself, as a philosopher like to speak about economic subjects, describe Cantillon as a labour theorist. "From the time of Cantillon, and even before him," he argues "the distinction between value in use and value in exchange was being clearly made; and again, from Cantillon, quantity of labour was being used as a measurement of the latter" (Foucault, 2005, p.241<sup>122</sup>)

Nevertheless, this version of one-input theory of value is so unpopular among Cantillon scholars that it is barely possible to find another voice attributing Richard Cantillon a labour-only theory of value. The second version, the land-theory of value, is the most popular version of one-input theory of value and in the coming paragraphs I will examine it before proceeding to critique it.

#### 4.2.1.1 *Land-only theory of value?*

Accepting there is a cost of production theory in Cantillon the scholars in this camp are of the opinion that Cantillon's value theory could be reduced to a single unit, land, making it a land-only theory of value.

Starting with Yong (1994, p.76) who meticulously distinguishes two different cost of production approaches in the *Essai*; "physical-cost and 'distributive' cost" theories, and claims that Cantillon "in the former,"

"succeeding Petty, ... considered the two physical inputs, land and labour, as fundamental constituents of the 'intrinsic value' of commodities ...In the latter, he anticipated Smith's adding-up theory of value on the basis of due appreciation of the role of 'undertakers' in

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<sup>121</sup> Furniss's claim that Cantillon's value theory is nothing "but a repetition of what had been said before" seems extremely strange to me given his fierce critique of previous literature. It must be noted that Furniss neither qualifies his statement nor supplies it with references to previous literature.

<sup>122</sup> Later he further elaborates his point and argues from Cantillon redefining the value of labour in terms of "food, clothing, housing" required, "need" as the "absolute measure of market price" in Cantillon(ibid).

organising the production process ... [making] his [Cantillon's] analysis of the 'intrinsic value' of commodities... an embryonic Smithian 'adding-up' theory of value" (p.73, 76)

By following Petty's par, Yong (ibid, p.72) argues, Cantillon "finally arrived at a land theory of value" which is an advanced "version of cost-of-production theory of value" in which the par is established "in terms of subsistence wages of labour".

Brewer seems to make a parallel reading to Yang in terms of both the method and result: by picking a method enabling him to "reduce labour costs to equivalent amount of land [cost]" Brewer claims, Cantillon finally reached "a land theory of value". Despite the similarities between his reading and that of Yong, we have encounter in Brewer some original observations too: "a land theory of value", Brewer claims, is the only logically coherent value theory that can be deducted from the research taken by Cantillon, as "land is the only scarce factor" (Brewer, 1992a, p.721-2).

This makes Cantillon "unique", for Brewer, in the long history of science of economics not only with his "basic model ...in that he treated land as the only genuine scarce resource" (1992b, p.11) but also with his land theory of value since "no other significant economist has claimed that value is determined by the amount of land used in production, though several have held a labour theory of value" (Brewer, 1992b, p.61<sup>123</sup>). Nevertheless, as "his theory of value was not taken by his successors, not even by Quesnay", he deducts in another article "the land theory of value lost its relevance" over time (1988a, p. 13).

Apparently, in his reconstruction, Brewer relies on the scarcity assumption (which was arguably a far later discovery) to examine Cantillon's value theory.

Berdell (2009) is another scholar who examine Cantillon's value theory through the lenses of scarcity assumption. Although "Cantillon appears to follow Petty fairly closely in regarding the amount of 'land and labor'" to decide on the so-called "intrinsic value" of commodities, Berdell states in a completely parallel way to Brewer, Cantillon "naturally chooses to resolve this composite into land rather than labor, as in his view land is the scarce factor" (p.237-8<sup>124</sup>). Therefore, by identifying land as the "key constraint" (p.236) and reducing labour values into their land equivalents, Berdell thinks, Cantillon advocated a land-theory of value. Thus, Brewer and Berdell seem to establish their readings on the scarcity of land assumptions.

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<sup>123</sup> It should be noted thought that despite the argument by Brewer there are some scholars, like Mazzucato (2018, p.78) who speak of "Quesnay's land theory of value".

<sup>124</sup> That difference, for Berdell (2009, p.237-8) implies "a supply-side view of the economy", unlike Petty's "demand-led view of the economy". Nevertheless, I could not comprehend completely why picking land as main constraint makes someone a supply-side economist.

There are other accounts nevertheless that treat, on the one hand, Cantillon's theory as a land-only theory of value but do not, on the other, base their reading on the alleged scarcity (of land) assumption.

Giacomin (1994, p.132), is one of these scholars who thinks although Cantillon's *Essai* as an intellectual attempt that both "lay[s] down [in general] a theory of value based on the cost of production" and "develops [in specific] a land theory of value on grounds of par or relation".

Giacomin's constructs his reading on the "*ancien regime*", with power based economic relations;

...the land theory of value that Cantillon sets out in chapters X and XI, part I, of the *Essay* [becomes thereby] an unequivocal indication of the power relationship on which the economy of the [Essai's] *ancien regime* is based" (1994, p.132).

As "land is everything and labour is nothing" (ibid) in this system not surprisingly the land theory of value become the only option that can flourish. It should also be noted that Giacomin seems to diverge from other land theorists in the sense that while other scholars ascribing a land theory to Cantillon ground their argument on the alleged scarcity of land resources and/or par theory of Richard Cantillon, Giacomin puts forward the general *ancien regime* economic model presented in the *Essai*, to justify his reading.

That being so, all the scholars named apparently argue that despite being in general a cost of production approach Cantillon's value theory is a land-only theory of value. That line of thought is put forward not only by the scholars mentioned, such as Yong (1994) and Brewer (1992a, 1992b, 1988a), or Giacomin (1994, p.132), but also by Heimann (1945 [1964], p.53) and Fanfani (1952, p.xv), Walsh (1987), Vaggi (1987), Bowley (1973) Brems (1978, 1990<sup>125</sup>), and Berdell 2009)<sup>126</sup>. In summary, all these scholars seems to share Vaggi's conclusion that in Cantillon "the value of a commodity is determined by the amount of land which, either directly or indirectly, has been used in its production" (Vaggi, 1987, p.79)

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<sup>125</sup> In conclusion to his paper of 1990, Brems states that "Cantillon ignored capital and offered a land theory of value: ultimately labor was produced from necessities. To reduce his labor to indirect land he needed all his labor coefficients as well as labor's 'manner of living.' All of this would appear in his price solution in addition to his direct land coefficients." (Brems, 1990. p.23).

<sup>126</sup> Accepting Cantillon's theory as a land theory of value both Berdell (2009) and Brehms (1978) attempt to reformulate Cantillon's theory in a schematic way. In that respect, Berdell attempts a "rational reconstructions of Cantillon's land theory of value" by following "the footsteps of general equilibrium models" under the assumption of a homogenous land which brings the same rent across all economy. Brems (1978), on the other hand, compares Cantillon's land theory with Marx's labour theory of value and declares Cantillon's alleged land theory of value as a coherent and sound theory, unlike Marx's labour theory that requires, for Brems, an additional production factor or parameter to be a coherent and credible theory.

### *4.3 Alleged fatal mistakes in Cantillon's value theory*

Most importantly, however, for some members of these group there is a fatal flaw in Cantillon's theory: the negligence of heterogeneity of land. "Heterogeneity of land", Brewer (1992b, p. 70) states, "evidently poses a serious problem for a land theory of value" whereas Cantillon "seems not to have had any satisfactory solution to the problem".

In a similar way Yong (1993 p.77, fn. 29) states that

"if we introduce the rent differentials due to the different quality of land, which Cantillon also expressly emphasised, his [Cantillon's] land theory of value becomes no longer safe, unless the land structure' is the same in all industries."

Bowley (1973, p.105-6) goes much further and claims in a passage worth being quoted at length that

Cantillon . . . never discussed the problem of the relative prices or the values of different pieces of land at all, he merely referred to taking into account different qualities and fertilitie of land in calculating intrinsic values. Thus he never considered the question "What is to be done with heterogeneous land in relation to intrinsic value, how is its quality to be assessed?" It seems that Cantillon did not notice the existence of the difficulty. He, presumably, did not notice that heterogeneous land could not be handled in a physical input concept of intrinsic value and that some means of pricing land, of valuation in the market sense, was required. . .

Thus some scholars who attributing Cantillon a land theory of value have also found fatal mistake with Cantillon's theory or presentation as it takes no account heterogeneity of lands, that is, what to be done with lands of varying quality in his value analysis.

For other scholars like Spengler (1954) Cantillon was aware of the difficulty but did not supply his reader with a persuasive solution:

[Cantillon] apparently felt the lack of a representative unit of land into terms of which to convert heterogeneous units of land and similarly the lack of a comparable representative unit of labour, he did not attempt to overcome this lack.

In the coming paragraph I will examine, in general, such critiques that attribute such fatal shortcomings to Cantillon and his value theory and will try to examine, in specific, whether Cantillon's theory can be read as a land-only theory of value and whether Cantillon was completely unaware of the problem allegedly caused by heterogeneous lands.

#### *4.3.1 Two questions*

All these observations raise two main questions; first, whether Cantillon's theory could be regarded as a land-theory of value and second, whether the Cantillon was aware of the

difficulty set by heterogenous lands and to what extent the heterogenous nature of land really challenges Cantillon's value theory.

I will start from the second question and ask even if we assume that there is a land theory of value in the *Essai* would the heterogeneity of land really be a serious problem? Or was really Cantillon completely ignorant of the difficulty that was allegedly put by heterogenous lands?

Indeed, it has been one of the most surprising discoveries for me to realize that despite the strong claims by Brewer and Bowley, Cantillon seems to be fully aware of the difficulties set by heterogenous lands, alongside varying labour skills, for any intrinsic value theories. At the beginning of the second book, after summarising what he has done in the first book, Cantillon makes the intriguing observation that

In this second part [book], after summing up the different degrees of fertility of the Land in several countries and the different kinds of produce it can bring forth with greater abundance according to its intrinsic quality ... it will be shewn by comparing exchanges which may be made, wine for cloth, corn for shoes, hats, etc. and by the difficulty which the transport of these different products or merchandises would involve, that it was impossible to fix their respective intrinsic value, and there was absolute necessity for Man to find a substance easily transportable, not perishable, and having by weight a proportion or value equal to the different products and merchandises, necessary or convenient. Thence arose the choice of Gold and Silver for large business and of Copper for small traffic. (H235)

The passage proves that Cantillon was not only completely aware of the problems raised by lands and labour of varying qualities but also identified the facilitatory tool, money, by which human beings had overcome the difficulties.

There is only one way this can be the case: the value of silver and gold must abide by the same rule. Put differently, it is only when the value of metallic money as well is set by its intrinsic value, only then it can be used as a reliable indicator of the intrinsic value of commodities (alongside the par between two components of total value, that is land and labour. Not surprisingly, Cantillon makes this statement in the most unequivocal sense so the reader may have no doubt any more :

The real or intrinsic Value of Metals is like everything else proportionable to the Land and Labour that enters into their production. (H205)

The Money or Coin which finds the proportion of Values in exchange is the most certain measure for judging of the Par between Land and labour ... (H103)

That being so, one can easily come to the conclusion that being ware of the challenge put by the heterogenous lands Cantillon relied on the monetary values as a credible indicator of the intrinsic values. Cantillon did not only suppressed thereby, the argument may go on, one of the

greatest difficulties in the history of economic thought but also prevent a great theoretical and conceptual deficiency and insufficiency that would have otherwise appeared in his whole value theory by treating monetary values as the surest sign of the par and intrinsic values.

This is in fact the reading of Roy H. Grieve who just recently dedicated an article that come to exactly same conclusion. I will dedicate a few paragraphs to his investigation not only because his investigation, that seems to be indeed a result of years of contemplation, deserves attention on its own right, but also because there are some points of divergence between his reading and mine that can be explained subsequently.

#### *4.3.1.1 1<sup>st</sup>: Is heterogeneity really a problem?*

As mentioned, the scholars who attribute Cantillon a land-theory of value also criticise him for not supplying his reader with a credible solution as to how the land of different qualities can be re-defined in terms of a single unit.

Refuting consistently to attribute Cantillon a land theory of value, Roy H. Grieve seems to prove in a series of articles why the heterogeneity is not a serious problem for Cantillon's value theory.

It must be noted from the outset that among all the scholars studying Cantillon Grieve seems as the only scholar who has genuinely and meticulously searched to find a conclusive answer to the alleged difficulties caused by heterogeneous lands.

These studies have apparently taken decades and if we start with his first article on the subject -written around 30 years ago-, he finds the solution in accepting the land of Cantillon's analysis as the land of average quality: "when Cantillon speaks of the par in general terms", Grieve (1993, p.49) confirms, "he is thinking of the land/labour relationship regarding land of 'ordinary goodness'"<sup>127</sup>. This being so, Grieve's first standpoint seems to reconceptualise heterogeneous land as more or less homogenous lands, which seems rather as a denial of the problem than a genuine solution.

When he returns to the same question decades later, he seems to dramatically alter his evaluation of Cantillon's theory, supplying us not only with novel interpretations but also a more credible solution to the problem set by the heterogeneous land stocks. Unlike his paper of 1993, which prioritise distribution of lands and considers the problems posed by the heterogeneous lands as so minor that it can be completely ignored, now, he seems to come with a solution to difficulties posed by heterogeneous lands.

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<sup>127</sup> It is apparently a reference to a paragraph in *Essai* (H, pr. 88) which reads that "land of ordinary goodness, such as most of the Land in Europe taking part with another."



Accepting his own failure in his article of 1993, he tries to prove that unlike the claims by scholars like Bowley and Brewer,

Cantillon *himself* was well aware ... that, with the existence of a great variety of all sorts of land (and for that matter, labour) it was possible *only* in terms of money prices, *not* physical quantities, to measure, in a relevant manner, the constituents of intrinsic values. (Grieve and Al-Muharrami, 2021, p.4)

In other words, for Grieve, “Cantillon was thinking of quantifying inputs in terms of their *prices* rather than their *physical quantities*”(ibid, p.5, italics original), making his theory a “*monetary cost*” of production theory (ibid, p.17, italics original)

Thus, by picking monetary costs as unit Cantillon had also solved, or maybe bypassed, the problem that may otherwise occur with heterogenous lands and labour, both being the source of value of commodities. With a due respect for Grieve and Al-Muharrami’s (2021) endeavors, some reservations and is agreements may be expressed with regards to the novel approach and solution they supply us with.

Firstly, Grieve and Al-Muharrami (2021) never seems to ask the following crucial questions: firstly, whether monetary values and intrinsic values can ever diverge from each other and secondly, how can we measure the intrinsic values in such a case? Further, if it is monetary values that express the cost of production, then how can we measure the cost of production of (metallic) money, or how had humanity managed to set a value for various metals throughout ages in which there were no alternative currency/money?

Lastly, and most importantly, if in the end it is only monetary values to which we should look then what was the meaning of all the search and endeavours in the *Essai* that offers the reader a “natural” par between land and labour so the intrinsic values can be measured in “natural” terms as well, rather than monetary values alone. It must be helpful here to remind the reader that when Petty first started the research project for a natural par between land and labour, he described in his *Treatise on Taxes* monetary values as “artificial” values or artificial indicators of values.

All in all, despite all its merits Grieve and Al-Muharrami’s (2021) solution occurs to me only as a partial solution that occasionally neglects one of the greatest research questions setting the backbone of the *Essai*: whether a natural par can be set and, if so, how it can be utilised to compare and contrast the intrinsic values. In the rest of this chapter, I will try to demonstrate that referring to monetary values is not necessary and even without monetary values a sound solution may be attained.

#### 4.3.1.2 2<sup>nd</sup>: Is Cantillon's value theory a land-only theory of value

Regarding this question, I think the best is to check Cantillon's works to decide whether in any passage Cantillon articulates anything that identifies land as the only entity or input determining the intrinsic value.

The passages in which Cantillon seem to come closer to such an idea seem to be just the first sentence of the second book that reads

In Part I an attempt was made to prove that the real value of everything used by man is proportionate to the quantity of Land used for its production and for the upkeep of those who have fashioned it (H235)

Likewise, in another passage speaking again upon the par and value Cantillon states that

the value of the day's work<sup>128</sup> has a relation to the produce of the soil, and that the intrinsic value of any thing may be measured by the quantity of Land used in its production and the quantity of labour which enters into it, in other words by the quantity of Land of which the produce is allotted to those who have worked upon it... (H97)

Still, it is in the *Dictionary* version Cantillon apparently goes further when he declares that

Thus, to judge of the intrinsic value of any thing, we must consider the land, and the labour that enters into it's productions; and, since we may pretty nearly determine the par of land and labour, we may look upon *land alone*, perhaps, to be the principal measure of all values. (D102, italics added)

In this paragraph that has no correspondence in the *Essai* version Cantillon seem to obviously articulate that the value of commodities and services can be measured via land alone.

Hence the claims by Brewer and Bowley, among others, which says Cantillon attempted to reduce all costs to one, the land-costs, seems at fist first to have a ground in the *Essai* and especially *Dictionary* versions of the manuscripts.

Nevertheless, further contemplations on the subject may bring us to different conclusions, once we ask questions like 'can this passage be interpreted alternatively or is there room for any alternative interpretation to a land-only theory of cost of production?' Or put differently, 'does identifying land as the only or "principal" measure unavoidably imply a land theory of value?'

Although it is most tempting to directly claim a land theory of value for these passages, I think, the ground for an alternative interpretation can be found in the work of another great economist, John Stuart Mill, who warns economists in his *Principles of Political Economy*

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<sup>128</sup> Note also that day's work was the natural denomination of Petty's Treatise.

(1848), about the minute but crucial difference between the (concepts of) *regulator* and *measure* of value:

“The idea of a Measure of Value must not be confounded with the idea of the regulator, or determining principle, of value,” [Mill warns and continues] “to confound these two ideas, would be much the same thing as to overlook the distinction between the thermometer and the fire.” (J.S. Mill (1848[1965] p. 580)<sup>129</sup>.

Mill’s warning gives us a criterium to evaluate the opinions of Cantillon anew from the sketch. In fact, I am neither the only nor the first economists who interpret Cantillon in light of Mill’s warning. Peter C. Dooley (2005, p.56), for example, relying exactly on this warning of Mill, refutes the attribution of a land theory of value to Cantillon. Since “both land and labour, not land alone, regulate values,” to him there is no good claim to consider Cantillon’s theory a land-theory of value<sup>130</sup>. More specifically, as Dooley (2005) perceptively observes, both land and labour regulate the value of commodities. However, there is only one natural measure, *the acre of land*, and one artificial measure, monetary values<sup>131</sup> in Cantillon.

The scholars attributing a land theory of value to Cantillon seems to terribly confuse the measure of value with the regulator of value. Most specifically these scholars seem to take a reductionist standpoint, turning land somehow the only *input* determining the total costs of production.

Such a reductionist standpoint clearly appears in Brewer (1992b, p.11, italics added) who declares that in Cantillon “the cost of anything can be *reduced* to the land needed, directly and indirectly, to produce it, including the land needed to support the labour force”. A similar reductionist standpoint could be discerned in other scholars, ascribing Cantillon a land theory of value too, though being not always so much explicit as Brewer.

It should also be noted that a similar reductionist view appears as to Cantillon’s par theory. In fact, one may claim that it is because some misinterpretations as to his par, economists tend to regard his value theory as a land theory of value. However, such a *reductionist* view of the par appears even in the works of scholars who refute attempts to ascribe a land theory of value to

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<sup>129</sup> I should confess that up until I came across to these warning it was difficult for me as well to clearly conceptualise what was the relation between Cantillon’s par (natural measure) and his value theory.

<sup>130</sup> That is not the only passages in which Dooley criticises the arguments by economists attributing a land theory of value to Cantillon. He criticises scholars like Brewer for considering “land” to be “the only truly scarce resource” (Brewer, 1981, p.34, see also 1992a, p.71-2). Thought from an economic perspective, Dooley rightly observes, such claims are “curious” since “scarcity defines the domain of economics” and “all things are said to be scarce which are limited in quantity relative to their usefulness”, so “anything with a price is scarce”.

<sup>131</sup> I think a similar misinterpretation is made by scholars who attribute a labour theory of value to Smith. Without going into any further detail I can refer only to Meek (1956, p. 63). After declaring the words that Adam Smith “did not regard ... labour as constituting the substance of its value” but only “measure” Meek himself cannot refrain from the intellectual temptations of scholars who always in one or another way reduce either measure to regulator or regulator to measure, ending in him regarding labour as both regulator and “real measure” of value in Smith.

Cantillon. Tony Aspromourgos (1995, p.99), for example, despite his refutation of a land theory of value in Cantillon, still makes the statement that

it was ... [the] reduction of labour to land which Cantillon pursued. This was based, to some extent implicitly, upon the fact that labour as conceived by Cantillon ... was strictly reproducible, like any other produced commodity; so that for Cantillon land could be conceived as the only truly original or primary input.<sup>132</sup>

Without extending the discussion further I can only say that there is no “original or primary input” in Cantillon but only material or “matter”, that is land, and shaping power and “form”(H3), which is labour, as it is said in the first sentence of the *Essai*, which is labour, both being equally primary inputs in terms of being the source of value of commodities and wealth of nations (H75)

That being so, rather than reducing one input into another Cantillon just redefine, in my view, both inputs in terms of a common natural measure, acre of land.

At this point, a reference to Karl Marx, I think, could be particularly illuminating. In the very first section of *Das Kapital*, while thinking about how the value of varying commodities, such as corn and iron, can be compared against or proportioned to each other, Marx concludes, if they are exchanged in the market, there must be something “in equal quantities something common to both” and continues

The two things must therefore be equal to a third, which in itself is neither the one nor the other. Each of them, so far as it is exchange-value, must therefore be reducible to this third . . . If we then leave out of consideration the use-value of commodities, they have only one common property left, that of being products of labour (Marx, 1954 [1867], p. 45).

Evaluating this passage and reiterating the main idea in light of it, Ricard Cantillon occurs to me as an economist who meticulously searched for a third, that is independent measure by which land and labour values can be compared in allegedly *natural* terms.

Thus, it can be the case that some statements by Cantillon, like the ones above quoted or the one which explicitly says that “the value of the day’s work<sup>133</sup> has a relation to the produce of the soil” give the impression that Cantillon attempted to reduce labour values to land values, making his value theory a reductionist one. Nevertheless, rather than being a reductionist reading as assumed by some, his reading just tries to find out a natural measure by which land values and labour values can be independently and/or conjointly evaluated.

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<sup>132</sup> A similar view can be found also in a more recent work by him. “Cantillon” he states, “followed Petty’s theory of the origin of value and therefore also measured values [like Petty] by either land or labour” (2015, p.52).

<sup>133</sup> Note also that ‘a day’s work’ was the natural denomination of Petty’s *Treatise*.

All in all, I think, neither in his value, nor in his par theories Richard Cantillon takes a *reductionist* point. Labour-values cannot be reduced to land-values but could only be re-defined in terms of a common measure<sup>134</sup>. That means, it is not the total physical amount of land (products) used in the production that determines the value of a given commodity. Indeed, the more I think upon this reductionist reading attributed to Cantillon the more I come the idea that it may be due to such reductionist (mis)interpretations that Cantillon's value theory is sometimes named among the forerunners of Physiocratic value theory that consider labour as a sterile entity<sup>135</sup>. Unlike all these claims, what I have found in Cantillon is a different theory of value in which labour as well is pinpointed as an independent source and regulator of value that cannot be reduced to total land values used by it, but only *measured* against land values in terms of a third entity, of a common and commensurate par, which is *acre of land*. A due analysis and comparison of Cantillon to Physiocrats, nevertheless, requires further observations which is beyond the subject of this chapter.

Put differently, Cantillon does not reduce the value of to its consumption of land products. But only redefine it in terms of total acre of land used by the labourer. In that sense, it is not so different than defining the same value in monetary values. In other words, how refining labour values in monetary terms does not imply a reductionist theory of value, likewise re-defining them in land-values does not have to imply somewhat a reductionist standpoint.

The method used by Cantillon which measures labour values in terms of a quantity of land, however, suggest a further, but equally crucial, point that the intrinsic values can be conceptualised as something set by the consumption decisions and preferences of landlord. The next section will try to examine this point and try to make the claim that at least in one version of the manuscripts Cantillon makes landlords the main factor determining the intrinsic values of commodities. This claim, however, does not appear in other versions of the manuscripts, letting me to somehow speculate as to causes behind such a variance between the versions.

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<sup>134</sup> Some scholars, even though they never ascribe a land-theory of value to Cantillon still make some reductionist statements implying land to be the only cost in Cantillon. Schumpeter (1954, p.212), for example, "With the deviations of actual prices from this norm—that he reduced from cost in terms of land and labor to cost in terms of land alone— Cantillon dealt very carefully."

<sup>135</sup> Just to remind the reader of two scholars making similar interpretations; According to Cootz (1965, p.16-7) Cantillon, in a way preceding Physiocrats, regarded land to be the only source of wealth for society<sup>135</sup> whereas for Schumpeter (1954, p.230) "labor plays an entirely 'passive' role" in both Cantillon and Quesnay.

#### 4.4 *The role of landlords in the establishment of so-called intrinsic values*

After all these explanations and clarifications as to Cantillon's value theory I may ask two main questions, both having some politico-ideological implications; First, are land and labour, despite being two independent sources of value and wealth, are treated equally by Cantillon or his overall analysis hints a qualitative difference between both? Second, and as most crucial one, is *intrinsic value* something set by market dynamics itself with no influence of gentry class, or by the direct or indirect impact of landlords? Or, if any, what is the role of propertied class in establishment of intrinsic values?

In the previous chapter I tried to demonstrate that the nature of his alternative measure alongside the par Cantillon sets between land and labour values show the centrality he attributed to gentry class in establishment of such factors. In short, the value of labourer, that is the wage of the slave-worker, is measured, firstly, in terms of land products he gets in return from the propertied landlord for his labour and then in terms the quantity of land needed to produce such products. Given the fact that the land conceptualised by Cantillon as an entity belongs to minority landlords and that the landlords as the “naturally independent” (H137) class that are free in their decisions, the value of labour as well seem to be conceptualised as a factor whose final value set by the landlords' preferences and consumption patterns.

Nonetheless such a reading might also suggest that as the value of labour is tied by Cantillon to what it gets in return from the landed class, then the intrinsic values of commodities as well could be tied by Cantillon to the landlords' preferences and expenses in the market. In the *Essai* version of manuscripts we have encountered a similar passage reading that;

By these examples and others which might be added in the same sense, it is seen that the value of the day's work has a relation to the produce of the soil, and that the intrinsic value of any thing may be measured by the quantity of Land used in its production and the quantity of labour which enters into it, in other words by the quantity of Land of which the produce is allotted to those who have worked upon it; and *as all the Land belongs to the Prince and the Landowners all things which have this intrinsic value have it only at their expense.* (H97, italics added)

In short as they are none but two sources of value and among both one of them, land, belongs to a tiny minority and the other, labour, finds its value according to what it gets in return from the propertied class, measured in terms of (the quantity of) land, both the intrinsic values and prices in the market are seen to be put under the direct or indirect command of the propertied class.

This suggests a strong attempt by Cantillon to make landlord class as the sole determinant of the intrinsic values as well. Nevertheless, the logic and reasoning of Cantillon that meticulously attempt to bring the gentry class into the picture seems a bit circular and

arguably tautological: first an alternative measure owned only by a tiny minority, the (quantity of) land, is arbitrarily set by him as the natural or alternative measure of value. Then, by relying on this arbitrarily-picked measure, the gentry class has been identified as the main factor allowing commodities not only to find out but also to “have” their intrinsic values in market. Thus, although his reasoning may appear as a logical consequence of his method that re-defines the values of commodities in terms of a land unit, still bringing the argument so further and claiming that commodities can have any intrinsic values only thanks to the expenses of the gentry class seems to be a bit misleading and exaggerating in the sense that a unit factor arbitrarily picked for quantitative analysis of value somehow turns into the main qualitative unit setting the same value, making the landed class in consequence the *raison d’être* of (the existence of) the same intrinsic value.

Nevertheless, a crucial point must be noted that such a claim challenges Cantillon’s main observation that argues that “[t]here is never a variation in intrinsic values” and “in well organized Societies the Market Prices” fluctuate around their intrinsic values (H74). It is so because once landlord expenses are being picked as the *raison d’être* of the intrinsic values then any change in consumption demand of the landlord must suggest, by logic, a shift in intrinsic values of commodities, making Cantillon’s one of the greatest observations, that later became the ground for classical value theory, at hazard. This could explain why the sentence that connect the intrinsic values of commodities to landlord expenses appears only in the *Essai* version and why there is no corresponding passage in the *Dictionary* version (see van den Berg, 2015, comments to E97).

The lack of such a passage in the *Dictionary* version and the tension caused by this sentence and the rest of the arguments presents in the *Essai* and *Dictionary* versions have some suggestions. First, it does not only prove the versions have great variances but more importantly seems to support Richard van den Berg’s argument that the *Dictionary* version is a more advanced version of the *Essai* version in terms of its logical coherence, and analytical level of arguments. Second, if I may speculate a bit on these variances, I can argue that having realized the inconsistency between this passage and his value theory as a whole, Cantillon later excluded this passage in the *Dictionary* version. Thus, although the role he tailored for landlord class made their expenses in one version of the manuscripts the main factor setting the intrinsic values of commodities as well, he apparently later took a step back from his claims and picked his value theory over the role he tailored for landlord class in the establishment of the alleged intrinsic values. Third, such a decision by Cantillon that ended in the exclusion of the passage from the *Dictionary* version, supports for me my reading that in Cantillon land appear not as a regulator but only as a measure of the values. So, landlords’ expenses do not regulate the values of commodities by itself but only suggest an alternative measure of value.

#### 4.5 Conclusions

In this chapter I have tried to examine the questions a) whether Cantillon's value theory could be treated as a land-only theory of value and b) what the role of landlords in the establishment of intrinsic values is. These were also the points at which the chapter has aimed to make some contribution to the literature.

Starting from the second question, my examination shows that although the *Essai* version suggest that Cantillon identifies landlords' expenses as the determinant of intrinsic values such a passage does not appear in other versions, giving me the impression that despite a possible desire to make landlords a crucial factor setting the intrinsic values of commodities as well, due to some inconsistencies such a desire may pose for his overall observations regarding the intrinsic values, that put intrinsic values immune to fluctuations in expenses, such a role tailored for landlord in the *Essai* version has been cut in other versions. Nevertheless, the existence of such a passage suggests that while starting his studies, or at least once during his studies Cantillon aimed also to make the gentry class an entity setting the intrinsic values of commodities as well.

Regarding the first question, I have attempted to make a contribution to the literature by refuting Cantillon's value theory is a land-only theory of value and by re-interpreting his *acre of land* not as a regulator of value but as an alternative measure of value by which the value of commodities can be independently assessed.

Elaborating this point further with some references to the literature, some scholars who have attributed a land-only theory of value to Richard Cantillon, have also criticised him for completely missing the difficulty set for his value theory by the heterogenous lands. Through some references to the *Essai*, I have tried to demonstrate that Cantillon seems to be completely aware of the difficulty set by heterogenous nature of both land and labour units. Dealing with why the heterogenous nature of land stocks is not a great problem in Cantillon, Grieve attempts to read Cantillon's value theory as a monetary cost of production theory. More specifically, for him, the "intrinsic value" of Richard Cantillon is "not a crude land-embodied treatment, but instead a cost of production approach" (Grieve, 2015, p.1) in which costs are quantified only in monetary terms (also Grieve Al-Muharrami, 2021). For all the merits of Grieve's reading, I have nonetheless endeavoured to reinterpret Cantillon's value theory. It is done mainly in order not to miss some of the greatest research questions establishing the backbone of the *Essai*: how the money finds its value in the market and how we can measure the value in terms of an alternative unit than monetary ones. Thus, while for Grieve, "to attempt to do otherwise [than monetary costs/prices] and specify intrinsic values in real terms would not merely be complicated in practical terms, but often quite impossible"(2018, p.24),



for me, it is not only practically possible but also managed in Cantillon's *Essai* (which is the subject of the next chapter).

In my novel reading I offer, by relying on the warning and insights by J.S. Mill (1848[1965] p. 58) and P. C. Dooley (2005, p.56), and in a way aiming to make a contribution to the literature, I have read the land units, more accurately *the acre of land*, as the alternative measure to a monetary one. Thus, I have endeavoured to demonstrate that despite the claims by some scholars, that Cantillon does not endeavour in the *Essai* to reduce labour values to their equivalent land values but instead to find a natural or alternative measure by which both land and labour values could be measured (with no reference to monetary values), making the *acre of land* his alternative and natural measure by which the intrinsic value can be assessed.

Such an interpretation nevertheless begets its own further questions: if the monetary values can be measured in terms of both money and the *acre of land*, is it possible for the intrinsic values in terms of the artificial measure, money, to diverge from intrinsic values in terms of natural measure, the acre of land? In which circumstances they may vary, and how the intrinsic values can be compared in such a case? Which one of them is more reliable? Although these questions may appear novel and difficult to address, in the coming chapter I will argue that the *Essai* offers some illuminating insights and even answers for such provocative questions.

Before finishing this chapter, however, some further points must be made. First, regardless of whether Cantillon's novel and natural measure, the acre of land, has any practical application, his theory of value, as I have tried to do that in this chapter, is immune to the critiques and shortcomings attributed to it.

Second, the heterogenous nature of assets and production factors seem to have been over-emphasised by philosophers, economists and historians of economic thoughts, something which has unnecessarily complicated the subject rather than illuminating it. If heterogeneity had been so difficult a problem as they tend to think, then it would have been impossible for humanity to set even a parity between the silver and gold, given the heterogenous/varying nature of these metals, making bimetallism theoretically impossible. However, this problem, which seems theoretically impossible at first sight, has been solved throughout ages by humanity with no great theoretical complications and examinations.

Thirdly, unlike the claims by the scholars attributing a land-only theory of value to Richard Cantillon and academics like Giacomini (1994, p.132) who thinks "land is everything and labour is nothing" in Cantillon, labour appears in Cantillon's value theory as an independent source of both value of commodities and wealth of nations. Thus, acre-of-land is used by Cantillon appears not as the regulator but the measure of value by which the contributions of independent sources of value, that is of land and labour, can be assessed.

It should also be noted to proactively prevent some confusions that this independent nature of labour in value creation in Cantillon does not have to be a challenge to my reading that puts landlords at the centre stage of economic analysis. It is so, first, because land itself, especially in a discussion regarding value theories, and landlord class itself are two different entities that should be confused with each other. Second, even when it comes to closest, it is not land that is set by the regulator of value but the expenses of landlords in the *Essai* version that as the facilitator of intrinsic values, suggesting that Cantillon does not make a land-oriented reading but at best a landlord-oriented reading of the socio-economic system. Third, despite the independent nature of labour in value creation, one can claim, giving the fact that the activity levels, production possibilities and total employment all are responsive to the demand from landlords, labour of Cantillon seem more as a responsive entity (see above chapter 1). In other words, even though labour has a power to create wealth and value, its creative power unlock itself only if there is a demand from landlords, making landlords the main actor setting the active labour stock of a nation.

Before finishing, a final note could be made that to attribute Richard Cantillon a land only theory of value is arguably to neglect the prevailing socio-political and economic circumstances of the early 18<sup>th</sup> centuries. During the period, if not the earlier, the labour force of the worker especially of the skilled worker, including artisan and manufacturer classes, were identified by some scholars, including Defoe, as the main stimulus of British wealth. The technical and skilled work, especially in cotton industry, was then the main source of value-added product in England and Britain making it enjoy a great wealth, which was also why projectors like Dobbs and Braddon, advised the nation to focus on such industries to amass wealth. Likewise, to refute the role of land might is arguably to neglect the role of landlords in the society. Land itself was considered as a creative asset that can create materials with a potential to contribute the national wealth, whereas the landlord class had still great power. Hence, given the political and economic environment of the day it does not seem possible for Cantillon to neglect the role of labour in value creation and consider only land as the source of national wealth. Thus, my conclusion that regard the acre of land as the measure, rather than regulator, of value, maybe considered as a conclusion I have reach through the historical contextualisation of the *Essai*.

## 5 Foreign Trade Theory: Cantillon and Mercantilist 'Monetary' Unequal Exchange

"I just want to make it clear to everybody that our policy has been and will always be . . . that *a strong dollar is in our interest as a country*, and *we will never embrace a strategy of trying to weaken our currency* to gain economic advantage at the expense of our trading partners."

U.S. Treasury Secretary Timothy F. Geithner,  
April 26, 2011 (quoted in Rickards, 2011, ch.11)

... textbook economic theory would hold that Switzerland's persistent current account surplus is a function of a rather weak Swiss franc. *Such a view stands in direct contradiction to our assessment and, consequently, our current monetary policy.* This is based, first, on the negative interest that banks and other financial market participants pay on their sight deposits at the SNB [Swiss National Bank], and second, *on our willingness to intervene in the foreign exchange market as necessary.* The goal of these measures is to ease pressure on the Swiss franc and thus ensure price stability, as the exchange rate has a strong influence on monetary conditions in Switzerland and, hence, on price stability.<sup>136</sup>

T. J. Jordan. *the Chairman of Swiss National Bank*

*There is no subtler, no surer means of overturning the existing basis of society than to debauch the currency.* The process engages all the hidden forces of economic law on the side of destruction, and does it in a manner which not one man in a million is able to diagnose.

J. M. Keynes (*The Economic Consequences of the Peace, chapter VI*)

If the free traders cannot understand how a nation can grow at the expense of another, we need not wonder since the same gentlemen also refuse to understand how within one country one class can enrich itself at the expense of another.

K. Marx (Address on the Question of Free Trade, 1848,  
quoted in Emmanuel, 1972, p.vii)

When the eye of heaven, in the eye of the king, had looked upon you, and picked you out, and placed you in a higher orb; you were first seene in this circle, of the balance of trade. Other faire pieces you had, but this was your master piece, because all the rest had reference unto this

E. Misselden (*The Circle of Commerce, 1623. p.3*).

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<sup>136</sup> from a speech given in, Basel, on 23th of November 2017 url:  
<https://service.betterregulation.com/sites/default/files/r171124b.pdf>

## 5.1 Introduction

When addressing the question ‘why mercantilist, despite all their knowledge of long-term implications of trade surplus, were still stubbornly insisting on trade surpluses’, economists and historians seems to put forward mainly four explanations: The first of them, which was in use since the days of Adam Smith, assesses this insistence through political lenses. “Connections with foreign nations” Smith reasons, “are obliged to carry on foreign wars, and to maintain fleets and armies in distant countries”, forcing Mercantilists to erroneously accumulate gold and silver in peacetime, making them to keep an eye on trade surpluses. (Smith, WoN). Similar evaluations became common after Smith, and canonical works such as Eli Hecksher (1935) or Viner (1948) have tended to assess the mercantilist trade surplus as a political phenomenon rather than economic. This perspective occasionally converges to the second reading that regards mercantilism as the politico-economical system absolute states/kings. In this reading every state or king are considered as entities aiming to become the absolute political and economic power hub both locally and, if possible, globally. Thus, trade surpluses become not only a mean of state income but also a requirement for them in their desires to consolidate their ‘absolute’ power against their rivals in economic and political spheres, which occasionally required wars and battles (see especially Rothbard, 1995, vol I, ch.7)

The third explanation supplies us with a more economic justification. Money, it argues, was a necessity of economic organisation and production whereas trade surplus the only way for nation with no mines to withdraw money into their nations. This analysis has gained credit especially with Keynes who had reinterpreted mercantilism in a novel way to supply his economic theory with some historical background (Keynes, 1935, ch.23). Money, Keynes assumed, was demanded by mercantilist not for its own sake but for its beneficial impacts upon the production level and employment, demonstrating its full impact on economic activity, for him, through lowering interest rates.

Like Keynes but in a slightly different way Max Beer interprets *trade surplus* as a doctrine demanding in essence nothing but liquid capital, whose absence would deflate both the economic activity and production (Max Beer, 1938). A similar view can be found Gould (1955) who treats Mun’s demand for a trade surplus during economic debates of 1620s as a demand for liquid stock of the nation. Mercantilists demanded at least since Mun, according to Gould, not bullion or money *per se* but a circulating liquid capital.

As Magnusson states, such evaluations taking the production and economic activity as the focal point were generally made under the influence of Keynes and, not surprisingly, peaked in the 1960s and 70s when Keynesian politico-economic doctrines were in great currency among not only economists but politicians and intellectuals as well (Magnusson, 1994).

Nevertheless, even though Keynesian economics has lost its lure since 1970s the argument is still in currency. Suprinyak (2011), for example, has recently made a similar reading treating mercantilists' seeking for trade surplus because of the exclusive role they attributed to money: "dynamizing commercial activity" (2011, p.469-70).

Viner (1937, p.31) also seems to converge to that idea when he says the mercantilist trade surplus argument "verbally, at least, ...can be explained only if they regarded money and capital as identical in fact as well as in name". Nonetheless, he remains hesitant in his claim since to him there is not enough data and textual evidence to prove such a claim<sup>137</sup>.

The fourth explanation is related to exchange relations; mercantilists did not bother themselves so much as classical and modern economists with the inflationist pressures of trade surplus and advised a higher price level not only as an occasionally promising sign of the wealth and advantageous economic condition of the nation, but also as a positive indicator or facilitator of a gain from trades with foreigners. These perspective makes mercantilists somewhat "inflationist" and indeed it is a subject of hot debate among historians and economists whether mercantilist could be labelled "inflationist". Maurice Dobb apparently have a sympathy with the inflationist view. Mercantilist favourable trade balance doctrine, to him, is a different facet of their economic analysis seeing an advantage for nation in higher prices enabling them to get a profit margin in exchanges. (Dobb, 1950[1946]). Rössner (2018, p.10) seems to share a somewhat similar view when he says that there emerged "a fear of *deflation*" in the works of "the early modern economic discourse (Cameralism, mercantilism)" regarding "low prices" as an indicator of "shortfalls of aggregate demand over supply, often caused by a lack of silver money in the economy that could ,.. lead the market economy into depression" (italics original).

Indeed, some passages of mercantilist authors like Misselden, 1622, p.107) arguing that "...it is much better for the Kingdome, ... to have deare with plenty of Money, whereby men live in their several callings, than to have things cheaper with want of money", seem to support such *inflationist* interpretations of trade balance doctrine.

In the literature this view has not gone without refutation though. "There were very few price inflationist among the English mercantilists" Viner (1930, p.283-4) says and continues "I can find in any case very few mercantilists who wanted higher prices and wanted more money as a means of obtaining a higher price level" (ibid, p.282). Relying on the authority of Viner, Magnusson too confront the inflationist view. "Most of the mercantilists," Magnusson argues

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<sup>137</sup> See also Grampp (1952), Gould (1955) Gomes (1987), Groenewegen (1995) for works discussing protective and liberal elements of British mercantilism.

“in fact, argued explicitly against higher prices. The contention was that high prices would imply diminished foreign demand and shrinking export shares. Thus it is clear that the principle of price elasticity was recognised by most mercantilist writers.” (Magnusson, 1994, p.160)

Nevertheless, since the term inflationist can be understood, at least, in two different senses, the term must be qualified before proceeding.

A rising price level, the first sense may imply, as a sign of fervent economic activity and high demand is beneficial to the nation. Taking this sense, however, seems to eradicate the narrow line separating mercantilist from later scholars including classical economists like Malthus, pre-classicals like Hume, or even modern central bankers who have meticulously advocate a slow but steady increase in price levels.

The second sense, however, could be the one comparing the price levels of the nation with each other to decide whether mercantilists favoured and preferred a higher price level to a lower one. This approach, unlike the first one analysing the change in the price level in a given nation, compares price levels between nations. It must be noted to eliminate some confusions that may otherwise occur that the main emphasis of this approach does not have to be on comparative living standards of nations accompanied by higher price level, but mainly the alleged benefit that can be get from mutual exchanges by a comparatively higher price level. So, regardless of living standards in a nation it underscores the advantages of a high price level in exchanges with foreigners.

In this chapter I will highlight this second meaning on three grounds; Firstly, mercantilists seem to always compare and contrast the wealth of nations in monetary terms symbolised itself in price level<sup>138</sup>. Secondly, since the focus of this chapter is Cantillon’s opinions on foreign trade such a perspective fits more to the current investigation. Thirdly, this approach seems to be often neglected in modern debates upon foreign trades, so I think, it would also be more useful given the current situation of the literature upon mercantilism.

Scholars who highlighted the mercantilist unequal exchange, including Perrotta (2004), Magnusson (1978), and Brolin (2007), seem to conceptualise mercantilist unequal exchange

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<sup>138</sup> Given the fact that as mercantilists measured the wealth of nations not only in real terms but in monetary terms as well such a viewpoint, that required monetary values to be appropriately high, should not be surprising for the reader. What may be really surprising, however, finding some non-mercantilists or arguably anti-mercantilist like Quesnay to be of the same opinion. In chapter VII of *Philosophie rurale*, Quesnay makes the unambiguous statement that “in order to evaluate the annual wealth of a nation ... it is necessary to examine together, first the quantity of the products, secondly their monetary prices” (quoted in Vaggi, 1987, p.35). He likewise declares at another occasion that “*Abundance plus valuelessness does not equal wealth. Scarcity plus dearness equals poverty. Abundance plus dearness equals opulence*” (quoted in Vaggi, 1987, p.34, italics original). Also, while comparing two nations with the same physical quantity of products but varying price levels, in a way reminding mercantilists, he says the nation with higher price level is not only richer but also more powerful than the other (see Vaggi, 1987, p.35).<sup>138</sup> Such quotations demonstrate that monetary values were a crucial factor for Quesnay as well in comparing the real wealth and power of nations. That side of Quesnay’s analysis will nevertheless be left aside and never be returned as our examination is not about Physiocracy or Quesnay.

as a phenomenon stemming from the nature of commodities exchanged. Thus, either the exchange of commodities for money or of manufactured products for raw materials seem to be considered by them as main forms of unequal exchanges for mercantilists (see also below section 5.2).

In the present chapter I will try to give a third interpretation of unequal exchanges; the one stemming from the variances in price level between nations. In such a case the unequal exchange is not caused due to the nature of commodities exchanged but thanks to the nominal values of commodities mutually exchanged. Additionally, given the fact that other unequal exchange theories are accepting commodities exchanged to be of equal (total) values but only of variance nature, it could be argued, none of them runs against the wisdom of classical political economy that the exchanges are always between equal (real) values. In this regard, the unequal exchange theory that will be examined in this chapter could be called also the only *genuine* unequal exchange theory present in mercantilism as it does accept the basic premise that exchanges in market do not have to be between equal real values. As in this form of exchange, the real unequal exchange stems from the variances in monetary value, I prefer to call this form of unequal exchanges as ‘monetary unequal exchange.

Hence, in the rest of the chapter, I would like to extend this examination by focusing mainly on the query of unequal exchange, that asks whether the exchange between a monetary rich country and poor one could be unequal in terms of the “real value” of commodities and services exchanged between them. In the end I will make the provocative statement that exchanges between such countries could not only be unequal in nature but also in value. Such a perspective supplies us not only with a further explanation as to why some mercantilists were so insistently seeking for a trade surplus, but also, or hopefully, furnish us with another tool to revisit mercantilist works to assess them with a fresh eye to deduct, when possible, some insights from them to comprehend the real nature of trade between nations.

The examination will be made by focusing on the works three great mercantilist economists, John Locke, John Law and Richard Cantillon, and especially the *Dictionary* version where we have found the subtlest analysis of monetary unequal trade between nation. Additionally, I will also make the provocative statement a due review of the *Essai* gives implies that that in foreign trade the monetary vales set do not have to reflect the real/intrinsic values of commodities. In such a case, Cantillon argues, his alternative/natural measure, the acre of land rather than monetary values/prices is a more reliable indicator of the intrinsic values of commodities exchanged between nations. In this regard, there is also a continuum between this chapter and the previous one in which I have analysed Cantillon’s value theory and treated *acre of land* as his alternative, *natural* measure of intrinsic values. All this examination is also required because his value theory, searching for the intrinsic values of commodities and a non-

monetary measure to assess such intrinsic values, in fact could be the result of the long mercantilist tradition meticulously examining the gains and losses from specific forms of trades. Put differently, while other mercantilist like Locke and Law, discerned that a nation could benefit more from specific forms of trade even when the trade balance is even, Cantillon by setting an alternative value theory and measure supplies us also with a method to discern the net gainers even in case of an even trade balance. Thereby, his foreign trade theory occurs to me as a climax of mercantilist trade theory forced in the end him to develop an alternative value theory that we have analysed in the earlier chapter. Thus, his value theory and foreign trade theory appear as compatible and coherent theories established upon mercantilist research questions aiming to discern the net gainer from even trades.

It should also be noted, to establish a continuum in the narrative and to thereby maintain to read Cantillon against mercantilist trade balance doctrines, some further monetary and financial phenomena, like exchange rate mechanism, changes in denominations of money or the role of credit mechanisms, alongside their implications for and potential influences on unequal exchange theory has been deliberately ignored in the present chapter. If all the financial factors had been integrated, it would have been impossible for me to maintain the focus and thereby create a consistence between chapters.

I will start first with the literature review querying the possibility of unequal exchange in modern literature. Thereafter, I will give a succinct account of the opinions of Locke and Law before ending in a detailed examination of Cantillon's opinions upon the case.

### 5.1.1 *Unequal Exchange: A Literature Review*

In his in-depth analysis of mercantilist foreign trade theories, Perrotta (2004, 210-11) comes to the conclusion that from the “formulations” by “the pre-Smithians ...”

we can make at least three distinct theories ... The first theory that ... that *trade normally involves the exchange of unequal values*. The second ... that it is possible for a country to have exports constantly in excess of imports. The third, while accepting that exchange involves equal values and that in the long run trade between two countries makes exports equal imports, holds that in international trade there is an unequal advantage for the parties involved which is dependent on the use value of the commodities exchanged, or, to be more precise, on the different productive potentials of their use value.

In these terms, the first theory seems clearly wrong. The second ... lacks the importance that the mercantilists attributed to it. The third theory, on the other hand, can be considered valid in many concrete situations. It is precisely this last theory, which is by far the most significant and the most widespread of that period, that has been ignored by historians, with very few exceptions. (italics added)



If we focus on the first and third assumptions, there is apparently a striking difference, if not contrast, between both.

The third assumption or method examines the commodities exchanged prospectively according to their potential benefits for the productive power and economic activity of the nation. As Brolin (2016, p.1161) states, such a categorisation of commodities which is made according to their potentialities for production, employment and wealth, which advocated the exchange of manufactured products for raw materials was “a cornerstone” of economic policies of not only “mercantilists” but even of “protectionists, neo-mercantilists, import-substitutionists”, alongside some modern accounts such as Singer-Prebisch thesis, all highlighting the importance of different production and trade strategies in the long-term development of nations.

The first one, however, occurs to me as a doctrinal approach assessing exchanges retrospectively or simultaneously according to the real or intrinsic values inherited in the commodities exchanged. Hence, it may be stated, whereas the third one concern with the ‘potential’ long-term merits of commodities in terms of production and economic wellbeing of the nation, the first one concern mainly with the ‘actual’ value of the commodities exchanged whereas that evaluation can be done completely independently of the alleged long-term potentialities of commodities.

Put differently, the third assumption highlights more the different development strategies attributing the divergence between nations not to the unequal exchange mechanism but mainly, if not exclusively, to varying development strategies of nations, making it more appropriately an *uneven development* theory than *unequal exchange*.<sup>139</sup>.

The first one however makes the claim that even when assessed in terms of the intrinsic/real value mutually transferred, the exchange between nations could be unequal. This point attributes the divergences to the unequal exchanges, that is to the variance in location of production and distribution/consumption: “unequal exchange” occurs in this view, as Ricci perceptively observe and summarises “when spatial production of value is disjointed from its geographical distribution, in the same way as social production of value diverges from its distribution between social classes” (Ricci, 2019, p.226<sup>140</sup>). More plainly, whenever a given part of the transactions gets (in value) more in return for what he gives, there the total value is redistributed through exchange mechanism in a way dislocating some of the value from the

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<sup>139</sup> In the 1950s and 60s there appeared a number of development theories (see Tøye and Tøye, 2003, Mallorquín, 2007, Boinavsky, 2010, Loureiro et al. 2020). All these theories, however, it must be noted is not the subject of our analysis because, though they occasionally the term *unequal exchange*, in their essence they were development theories analysing mainly, if not exclusively, the long-term impacts of exchanges on development, rather than exchanges per se. .

<sup>140</sup> For additional works examining unequal exchange mechanism see Brolin (2007, 2016), Higginbottom (2014) and Patnaik and Patnaik (2016).

(location of) producers. No matter it is from the actor, class or nation producing the value in question, such a dislocation allowing some to amass great wealth by exchange itself, provocatively implying that the exchange itself, rather than being a sterile activity, is a factor resetting the distribution of value between economic actors and locations.

### *5.1.2 Arghiri Emmanuel's contribution*

If we return back to Perrotta's classification, although he reckons the first assumption as a "clearly wrong" one, in the literature we can encounter with some accounts aiming to establish such theories. Indeed, when Arghiri Emmanuel, a Greek-French 'dissident' Marxian economist, coined the term "unequal exchange" in the 1960s and 1970s (Ricci, 2019, p.227) he did this exactly in the sense which Perrotta labels "wrong": the uneven or non-equal nature of exchange in terms of value transferred between both sides of the exchange, Emmanuel (1972<sup>141</sup>) argued, is possible and common. Writing a whole book dedicated to this phenomenon, in a way exceeding all attempts until him, he endeavoured to systematically analyse and algebraically demonstrate that the uneven exchange is not only possible but even some of the great divergences in wealth and development of nations could be reasonable explained through the lenses of unequal exchange mechanism. Structuring his thesis around wage (discrepancy), that "can vary enormously in space but very little in time" (1972, p. 120<sup>142</sup>) Emmanuel concluded that the transfer of value through exchange mechanisms from underdeveloped nation to developed nation is the main reason why some nations flourish over time, whereas other remains poor. Put differently, they were not only retarded in development by such exchanges but also are drained of their real wealth with the same exchanges (see also Maddern, 2016 and Bernal, 1980)

Indeed, although there were some predecessors such as Gunther Kohlmey, following Raffer (1987, p.6), we may claim that the concept of "Unequal Exchange did not become a major issue until the 1960s when Emmanuel attracted attention to the 'imperialism of trade' ". Thus, it may be claimed that it is mainly because of Emmanuel the subject had gained great attention among especially non-orthodox economists.

If we look into details of Emmanuel's thesis, "low-wage countries" Emmanuel assured "exchange 'a larger amount of their national labour for a smaller amount of foreign labor'" (1972a: xxxi) Even though he establishes his thesis upon wage discrepancy still he unequivocally clarified that "since equivalence in capitalist production relations signifies not

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<sup>141</sup> In fact, Emmanuel's book, originally published in French in 1969. To avoid probable confusions, however, the translations and quotes will be from the English edition, Emmanuel, 1972.

<sup>142</sup> Emmanuel's treatment of wages as the independent variable determining price levels, rather than vice-versa, though being one of the intellectually most promising subjects, will not be dealt with here. It must nonetheless be noted that Emmanuel's treatment is completely contrary to the standard textbooks established around "conventional Heckscher-Ohlin theory and its recent reformulation by Samuelson" which holds prices as the determinant factor of wages (Brolin, 2016, p. 1160-1).

the exchange of equal quantities of labor, but that of equal aggregates of factors ([e.g.] labor and capital nonequivalence (unequal exchange) can only signify the exchange of unequal aggregates of these same factors” (1972a: 325), suggesting that so long as trade continues between nations the low wage countries are destined to be the loser of commercial exchanges.

Emmanuel’s thesis in that respect diverges from previous Marxist and structuralist theories such as Lewis (1954, 1969, 1978, 1979), Singer-Prebisch thesis (Singer, 1950 and Prebisch, 1950, see Toye and Toye, 2003 and Ricci, 2019, p.226), addition to Post Keynesians (including Joan Robinson, 1979, p. 102<sup>143</sup>) and neo-Marxist theories.

The divergence between Emmanuel and earlier accounts can be best seen (I think) in his critique of neo-Marxist “monopoly capitalism” of Baran and Sweezy (1966), and later of Amin (1976). In a way following previous Marxist and structuralist traditions attributing the discrepancies in developments to transfer of either capital and profit towards developed nations neo-Marxist monopoly capitalism stressed the monopolistic power of great corporations gained by long-term technologic investment (Brolin. 2016). Thus, the concentration of technology-capital in the hands of few firms was declared by these scholars as the main reason behind the unequal exchange phenomenon (Ricci, 2019, p.227).

From Emmanuel’s perspective, nevertheless, “monopoly capitalism” had some fatal flaws, including, first and foremost, their adherence to Ricardian theory of trade. For Emmanuel, Sweezy and Baran had fallen into the same trap with Lenin by remaining “faithful to the line of classical political economy, which holds that free trade is merely an exchange of equivalents”, suggesting “that the trade between two countries may well affect the distribution of value produced within one or both countries concerned but cannot transfer any value from one country to the other” (Emmanuel, 1972, p.199, n.34 and p.95)

Standard classical-Ricardian trade theories, alongside their modern versions, assumes trade to be of equal values. Even though the commodities and services exchanged could significantly vary and a nation could exchange say, capital- or labour-intensive products, still these theories assume that the total value reciprocally transferred to be equal. Thus, although nations could industrially or technologically etc. vary all exchanges are treated to be of equal values in which no one get more or less than what it cedes<sup>144</sup>.

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<sup>143</sup> Joan Robinson who clearly states in her critique of neoclassical economy that “the most pervasive and strongly held of all neoclassical doctrines”, which is the “the universal benefits of free trade,” leaves no room for “unequal exchange” with his unrealistic assumption of uneven development for all the nations in trade (Robinson, 1979, p.102<sup>143</sup>). Nevertheless, Robinson’s critique as well seems as a critique established upon development and production/employment rather than exchange *per se*.

<sup>144</sup> “Classical models” that rely on the Ricardian theory of trade, as Bailly (2017, p.92) summarizes, “are built on the general idea that in any exchange each person receives the equivalent of the value they cede” meaning any transaction “results in each trader being as wealthy as before the exchange”.

Emmanuel's thesis seems to exactly attack to this presupposition. In that respect, however, his thesis seems not only to diverge from classical-Ricardian tradition and neoclassic, but also from almost all non-orthodox unequal exchange theories alike, including the Marxist, neo-Marxist, structuralist, post-Keynesian traditions or even that of Proudhon, a hostile of Marx to which Emmanuel occasionally refers.

Evaluated from this perspective, I argue that, the literature until Emmanuel seems, formally speaking, more as a literature on *unequal development*, or more precisely *uneven development*, rather than *unequal exchange*. In that literature exchanges are assessed not in the terms and context of exchange *per se*, but in terms of long-term development and wealth-accumulation. All these divergences from the previous literature make Emmanuel arguably the most prominent scholar who has systematically studied exchange *per se* (with limited reference to the structure of production or development strategies) as a different and arguably independent sphere. In fact, this stress on exchange side caused some of more traditional Marxists, like Charles Bettelheim, who once supervised Emmanuel's thesis (Brolin, 2016, p.1170), to accuse him of subordinating production side to exchange side with its overemphasis on exchange relations (see Emmanuel, 1972, Appendix)<sup>145</sup>.

All in all, Emmanuel seems to extend the literature on a few points. Firstly, by making the unequal exchange *per se* the unit of analysis, he clearly put exchange relations as a redistributive cause of value and wealth transfers between nations. Secondly, in doing that he also seems to claim that regardless of the long term potentials or the nature of commodities (e.g. agrarian or manufactural) exchanged the unequal exchange that enrich one side of the trade more than the other is possible. Lastly, Emmanuel seems to <sup>146</sup>supply us with novel reasonings and lenses by which we can re-evaluate the previous economic theories, including the mercantilist ones.

Before proceeding two points must be made. Firstly, although for Emmanuel not only modern economists like Otto Bauer (1924), Maurice Dobb (1946, p.229-30) and Milentije Popović (1950, p.5,7,16) but also the founding figures of both Physiocracy, François Quesnay and Marxism, Karl Marx<sup>147</sup>, and Engels, were all aware of the unequal exchange my readings do

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<sup>145</sup> For another critique of Emmanuel made from a traditional Marxist perspective see Philing (1972).

<sup>146</sup> In the *Dialogue sur les travaux des artisans*, Quesnay clearly states that the "trade is only an exchange of value for equal value" (Meek, 2003 [1962], p.214). Indeed, If exchange and trade had been considered as an exchange of unequal values, it would be particularly difficult for Quesnay and other Physiocrats to still regard trade as a sterile activity, which is arguably why just in the following sentence Quesnay clarifies that "there is never anything here [in trade] but an exchange of an item of wealth of one value for another item of wealth of *equal value*, and consequently no real increase in wealth at all" (Meek, *ibid*, italics added). See Bonnot D. Condillac (van den Berg, 2004, p.1436) for a Physiocratic unequal exchange theory.

<sup>147</sup> Although for Emmanuel the founding figures of Marxism like Marx and Engels were aware of the unequal exchange mechanism, my readings raise some doubts about such a conclusion. While searching for how a capitalist can extract a surplus value Marx seems to think he has found the solution so subtly that "every condition of the problem is satisfied, while *the laws that regulate the exchange of commodities*, have been in no way

not support such claims. Still an in dept analysis is excluded in order to focus on mercantilist literature.

Secondly, Emmanuel establishes his unequal exchange theories on the divergences in real wages rather than in monetary factors or price variances. Even when he occasionally speaks of monetary factors as the causes behind unequal exchanges still such mentions are so rare and in-passing, making the monetary aspect of unequal exchange as a factor neglected by Emmanuel too (Emmanuel, 1972, p.147<sup>148</sup>). In the coming paragraphs while studying mercantilists author I will focus on on this side of the subject. I also intent to make literature some minor contribution by extending the debate towards such monetary territories.

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violated. *Equivalent has been exchanged for equivalent*<sup>148</sup> in the market (Marx, Capital, MECW, vol. 35, p.205, italics added). *Das Kapital* maybe a great critique of classical political economy, when it comes to the unequal exchange it seems to be still within the same historical and conceptual framework seeing market, like previous political economists, as a place where equivalents are exchanged for equivalent.

For a work aims to establish a Marxist theory of international unequal exchange, see Grossman (1929). See also Hornborg (2019) for an article aiming to identify “some conceptual flaws in eco-Marxist theory” regarding international exchanges.

<sup>148</sup> If less developed nations import something with the money they have, Emmanuel assures, “they will be subjected to unequal exchange”, so exploitation by developed ones where price level is high (Emmanuel, 1972, p.147). Or again when he speaks of financial exploitation he rightly regards that exploitation to be “more subtle than unequal exchange” but consciously neglects that exploitation for being “outside the scope of the... study” (ibid, p.228).

## 5.2 *Mercantilist Accounts of 'Monetary' Unequal Exchanges Before Richard Cantillon*

Apparently, the unequal exchange mechanism of mercantilism has drawn attention of some scholars. Addition to Perrotta and Emmanuel, Magnusson (1978: 110), for example, speaks of a divergence in “the mercantilists’ view [...] from that of modern price theorists at one crucial point”; unlike their modern counterparts, he claims, “the mercantilists do not take a maximization of utility for both parties for granted, assuming instead that the exchange will be unequal.<sup>149</sup>” For Brodin, who spares some places to the debate,

There were at least two intertwined mercantilist conceptions of trade inequalities: on the one hand, the fundamental perceived inequality of exchanging money for goods, and on the other, the exchange of raw materials for manufactures. (Brodin, 2007, p.21)

Thus, according to Brodin, the unequal exchange seems to be stemmed from the nature and qualities of the commodities exchange; either of commodities for money or of manufactural product for raw materials, both considered beneficial by the mercantilists. Indeed, all the modern literature analysed so far apparently examine the case like Brodin, through the kind or nature of commodities exchanged.

In the present chapter I will take a further step and try to show that there is a third unequal exchange in mercantilist authors stemming from the divergence in the actual values of commodities exchanged. Put differently, an unequal exchange that is cause by the variances between the real physical quantities/values of commodities exchanged and their monetary values. Such a perspective, however, also implies that unequal exchange is possible in real terms so one nation could get more, in real terms, than the other because of such exchanges.

This chapter aims to prove this claim and by relying particularly on the works of John Law and Richard Cantillon, two of the greatest economists of mercantilist era, I will particularly try to show that *de facto* unequal exchange in values reciprocally transferred was not only considered a possibility but even a common and unavoidable feature of trade given the variances in the price level between nations. In other words, to them, when the subject turn to the international exchanges, the monetary values do not have to reflect the intrinsic or real values of commodities, and even when the types of commodities exchanged are similar still unequal exchange, stemming from variances in monetary phenomena, is possible. In that respect, these economists are arguably of the opinion that even when monetary values are equal still the real value of assets and commodities reciprocally exchanged could be unequal, benefiting one side more than the other. We will start our debate with John Locke, who might have some influence on both Law and Cantillon.

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<sup>149</sup> Although he does not appropriately qualify what he means with unequal exchange here the rest of the work gives the impression that Magnusson as well share the common view likewise Perrotta and Brodin

Putting an unbridgeable gap between an open economy, with foreign trade, and a closed economy, in which there is no need to trade with foreigners, John Locke declared the quantity of money in circulation as a crucial factor in the first one. In a closed economy, where “... *any quantity of that money ... would serve to drive any proportion of trade, whether more or less*” (Locke, 1691, part II, point 20), the proportion of money to commodities was considered by him to be irrelevant.

In an open economy however, the case was crucially different for him, as now there must be a sustainable proportional value between domestic and foreign price levels:

... [In an open economy] any quantity of that Money will not serve to drive any quantity of Trade; but there must be a certain proportion between their Money and Trade. The reason whereof is this, because to keep your Trade going without loss, your Commodities amongst you, must keep an equal, or, at least, near the Price of the same Species of Commodities in the Neighbour Countries: Which they cannot do, if your Money be far less than in other Countries; for then, either your Commodities must be sold very cheap, or a great part of your Trade must stand still...

Conducting a thought experiment in which England was losing half of its money stock, he warns the nation against the economic calamities that could come with it. In a passage worthwhile quoting in length, he states

that every one of these must receive but half the Money, for their Commodities and Labour, they did before, and but half so much as our Neighbours do receive for the same Labour and the same natural Product, at the same time. Such a state of Poverty as this, though it will make no scarcity of our Native Commodities amongst us, yet it will have these ill consequences. [Firstly] It will make our Native Commodities vent very cheap. Secondly, it will make all Foreign Commodities very dear, both which will keep us Poor. ... that in all our exchange of Native for Foreign Commodities, we shall pay double the Value that any other Country does, where Money is in greater Plenty. This indeed will make a dearness, and, in time, a scarcity of Foreign Commodities; ... {Thirdly} It endangers the drawing away our People, both Handicrafts, Mariners, and Soldiers, who are apt to go where their Pay is best, which will always be where there is greatest plenty of Money; and in time of War, must needs bring great distress. (Locke, 1691, part II, point 20)

In short, an economy which cannot keep its money stock and price level at a par with its neighbours, to Locke, is destined to be poor but also to lose in all of her exchanges with foreigners. All the products of the nation, both of land and labour sold abroad at cheaper rate than it must be, and the nation as a whole could get in return for these exchanges much less than they should otherwise get.

Among all the mercantilist I have reviewed John Locke seems to be one who gives first a reasonably theoretical analysis of unequal exchange. After him, however, John Law apparently developed the thesis in his examination into the circumstances of Scotland.

### *John Law*

Following the footpath of Locke and as one of the most renowned mercantilists allegedly influenced Richard Cantillon (see Murphy, 1983), John Law did not only differentiated, like Locke, a closed economy from an open one, but also made both the proportional amount of money under national command, and the domestic price level as a crucial factor for an open economy. He clearly declared that in an open economy “to be Powerful and Wealthy in proportion to other Nations, we should have Money in proportion with them” (Law, 1705 [1750], p.110-1). In elaborating his ideas, he further reasoned that “if we could be suppos'd to be without any Commerce with other Nations,” he affirms, “a 100 lib. may be allay'd and rais'd to have the same effect in Trade as a Million” meaning that the total quantity of money the nation enjoys has no real effects. However, in an open economy the case is so different; but, if a Stranger were suffer'd to come to [poor] Scotland” where prices were miserably low, he reasons, “he might purchase a great part of the Land or Goods with a small Sum. And a rich Man here would make a very small Figure Abroad” meaning in both cases the Scottish loses significantly in his dealings with money-rich foreigners (Law, 1705 [1750], p.88).

Hence, to him it was not enough to declare that “trade depends on money” and Scotland has a very inconsiderable trade, because “she has but a very small part of money”. It must also be confessed that as a result of “a little home trade” and lack of money in the economy the “foreign trade ... is carried on with great disadvantage to the people, *who pay dearer for foreign goods*” (Law, 1705 [1750], p.33-5, italics added). Thus, because of the low quantity of money circulating domestic trade that was keeping the price level significantly low, Scotland was losing in her trades with foreign nations, no matter whether the trade was in land, labour products or raw materials. If the case be otherwise, he further reasons, then “Scotland would be richer...; Because, a greater Quantity [of money] would be brought in,[to Scotland] to buy the same Quantity of Goods”(Law, 1705 [1750], p.88).

He examines the case even from the alterations in the denomination of money, which is done mainly to put into context the potential harmful effects of mismanagements of such affairs. Taking France, where nominal value of money was then regularly changed, he endeavours to clarify why an appreciation of money, namely a rise in the denomination of money, could be harmful rather than beneficial for the nation and its balance with foreigners;

... the raising the Money, so far from bringing the Ballance to the French side, keeps the Ballance against France: For, as their Goods do not rise to the full proportion the Money is rais'd, so French Goods are Sold cheaper, and Forreign Goods are Sold dearer, which makes the Ballance



greater, occasions a greater Export of Money, sets Idle so many of the People as that Money employ'd, lessens the Product or Manufacture, the yearly Value of the Country, and the number of the People. (ibid, p.91-2)

Thus, a mismanagement of denomination, he implies, rather than raising the “the yearly Value of the Country” and the production level, may easily run into a unluck accident for the nation. In such a case, foreigners would get a premium for their money and could bought more of French land and labour with the same amount of money, ending in enrichment of the foreigners than the French<sup>150</sup>. By doing so, Law examines the foreign trade through the perspectives of both exchange rates between currencies and denominations as well, in a way predating Richard Cantillon. (In our examination of Cantillon however, we will neglect such effects of nominal changes on the national wealth and foreign trade that requires an independent paper).

On another occasion he explicitly declares why he is not advocating an increase in demand for domestic products managed by a deduction in price level, which is allegedly beneficial for the production and employment level of the nation. His reasonings seem to the same conclusion that such an improvement would enrich only the foreigner in disfavour of the domestic actors:

It may be alledg'd, we have more Product and Manufacture, than is consum'd, or exported; and selling cheaper, would occasion a greater Demand for our Goods Abroad.

The Product and Manufacture might be much increas'd, if we had Money to imploy the People: But, I'm of Opinion we have not any great Quantity of Goods, more than what is consum'd or exported. Allow Selling cheaper would occasion a greater Demand; that the greater Demand, would occasion an increase in Product, and Manufacture, to the value of a 1000000 lib. and allow that the extraordinary cheapness of Goods, did not occasion a greater Consumption in the Country: Yet, we would be in the same Condition as before; 20000 lib. would be still due of ballance, and the Improvement would be given to Forreigners for nothing. But this Improvement is imaginary, for tho the Demand encreas'd, yet without more Money more People could not be imployed, so no further Improvement could be made: we would be forc'd to retrench near one half of the ordinary Consumption of Forreign Goods, and Expense Abroad; not having Money to pay the great ballance would be due. (ibid, p.85-6)

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<sup>150</sup> Here, some modern reformulations of Jon Law's remark might be brought into the attention of the reader. In the 20<sup>th</sup> century, Post-Keynesian Nicholas Kaldor came with the currency depreciation in internationally non-competitive nations, like the UK, may end in a loss for this nation of their shares in global market. The mechanism, as his biographer highlight (King, 2009, p.194) known in the economic theory as Kaldor paradox. Indeed, even though the paradox is against the economic maxims of (neo-)classical economic theory, there are some survey vindicating Kaldor paradox. A study by McCombie and Thirlwall (1994, p.289-299), for example, demonstrates that in the decades following 1950s, the countries with depreciated currencies lost their market shares, whereas the one appreciating their currency extended their market share. Even though the paradox may seem difficult to explain from (neo-) classical perspective, which is why it is called paradox in economic theory, there is nothing as to paradox once it is examined through mercantilist perspective insisting on a par between comparative price level and exchange rates. A due examination, however, requires an independent paper and long-term effect of such policies should not be neglected.

Arguably here John Law utilises and pushes here the quantity theory of money up until its furthest implication. Counting the comparative value of not only products, in specific, but even of nations, in general, by the total amount of money circulate within national bounds<sup>151</sup>, he seems to come to the conclusion that an increase in productivity and employment level can bring no real benefit to the nation in its trade with foreigners, unless the nation enables to keep domestic price level so high at a par with foreigners that it may prevent a possible exploitation by foreigners caused by low the low prices in the domestic market.<sup>152</sup>

### *William Wood*

William Wood, an obscure mercantilist author with a competent knowledge of the commercial affairs of his day, seems to share similar opinions to Locke and Law. In the earlier part of his work, after citing some remarks by Charles Davenant, he attributes both the fall of interest rates and the rise in land prices to a constant influx of money, which is accompanied by a successful management of foreign commerce. (Wood 1718, pp. 29-30). Rather than being a mismanagement nonetheless a rising price level was a sign of good management for him;

"where a *Nation* is *impoverished* by a bad Government, by an ill managed *Trade...*, money will be scarce, the Interest of it will be dear, and the Purchase of Lands cheap; the Price of Labour and Provisions will be low; Rents will every where fall; Lands will lie untilled, and Farm-Houses will go to *Ruin*" (ibid., pp. 74-75).

Therefore, for him among both cases the inflationist, rather than deflationist, policies tendencies are the one that must be preferred.

In summary, some of the most renowned mercantilist economists seem to be aware of the fact that a lower price level means, at first glance, a higher export and more foreign trade. Unlike Physiocrats and political economists, however, these economists had apparently another argument that seems to be either unintentionally forgotten, or deliberately neglected that a lower domestic price level would also mean that the nation in question is being exploited by a richer neighbour and there is no automatic mechanism guaranteeing the economic and political rise with lower price levels. Thus, even though a higher price level could mean a lower competitive power still such an erosion in competitive power could be well compensated by commercial activities and exchanges taking place between the poor nation and its richer neighbours. Additionally, some mercantilists seem aware of the fact a higher price level is an incentive or motive for keeping people on productive and laborious activities. However, such

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<sup>151</sup> "as the Money of England has increas'd, the yearly Value has increas'd; and as the Money has decreas'd, the yearly value has decreas'd" (ibid, p.200).

<sup>152</sup> Far later, when tried to answer why there occurs barely any profit for motherland country in the tropical products even when there is a high productivity, like in sugar industry, John Lewis had to re-discover the same point; "However vastly productive the sugar industry may become, the benefit accrues chiefly to industrial purchasers in the form of lower prices for sugar" (Lewis 1954 p. 183).

points are beyond our debate and we pass to Richard Cantillon and how he utilises monetary perspective in his economic analysis of exchanges between nations.

### 5.3 Richard Cantillon

A review of Cantillon's *Essai* gives me enough reason to consider him as a mercantilist, at least when it comes to the role and importance of money in a range of factor varying from domestic economic activity, through international trade, to war financing (H408) or even the alleged influence of denomination experienced in Roman coins, alongside the coins exported, upon the decline of her power and strength (H615, H665,). Nevertheless, for the sake of space I will not specifically examine all these points, and will mainly spare time and effort on his observation on the crucial role played by variances in monetary factors and price levels of different nations. That is how a high amount of circulating money in a nation and the high price level accompanied to it, enables a nation to get an upper hand in his trade with foreigners. Thus, by bypassing the importance Cantillon attributes to money in terms of war financing and domestic economic activities, I will directly start to examine with his analysis of how money and price level could be a crucial, instead of sterile, factor in international trade.

#### 5.3.1 Comparative commercial advantages or comparative commercial exploitations

The mercantilists examined in this chapter seem to share the consensus that having abundant amount of (metallic) money within nation and/or under your own command is one of the greatest benefits for a nation who know how to capitalise on it. Cantillon, in that respect, despite his acceptance that such an advantage cannot be maintained permanently *ad infinitum*, still clearly regards an abundance of money as a great advantage for the nation.

Even in the *Analysis*, allegedly the earliest draft of the *Essai* (see van den Berg, 2015), we have met with similar sentiments. A state “considered in itself”, the *Analysis* states in a Lockean way, “as having no Trade or Communication with its Neighbours, does not become more richer, happier, or more powerful, by an Increase of Money in Circulation”. Such a case, however, is the case only for a closed economy. “Yet”, it warns though

“in considering and comparing the Barter and Trade which one Town [and Country] has with another, ... it appears that that Town and consequently that Country which has most Money in Circulation. And where of course Goods and Necessities are dearest, has great Advantages over those Towns and Countries where Money is less abundant, and the Necessities of Life cheaper. (*Analysis*, paragraph 253 in van den Berg, 2015)

Although the *Analysis* version do not clarify much as to why it is so, in the *Essai* and *Dictionary* a similar view that advocates a high price level as a beneficiary factor does not only appear but also analysed in further details.

We may start with his warning which says a nation cannot keep its wealth *ad infinitum*, and there is a limit for total amount of money that can circulate within trade, so or a zenith for the wealth of power of any nation.

“When a State has arrived at the highest point of wealth”, that is when “the respective quantities of money which they possess” exceeds its rivals, Cantillon assures,

“it will inevitably fall into poverty by the ordinary course of things. The too great abundance of money, which so long as it lasts forms the power of States, throws them back imperceptibly but naturally into poverty.” (H401)

The passage proves that for Richard Cantillon it was next to impossible for a nation to maintain eternally its wealth and power or to keep its exports constantly over its imports due to price pressure that would be triggered by rising quantity of money within nation. Not only an erosion in competitive power but also a luxury which would be inevitable follow an abundance of money to him would also bring a reduction in power, wealth and commercial activities. To decelerate the process he even advises to “the Prince or the Legislator” to “to withdraw money from circulation, keep it for emergencies” (H401)

Nevertheless, such an appreciation does not prevent Cantillon from advocating trade surpluses as an advisable economic policy, or high price level as a beneficiary factor for an economy open to world. To argue there is a zenith for wealth and limit to price level, on the one hand, but to advocate trade surpluses and to declare, on the other, higher price level as advantage for an open economy may seem, at first sight, like erroneous conclusions, contradictions or an insufficiency to coherently comprehend all the implications of price-specie flow mechanism claiming that there is a natural limit for money that can be kept within nation. A further look at his theory, however, gives the impression that rather than being inconsistent or erroneous, Cantillon’s conclusions have something subtle (which we cannot encounter in Humean version of specie-flow mechanism), which is arguably why he does not completely give up the trade balance doctrines of the mercantilists.

Arguably the most illuminating passage comes in the Chapter VII of the book II, when he gives “Further Reflection” on the fluctuations in the quantity of “hard money a State”. There he unequivocally states;

It is clear that every State which has more money in circulation than its neighbours has an advantage over them so long as it maintains this abundance of money. (H406)

Humean specie-flow mechanism<sup>153</sup> argues that it is of no use for a nation to keep an eye on its foreign balance or vainly labour to design economic policies to draw more money into the

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<sup>153</sup> According to Perrotta, before Hume and “on a more empirical level, Barbon, Mandeville and Vanderlint had noticed that exports would, in the long run, be equalled by imports, otherwise the country which loses out in its

State. Whatever be done, the mechanism argues, there are natural limits which cannot be surpassed. Cantillon, on the other hand, without refuting that conclusion, still seems to consider both trade surpluses and higher price levels as an advantage for the nation. Since the chapter is not upon specie-flow mechanism, I do not intend here to enter into debates and details about specie-flow mechanism, or why I agree with Spengler (1954) who says Cantillon's comprehension of the mechanism that is elaborated with minute details apparently subtler and superior to that of Hume<sup>154</sup>. This may be the subject of another discussion beyond this chapter.

One of this minute detail, which is arguably missed the attention of Spengler as well, is his opinions on unequal exchange between two nations with different price levels. Even though in the long run the advantage beget by high price level could be partly alleviated or even completely disappear, still his monetary unequal exchange mechanism apparently argues, during the same process the nation with a higher price level (and trade surpluses) maintains an advantage in both monetary and real terms, that is measured by the total land-plus-labour values mutually exchanged. Such a 'real' surplus, that is surplus in real terms would also mean a comparative advantage for the nation and arguably a higher life standard for the citizens of the same nation.

In the coming section, I will endeavour to demonstrate how he elaborate the advantages brought by higher price level and more specifically how he utilises his value theory to analyse exchanges in open economies.

### *5.3.2 How does Cantillon utilise his value theory to detect the 'net' gainer?*

Both John Locke and John Law, as quotations above hopefully show, had clearly discerned that a nation with abundant amount of money in circulation and higher prices has a great advantage in his exchanges with foreigners. Still, both economists had a great shortcoming preventing them to develop an analytical examination of such insights; neither of them had an alternative value theory and par/measure via which the value could be quantified in non-monetary terms. Their value theories were apparently based on supply and demand, in general, and comparative quantities of commodities, including money, in particular.

Additionally, neither of them could pinpoint any measure but only money and monetary prices as indicator of value. That being so, though they seem to clearly grasp the insight that the

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exchanges would cease to trade", and the same argument was later used both "by the physiocrats and the classical school" as a pillar of their foreign trade theories. (Perrotta, 2004, p.214)

<sup>154</sup> As crucial difference between Cantillon and Hume is that in Cantillon, as Brewer (1992b, p.90) puts it, the "specie-flow mechanism generates very long cycles, not static equilibrium". For a (post-)Keynesian critique of Humean interpretation of specie-flow mechanism, see Robinson (1943)

exchanges could be unequal even when monetary values/prices are equal, still their theoretical instruments did not allow them to systematise that insight in a theoretical framework with analytical demonstrations. Therefore, their inability to establish another value theory with an alternative par/measure, it may be said, prevented them from setting a theoretical framework in which intrinsic or real values exchanged can be compared, so the real gainer and loser could be analytically picked, even when trade balance is even and exchanges are equal in monetary terms.

Cantillon, however, had such a tool. He arguably managed to establish a natural measure that Petty had first asked for, enabling him to measure, at least theoretically, the real/intrinsic values of commodities with no reference to their monetary values. Hence, he could turn or transformed what had remained in Locke and Law as a sheer insight into an analytical economic theory that could speak of the real value of commodities exchanged so that he could theoretically demonstrate that even monetary values are equal still exchanges are benefiting a side more than the other.

That being so, it may be argued, Cantillon's appliance to an alternative value theory to analyse the foreign exchange seems to be original with him. In that respect, we may assure, he exceeds not only Locke and Law but even Petty, who had previously searched for an alternative par, at least on three grounds: firstly, Petty never managed to substantiate a par, so he could be able to use his alternative natural par to figure out the real/natural values of commodities. Secondly, and as a logical consequence of the first, Petty never applied his par specifically to analyse foreign trade, so he could decipher the real value of commodities exchanged. Thirdly, Petty seem to never consider the great insight that is present in Cantillon that *in exchanges between nation, the commodities exchanged does not have to be of equal in terms of the intrinsic values*. Cantillon, unlike all the mercantilist predating him, had both a value theory and a natural par/measure and masterly managed to apply his value theory and natural measure to the international trade between nations.

But how he applies his value theory and par to international trade? In our analyse of that point, we must say above all else that among all the works attributed to Cantillon, the *Analysis*, the *Essai* and the *Dictionary*, it is the *Dictionary* version which supplies the reader with most data required for our study, It is in this version Cantillon seems to rely most on 'physical' quantities of value and most importantly, it is only in this version Cantillon lucidity applies his alternative natural measure to the foreign trade. Still but in other versions, such as the *Essai* the reader can find the essence of the argument.

If we start to examine his analysis more closely, for Cantillon, the real or intrinsic value of commodities is measured by the total amount of land and labour entered its production, making it a *cost of production* approach to value. Cantillon calls these total costs as the

*intrinsic values* of commodities, which is in specific land-plus-labour required for the production. The market prices of commodities generally reflect, for him, the intrinsic value of commodities, meaning that in any exchange in market the monetary prices are supposed to conveniently reflect the intrinsic values. This, nonetheless, seems to be conceptualised as the case of a closed economy which does not have to be reiterated in an open economy and foreign trade between nations.

His observations on foreign trade clearly indicates that *when trade is taken between two countries monetary values do not have to reflect the real or intrinsic values*<sup>155</sup>. In such cases, the nation with a higher price level gets more intrinsic value for less in exchange making the trade or exchange itself a source of real gain.

If we look at his specific statements, one of theoretically most comprehensive and competent statements comes in the chapter of ‘*Further Reflection*’ on the quantity of money, where he declares, by referring to his value theory, that a money-abundant nation always gains from her exchange with other nations as

... in all branches of trade it gives less Land and Labour than it receives: the price of Land and Labour being everywhere reckoned in money is higher in the State where money is most abundant. Thus, the State in question receives sometimes the produce of two acres of Land in exchange for that of one acre, and the work of two men for that of only one. It is because of this abundance of money in circulation in London that the work of one English embroiderer costs more than that of 10 Chinese embroiderers, though the Chinese embroider much better and turn out more work in a day. In Europe one is astonished how these Indians can live, working so cheap, and how the admirable stuffs which they send us cost so little. (H407)

Although that passage itself could be enough to discern the unequal exchange in Cantillon, still the first chapter of the third book seems to supply the reader with more details;

When a State exchanges a small product of Land for a larger in Foreign Trade, it seems to have the advantage; and if current money is more abundant there than abroad it will always exchange a smaller product of Land for a greater. (H487<sup>156</sup>)

Hence, to me it is obvious that Cantillon differentiate values in terms of physical inputs of land and labour from their monetary expressions, or, in other words, real/intrinsic values from their monetary equivalents, that enables him to conduct such an analysis.

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<sup>155</sup> In fact, a passage from *Essai* gives me the inclination that in foreign exchange monetary values does not have to follow even the (monetary) cost-of-productions. “It suits the Dutch better”, Cantillon states there “to enrich the Indians than their neighbours who might profit by it to oppress them. Moreover they sell to the other peoples of Europe the cloths and small Manufactures of their own raw produce *much dearer* than they sell the Indian manufactures at home where they are consumed (van den Berg, 2015, H516, italics added).

<sup>156</sup> When a State exchanges its Produce conjointly with its Labour, for a larger Produce of the Foreigner conjointly with equal or greater labour, it seems again to have the advantage. (H489)



Two questions may arise here: firstly, how does Cantillon conduct his analysis? Secondly, whether his foreign trade theory is an extension of this value theory into international trade in which the value of commodities exchanged are regulated by the combined value of land-plus-labour, rather than one alone? As we have already discussed in the previous chapter whether his two-input (land-plus-labour) system of value could be reduced to or reinterpreted as a kind of one input system, it will be focused only the application of this theory into foreign trade. In the coming sections these questions will be discussed, ending in the conclusion that a review of his foreign trade theory implies a coherent and consistent application of his value theory discussed in the previous chapter to international trade between nations. I will not repeat the same discussions as to his value theory here but shall only examine the case exclusively through and his foreign trade perspective.

#### *Acre of Land as the natural measure of value and net gain from foreign trade*

As is rightly observed by some scholars like Brolin (2007, p.18-23) Cantillon uses “a land unit of measurement”, the acre of land, to assess foreign exchanges.

In the coming paragraphs I will examine how Cantillon uses this measure of value to analyse the foreign trade. While doing this, I will rely mainly on the *Dictionary* version as it is this one in which we encounter a specific arithmetical application of this alternative measure (*the acre of land*) to foreign trade.

Cantillon’s analysis starts with a thought experiment in which “the ladies of quality of Paris consume yearly Brussels lace to the value of 100,000 ounces of silver” from Brabant, whereas in return the people of Brabant are assumed to consume French Champagne of equal value, 100,000 ounces of silver. Then he delves into the details to prove his argument that even when monetary values are equal, one can discern a gainer in such commercial exchanges.

In a thought experiment Cantillon assumes that in these transactions Brussel gives nothing in material but only “the produce [flax] of no more than one quarter of an acre” refined and perfected by the labour force of people in Brabant. Such a refinement, which raises the value of lace of an acre of land to 100, 000 of silver, he says, supplies 200 people with employment, and with assumption of 3 acre per head usage, he says that employment supplies the nation with a land stock of around 600 acres of land.

France, on the other hand, the thought-experiment continues, gives Champagne which is not so refined a product as Brussel laces. Calculating the champagne stock exchanged by France for lace to be produced on a land covering “6166  $\frac{2}{3}$  acres”, he reasons that Brabant gives a land product of “one quarter of an acre” and get in return a product of “6166  $\frac{2}{3}$  acres”, meaning a net gain more than 6116 acres of land in favour of Brabant This assessment is made

in terms of his natural measure, the acre of land. Applying to the same measure, he continues reasoning and judges that if there would be no trade between both nations, then either the Champagne that got from that exchange or an alternative beverage like beer, must have been produced in Brussel to meet this demand. Such a production, however, would cost Brussel a land stock of 4000 acres. Thus, such an exchange also enabled Brussel to save a land stock of 4000 acre which can be used for alternative pursuits. In conclusion, by taking a comparative approach that count both the gain of Brussel and losses of France he says, by such an exchange France lost a land stock of 6166 acres, plus 4000 acres, whereas the same exchange enabled Brussel to get or save in combine a land stock of more than 10116 acres. (D493)

All these computations are made upon the assumption that the money circulating in both nations to be more or less equal, keeping price level around the same level in both nations. (H499. In such a case, Cantillon argues, “following the rule of intrinsic values,” we may claim that “the land used” in France for Champagne production “ought to be equal to the Land used in Brabant for the production of the Flax,” including land requires for labour force and horses used to carry products etc. (H.499).

If the quantity of money and price level varies between nations, he further reasons and warns, then not only the loses and gains could be more dramatic, but the rule of intrinsic value could be discarded;

if the quantity of money circulating in *Brabant* be <sup>b</sup>treble<sup>b</sup> to that circulating in *France*, as the exchange is made <sup>c</sup>by the evaluation<sup>c</sup> in money, one third part of the land and labour in *Brabant* will answer, and correspond in value to the whole land and labour in *France*; and the product of one acre in *Brabant* will exchange for that of three acres in *France* of equal goodness. (D500)

Such an analysis that is based rather on his natural measure, the acre of land, than monetary values, allow him to go further than any other mercantilist in his analysis of trade balance doctrine. Thereby, he seems to think he had developed the trade balance analysis so much that he numerically exemplifies “a branch of trade which strengthens the Foreigner, lessens the number of inhabitants of the State ... *without causing any circulating money to leave it weakens the same State.* (H501, italics added)”

By all these endeavours and calculations, he apparently resolved the great question that no mercantilist have ever come even closer to a solution; how we can discern the gainer from foreign trade in which trade balance is even so no money is transmitted between nations.

In general, “whenever there arises a doubt or difficulty about trade, the method he offers, namely “to compute the land and labour, as in the preceding example” would solve the “controversy [most] efficiently” (D506). His method is so efficient a method for him that

By confidently generalizing the example, the Dictionary version even assures the reader that from the method he offers “we may examine the advantages, or disadvantages of every particular branch of trade with any foreign country, when the balance appears equal” (D503).

In a passage in the *Dictionary* version for which there is no equivalent in the *Essai*, after mentioning of remembering the previous political arithmeticians/economists he seems to condemn the alleged lack of theoretical and analytical skills in their approach that makes their trade-balance analysis only more vague than illuminating. There he confidently, if not somewhat arrogantly, argues that

“Sir William Petty, Mr Davenant, Mr Locke, Sir Josiah Child, Mr Law, Mr King, and others, seem to borrow their general notions one from another, and rather to puzzle the nature of trade instead of making it clearer.’ (D508, see also the comments for this paragraph)

Analysing thus how Cantillon utilises his two-input (land-plus-labour) intrinsic value system to discern who benefits more from the foreign trade even when monetary values are of equal, we may pass to the second question dealing with whether this two-input value system can be reduced to a one-input system.

### *One or two inputs*

The query as to whether Cantillon’s two-input system may be reduced to one-input so that either land or labour be conclusively set as the ‘prime’ or final ‘measure’ with no reference to monetary values has implications both his value theory and foreign trade theory. Already analysing his value theory in the previous chapter, I will focus here only on the implications for the foreign trade and unequal exchange theories.

If we start with a literature review, apparently in the whole literature upon Cantillon, there seems only two scholars who examine Cantillon’s foreign trade theory through unequal exchange, both reducing the unequal exchange to land values.

Examining the exchange through population perspective, Tarascio consider Cantillon’s foreign trade theory could be formulated as exchanges of transfers of lands:

Cantillon recognized that the effect of international trade was equivalent to the transfer of land (or resource endowments) from those countries with comparatively rich land to those with comparatively poor land. The result would be a smaller population in the former and a larger population in the latter than would occur in the absence of trade [Tarascio, 1981, p.16]

Giving a more detailed analysis as to unequal exchange theories, Brolin (2007, 2016) considers Cantillon’s foreign trade theory as a proto-ecological land-based unequal exchange theory. Among the two main versions of unequal exchange theories, Brolin states

... the standard Marxist interpretation speaks of unequal, or non-equivalent, exchange as a net transfer of labour or labour values, [whereas] ecological unequal exchange is commonly defined in terms of a net transfer of land or land values (natural resources, ecological footprints, energy, or elaborations thereof such as 'exergy' or 'energy'). (Brolin, 2016, p.1162<sup>157</sup>)

Among these, according to Brolin, Cantillon's standpoint is nearer to the ecological view. Cantillon's "... use of a land unit of measurement" he states, "could be said to make him a predecessor of more modern ecological theories of unequal exchange" (Brolin, 2007, p.18). The same argument repeated in a few pages later; "In the work of Cantillon land was taken as the ultimate ground, and in that sense he can be considered the mainspring of theories of 'ecological' unequal exchange" (ibid, p.23<sup>158</sup>).

Unlike both Tarascio and Brolin, however, Cantillon's both value and unequal exchange theories seems to me as theories that could not be reduced to one-input only value theories. As both land and labour are considered two independent sources of value that cannot be reduced to the other, Cantillon's unequal exchange theory appears to me as an extension of this value theory into the territories of foreign trade in which combined value of land-plus-labour determines the final value exchanged between nations.

Remembering Emmanuel's critique of Marxist economic analysis, another one-input system, may help us to better perceive why Cantillon's unequal exchange theory cannot be reduced to one input. Criticising Marxist unequal exchange Emmanuel (1972, p.325) notes that "since equivalence in capital production relations signifies not the exchange of equal quantities of labour, but that of equal aggregates of factors..., non-equivalence (unequal exchanges) can only signify the exchanges of unequal aggregates of the same factors". Thought from this perspective it may be claimed Cantillon's analysis of unequal exchange is an aggregate-based analysis, rather than Marxist and ecological one-input systems that neglect either land or labour<sup>159</sup>, arguably making his unequal exchange theory somewhat original and authentic.

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<sup>157</sup> There seems to be a third form of unequal exchange theory, 'the ecological Marxism' that blend Marxism with ecological concerns, see for example Foster and Holleman (2014). Nonetheless, for some scholars like Hornborg (2019) it is hardly possible to reconcile Marxist with ecologic unequal exchange theories. "A theory of ecologically unequal exchange" Hornborg claims "poses no less of a challenge to mainstream economics than does classical Marxism" (ibid, p.170).

<sup>158</sup> In fact, for Brolin Cantillon's treatment of the subject "continues by introduces the 'non-equivalent exchange' of the more abstract logics of physiocracy and classical political economy". Nevertheless, Brolin does not qualify why he treats Physiocratic and classical theories as theories of non-equal, non-equivalent exchanges.

<sup>159</sup> It must be noted that whereas aggregates of Emmanuel refers to "labour and use of capital" (ibid), in Cantillon whose value theory has no mention of capital-input, the aggregates refer to the land-plus-labour value.

### *A probable contradiction?*

At that point the reader may ask if Cantillon thinks, one acre of land could be exchanged with three acres of land, as is the case with his example of a the trade between France and Belgium, how can Cantillon still assures regularly throughout the *Essai* that the market values are regulated by the intrinsic values of commodities that reflects the total amount of land and labour used up in their production? Or why does not he treat these claims as somewhat contradictory?

A due analysis of the point, I think, requires us to read Cantillon's passage more meticulously. Without complicating the subject, however, we may refer to some passages in which he speaks about how monetary values reflects the par between land and labour

The Money or Coin which finds the proportion of Values in exchange is the most certain measure for judging of the Par between Land and labour and the relation of one to the other in different Countries where this Par varies according to the greater or less produce of the Land allotted to those who labour. If, for example, one man earn an ounce of silver every day by his work, and another *in the same place* earn only half an ounce, one can conclude that the first has as much again of the produce of the Land to dispose of as the second. (H, pr.103-4, italics added)

Here, it should not escape from the attention of the reader that it is only in the same place, or in other words, it is only when we compare the value of commodities produced and sold in the same place the monetary values reflect intrinsic values. When commodities are exchanged between two distant places, however, monetary values could reflect two different intrinsic values. Putting differently, as the cost of production (of even the same bundle of goods) does not have to be the same when the commodities produced in distant nations with varying price levels, the monetary values on which the international exchange take place do not have to reflect the intrinsic values. Extending the discussion, we may say that monetary values are credible indicators of intrinsic values when the exchange takes within the same location and market. When exchanges between two locations and markets, however, variances in cost of production and price level could enable an unequal exchange even when monetary values of the commodities exchanged are equal.

Hence, there appears no contradiction in Cantillon's analysis for me. While gold and silver, like other commodities, "have a value proportionable to the Land and Labour which enter into their Production", still the same amount of gold and silver could be exchanged for different amount of intrinsic values across nations, making one side the net gainer of the exchanges (Hpr.232).

Resolving, hopefully, the final query that may arise and demonstrating thereby why Cantillon's observations do not have to be considered as contradictory we may pass to the implications and conclusions of his reasoning.

#### 5.4 Discussion and Conclusions

This chapter has aimed not only to make some connections between Cantillon's value and foreign trade theories, but also to revisit his foreign trade theory within British mercantilist economic literature and tradition. Thus, it specifically makes the claim that Cantillon's intrinsic value theory, that is very similar to that of Adam Smith but predates it by around a century, may be read as a climax of mercantilist tradition aimed to discern the net gainer from all branches of trade, most specifically from branches with *even* trade balances in which monetary are useless to discern a gainer. In his attempts to find a solution to this great mercantilist problem, the chapter argues, Cantillon laid the foundation of an alternative theory eventually paved the way for Smith's theory of natural values.

Going into further details, mercantilist such as Locke and Law seem to discern that even when monetary values are equal, and commodities exchanged are of the same nature still the international trade benefit the nation with a higher price level. Nevertheless, having no alternative value theory that could measure the value of commodities in terms of a non-monetary measure, apparently prevented both economists from advancing their arguments further that might have ended in a more convincing presentation of their insight.

Cantillon seems like the economist who has taken such steps. In the *Dictionary* he apparently tries to prove, with numerical examples, the claim that we can discern a net gainer even when trade balance is *even* and exports and imports are of equal value in monetary terms. His confidence of his method, which measures the values of commodities exchanged in terms of total land and labour used in their production, is so great that the net gainer and loser of all branches of trade, he declares, can be discerned with the method and value theory he introduced. In this respect, his aim to devise a method to measure the value of commodities exchanged in non-monetary terms occurs to me not only as a proper application of his general value theory to international trade, but also as a climax of previous mercantilist tradition that may be seen most specifically in the works of great mercantilist economists like Law and Locke who discerned that monetary values themselves could be a reason of unequal exchange but could not analytically demonstrate it due to the lack of an alternative and objective measure<sup>160</sup>..

My analysis requires me also to occasionally diverge from the modern literature on Richard Cantillon, including Brodin (2007), and Grieve and Al-Muharrami (2021).

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<sup>160</sup> As Raffer (1987, p.5) puts it "the sheer impossibility of measuring values on an 'objective' scale, that is, a scale independent of market prices, precludes the understanding of inequality of exchange". In that respect, the lack of an objective scale seems to prevented not only the previous mercantilist economists but also the modern mainstream economics that starts from individuals and their utility preferences in a way leaving no objective base to compare values exchanged in the market may have difficulties in claiming unequal exchanges.

Starting with Brolin, as briefly mentioned above, he counts Cantillon's unequal exchange as a form of ecological land-based unequal exchange. Unlike him, nonetheless, Cantillon's treatment of the foreign exchange occurs to me as a form of land-plus-labour unequal exchange since both factors are considered the inputs qualifying total intrinsic value. Thus, his unequal exchange value seems unique in the way that it resembles both the ecological unequal exchange theory measuring exchanges in terms of natural sources and Marxist unequal exchanges relying on labour used as the common measure but cannot be classified as of either alone.

Grieve and Al-Muharrami (2021), on the other hand, as analysed in the previous chapter, regards Cantillon's value theory as a monetary cost of production. Given the intriguing details of Cantillon's examination of foreign trade, I should nonetheless declare my disagreement with them. In a given location or in an enclosed market/economy, monetary values can be a reliable measure to quantify inputs. Nonetheless, as his analysis on exchanges between France and Belgium unambiguously states, in the exchanges between distant locations with different price levels monetary values could be equally misleading rather than illuminating. Thus, monetary values appear as partially-credible indicators of the intrinsic values that has usefulness only in a closed economic system in which the production and exchange takes more or less in the same place. In fact, if Grieve was right and Cantillon had really examined the exchanges only in terms of monetary values (prices) then it would be unachievable for Cantillon to discern the net gainer when trade balance was even in monetary terms and impossible for me to write this chapter.

Contemplating further on this insight one may perceive also that there is also a great claim at the heart of the insight and analysis by Cantillon that in every exchange between different locations there is a net gainer, which is the location or state with a higher price level and a loser, which is suffering from insufficiency of money and sluggish price levels. The dramatic implication of this analysis could be that regardless of the population, skills, opportunities or productivity of labour and capital, the money-abundant nations always exploit the less developed locations with scarce amount of money in circulation. Rather than being a temporary factor stemming from accidental circumstances such as monopolies, or fluctuations in supply or demand conditions etc., Cantillon's economic analysis implies, unequal exchange is the common feature and even the norm of economic exchanges within distant location as seen every minute in the globalised world of today. Thus, monetary exploitation -that demonstrates itself in forms of monetary unequal exchange- becomes an 'entrenched feature' of monetary economy, which is (next to) impossible to eliminate

Reminding Struve (2007 [1923], p. 452, quoted in Nenovsky, 2019) who consider the "equilibrium" and equal exchanges only "as a special case of [economic] movement", I may

claim that equal exchanges appear in Cantillon only as a special case, in which commodities produced *in the same place* are exchanged with each other. In all other cases, the exchange favours mostly, if not exclusively, the place with an abundant level of money and high price levels.

A due analysis of this insight requires an in-dept analysis of financial system as well. Such perspectives, however, are deliberately kept out of this chapter. I am neither extending the further implications of this insight for the exchanges between the wealthy, rich and expensive global North and poorer and cheaper global South<sup>161</sup>.

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<sup>161</sup> The classical perspective since Hume consider the foreign trade only one-sidedly in a way completely neglecting the great cost of low-price levels to the nation in question. Likewise, its tremendous implications of low price levels for the potential depletion of natural and human capital of poor nations are apparently ignored in these debates. Some factors, however, could be easily added into the perspective. A world bank report aiming to assess the wealth in alternative measures to GDP, for example, makes the unambiguous statement that “increased wealth in a country is primarily result of an increase in intangible wealth ... One conclusion from this is that, especially for the poorest nations, increasing economic activity by selling off natural resource actually results *in lower welfare* in the long run” (Beyond GDP report, 2009, p.15-6, italics added). Such a conclusion, however, put a stark contrast to mainstream free-trade and equal-exchange based economic approaches in a way favouring mercantilist insistence of trade surplus and desire for a high-enough price level. My only addition could be that even though the real increase in wealth is from intangible assets such as social and human capital, still the price level and exchange rates accompanied to it can be classified as intangible ‘financial’ or ‘monetary’ assets helping developed nations to enjoy such an exclusive and privileged wealth margin. In short, it may be argued, there is no way to be rich and wealthy but to be ‘expensive’...



## Conclusion

The objective of this dissertation has been to read Cantillon's *Essai* as a mercantilist text that aims to keep landlords at the centre stage of socio-economic analysis. While doing that I have tried to examine Cantillon's *Essai* mainly against the British background, rather than French. Thereby it also aimed to re-interpret the economic system as a rather political system that was highly influenced from the political transformation of British society experienced over the late 17<sup>th</sup> and early 18<sup>th</sup> centuries. This perspective also enabled me to revisit some debates on the *Essai* and examine its passages through new lenses or to bring some new interpretation. Thereby it enabled me also to make some contributions to the literature.

The first chapter lays the ground fir the whole dissertation, and it is especially there Cantillon's economic system is depicted through political lenses as a system made for the sake of the gentry class. His examination of the market society was compared with John Locke, a typical liberal Whig, who read the society through individualistic lenses, and Lord Bolingbroke, who refuted Lockean individualistic perspectives in his family-based approach to society that put the gentry class at its heart. Cantillon seems to extend the gentry class perspective of his close friend, Lord Bolingbroke, into economic domains, making the gentry class the privileged minority who decide everything in the market society, including not only the population size or multiplication rates, but also how the landed, manufacturing, and commercial capital/stock of the nation is utilized. Given the great transformation the British society experienced over the 17<sup>th</sup> and early 18<sup>th</sup> centuries, creating an entity that we may label, following Lord Bolingbroke, a "commercial society" in which commercial and financial classes were consolidating their political power and economic wealth against the old, ruling class of gentry, the *Essai* seems to have been especially designed to refute ascribing any long-term independence, and thereby power, to such classes. Cantillon's *Essai* apparently endeavours to prove that the transformation experienced, and the alleged rise in the power and wealth of non-landed classes, rather than being a genuine challenge to the right socio-political order and economic structure organized around the gentry class, can only be a short-term deviation from the right order. In the long run, when the society has settled down again, the landlord get their right position in the socio-political and economic hierarchy as rulers of both commercial and financial classes and the other landless classes. Therefore, the transformation from a closed/commanded society ruled by landlords to a market-oriented, open economy is neither counted by Cantillon so radical a transformation as some of his contemporaries like Defoe assumes, nor are the commercial and/or financial classes destined to be old servants turning new masters as Lord Bolingbroke anticipated in his gloomy prophecies for the gentry class of the day. All the great changes experienced in the society could only be superficial changes in means and methods but never in essence and fundamentals of the already established social order. In this regard, my reading diverges from some scholars, especially the member of

Austrian school such as Thornton (2009), who treats market and price mechanism of Cantillon as somewhat autonomous entities enabling an optimal distribution of resources. Unlike them the chapter aimed to prove that, even though Cantillon's depiction of the subject is debatable, there appears a great desire to prove the claim that a market economy is not anything but a continuum of the old feudal system with novel means, like price mechanism, in which the gentry class is the sole determinant of market behaviours and the wealth and wellbeing of all the rest, alongside the distribution of resources and capital stock of the nation, are set by their behaviours.

Chapter 2 compares and contrasts his views on population theory with 17th and 18th centuries British political arithmeticians. At first it described the course of population- and political-arithmetic during the second half of the 17th centuries by reference to the most renowned political arithmeticians of the day. Then the views of two neglected arithmeticians from the early 18th century, Laurence Braddon and Arthur Dobbs, were examined. Unlike the arithmeticians of the 17th century who had tried to find out the universal laws governing population trends, the analysis of these younger arithmeticians seems to highlight more the implications of socio-political variances in the lifestyles and preferences of nations on their population and multiplication rates. Nevertheless, these arithmeticians also seem to share a similar agenda to 17th century arithmeticians and apparently did research in population for the sake of wealth and riches of their nations, allowing us to classify them among the projectionist tradition of 18th century. Cantillon's analysis, on the contrary, seems immune to such projectionist agendas and wealth pursuits. Instead Cantillon apparently aim to prove the role of landlord in the actual size of population, marriage patterns and multiplication rates of the societies. In this regards the chapter aims to demonstrate that his population analysis seems to follow his *hidden agenda* that endeavours to demonstrate the role of the gentry class in the socio-economic organisation and market behaviours of the societies.

Chapter 3 compares the par values of Cantillon and Petty. It aims, on the one hand, to show why Cantillon par cannot be treated as the completion of the research projects first started by Petty; measuring value in terms of natural denominations alone. On the other, it also endeavours to demonstrate how Cantillon makes landlords as a part of the par discussions as well in his discussions regarding their role in the population size and income level of the unskilled labourer. Regarding the first, it argues, unlike Petty who had tried to find a universal measure applying to all facets of value in human society, including not only economic wealth of nations or the values of specific commodities, but also socio-psychological friendship, artistic abilities or scientific innovations, Cantillon's par seems to focus only on the values of the marketplace. Thus, he significantly curbed, maybe rightly, the ambitions behind Petty's research agenda and put the par problem into a more 'economic', more market-oriented context. Put differently, unlike Petty who tried to find out a universal invariable measure of

value, Cantillon apparently aimed to find a comparative value of a given labourer and his personal consumption, which ended, for him, in a universal par considering the value of labour to be double his personal consumption. This par is also exactly where the landlord become a part of the picture. As population trends of the societies, family size of the landless class, and even the income level of the workers all is set under direct or indirect control of landlords through a closed or open/market economy, the gentry class also become the main factor setting the *par* between land and labour values. Finally, the chapter has also examines Cantillon's calculations more closely, suggesting in the end that evaluated even within its own context, with no reference to Petty's great ambitions, the mistaken reasoning and erroneous calculations done by Cantillon in the examination makes his par an unreliable one to compare values across societies.

In this regard the chapter has aimed to make contributions by literature not only to develop Brewer (1992a, 1992b)'s observations that considers "the connection between them [Petty's and Cantillon's par] are considerably weaker than is often thought" by also demonstrating some miscalculations with Cantillon's par, but also by highlight the crucial, but hidden, role of landlord in the establishment of Cantillon's par.

Chapter 4 deals with Cantillon's value problem. Since the late 19th century, when rediscovered and praised by Stanley Jevons (1991), Cantillon's value theory has been the subject of great debates among scholars. Some described it as an *objective* cost-of-production approach, other as a *subjective* and market-oriented theory of value, or even an opportunity cost theory of value. For some scholars the method taken by Cantillon in his works reduces the value of labour to that of land, making his view a reductionist view. However, according to this argument, since Cantillon offers nothing as to how can we compare the value of land stocks of varying qualities, his value theory has serious flaws that cannot be ignored. I have revisited this debate to show that the scholars who condemn Cantillon of taking a reductionist view that ends nowhere, seem to confuse, what J.S. Mill's called, the *measure* of value and the *regulator* of value. They apparently treat Cantillon's *acre of land* as a regulator of value while it is offered by Cantillon as a measure of value. Hence, the acre of land is considered by Cantillon not as a magical tool by which we can 'reduce' the value of labour to that of land, but maybe as a convenient measure by which we can compare the value of labour against that of land. Such a perspective allows us also to treat value theory as a theory considering both land and labour as independent regulators of value; so whereas the intrinsic values of commodities are regulated by land-plus-labour entered production, their value can be measured by acres of land alone. This solution also implies that in Cantillon there are two measures of value, the monetary prices, which is the artificial measure and the *acre of land*, as being arguably the *natural measure*.

My interpretation which distinguishes, first, the measure of value from the regulator of value and, then, arguably the natural measure from the artificial measure, has allowed me to re-evaluate Cantillon's works, including the *Essai* and *Dictionary*, resulted in a novel reading and further discussions of the modern literature on Cantillon. In a recent article Grieve and Al-Muharrami (2021) have suggested a reading of Cantillon's value theory as a monetary cost of production theory of value. Although being a credible argument with its own great merits, such a reading, I reason, reflect the value theory present in the *Essai* only partially, as it has also a non-monetary aspect. Additionally, such a division allow us to enquire further as to the nature and implication of value and aim to study some interesting questions like what happens if total monetary values of commodities, this is total values in monetary terms, diverge from their total natural or intrinsic values, that is total values measured in terms of acre of land. A review of Cantillon's works proves that he does not only discern such a possibility but also tries to supply his reader with a method to measure the values in terms of natural acres of land, thereby finalising his examination as to how the value of commodities exchanged can be defined in Petty's *natural denomination*. His analysis in the context of foreign trade, however, is the backbone of the last chapter in which I have tried to read Cantillon's foreign trade theory without losing his value theory and as a continuation, if not high water mark, of the previous mercantilist tradition that aimed to discern the net gainers in trade between nations.

Additionally, a subject that has been completely neglected in the literature, the role of landlords in the establishment of intrinsic values in Cantillon, has been examined. In this regard, a passage from the *Essai* version in which landlords' "expense" (H97) are set as the main reason behind the existence of intrinsic values have been highlighted, alongside the potential tensions or challenges this passage raises for his other observations regarding intrinsic values. Also, the lack of such a passage in the *Dictionary* version suggests that realizing the tension this passage creates with his observation that says "[t]here is never a variation in intrinsic values" (H75) Cantillon later cut the passage from the *Dictionary* version, still the existence of such a passage in the *Essai* version gives me also some room to argue that Cantillon once endeavoured to make landlords even as the main factor determining the intrinsic value of commodities and if commodities "have" ((H97) any intrinsic values it was thanks to their "expense[s]" (H97). Nevertheless, the overall perspective allows me to argue that struggling to incorporate landlord class into picture, Cantillon had picked his value theory over the role he tailors for landed class and thereby eliminated the passage from the *Dictionary*. To me, this gives a further reason to treat acre of land as the measure of value than the regulator of value in Cantillon.

The final chapter assesses Cantillon's foreign trade and value theory upon the previous mercantilist tradition. It has been a subject of long debate amongst scholars why mercantilists insisted on the benefits of trade surpluses, despite being aware that such surpluses, by

increasing the quantity of money in circulation within a nation, causes a rise in domestic price level that is destined to end in a damage in the competitive powers of the nation in foreign markets. Some have attributed the main reason to the political considerations whereas others, arguably under the influence of J.M. Keynes, to the alleged beneficial effects of trade surpluses on the production level of society. Thus, what was required for them was not money per se but liquid capital that could accelerate the production level. I have tried to underscore another reason that can be picked from the works of some of the greatest mercantilists; to get a net gain from exchanges with foreigners that could not be achieved without a comparatively higher price level. On this point, a review was made of the works of some of the greatest minds of mercantilist era, including Locke, Law and Cantillon. Both Locke and Law, as well as some other mercantilists, had been of the opinion that a low domestic price level could be a bane rather than benefit for the nation, so that nations had to keep an eye on trade balance to escape from exploitation caused by low price level. Thus, these economists apparently discerned that a nation can lose when the trade balance is even, so exports and imports are equal, in monetary terms. However, neither Locke nor Law had a well-developed value theory that they might have used to elaborate this insight and demonstrate consequently that a nation may lose a greater value and wealth in its trade with foreigners even when trade balance is even,

Here Cantillon's works have been evaluated against such a background. Unlike, Law and Locke, it has been argued, Cantillon had a well-developed value theory that meticulously attempted to measure the value of commodities in an alternative non-monetary term. He masterly utilised his alternative natural measure, acre of land, in his works, especially in the *Dictionary*, to reveal the net gainer in foreign trade with even balances. His analysis does not only favours high price levels, which allow the nation to exchange less intrinsic values, the land-plus-labour, with higher intrinsic values in total, but also exemplifies with numerical references how his method enables the reader to discern the gainer in specific branches of trade. In this regard, by utilising an alternative value theory, he also seems to go so far ahead of previous mercantilist economists, including not only John Locke or John Law but also Sir William Petty, Charles Davenant and Sir Josiah Child, that he even accuses them all of copying each other in a way complicating the subject rather than simplifying and illuminating it.

My own investigation in this chapter has two crucial implications; firstly, and as a contribution, the literature on Cantillon seems to neglect the minute details of Cantillon's value theory by directly assuming that in Cantillon monetary values reflect the intrinsic values. Although this is the case in the context of a local/domestic market, still as Cantillon's analysis in the *Dictionary* version suggest this does not have to be the case with an open economy. In international trade, monetary values and intrinsic values may well diverge from each other favouring one side of the trade even when monetary values are equal. Additionally, in such a case Cantillon seem to treat his intrinsic values, namely total land-plus-labour entering in

production rather than monetary or face values as a more reliable indicator of total values of commodities internationally exchanged. Thus, when exchange is between a rich country with a high price level and a relatively poorer one with low price level the real values must be measured, to him, with his method based on intrinsic values of commodities rather than monetary values.

As a second contribution to the literature, Cantillon's intrinsic value theory has been identified in the literature as a forerunner of Smithian, and classical, value theory that treats the cost-of-production as the regulator of market prices in the long run. Although we have still had not a conclusive answer as to how Cantillon reached such a developed a value theory so early, my investigation regarding his foreign trade theory implies that his intrinsic value theory may be considered as a result of previous mercantilist tradition that had diligently searched for the net gains for the nation from each and every branch of trade it involved. Hence, his intrinsic value theory may be the result of such mercantilist endeavours that discerned, on the one hand, that monetary values are not enough but, on the other, had still no alternative value theories to assess the net gains from foreign trade with and in terms of an alternative measure capable of assessing total values exchanged in non-monetary terms. Thus, a similar mercantilist desire, it may be argued, forced Cantillon to get some further measures, whereas his far better analytical abilities and tools enabled him to develop an independent value theory, arguably the first systematic cost-of-production theory of value in British economic tradition. The value theory he sets, does not only utilise different measures to distinguish monetary values from intrinsic values, but also treats the fluctuations in monetary prices as short-term deviations from intrinsic values that regulate the long term values of commodities in market. Thereby, it also seems to pave the path for Smithian value theory, that eventually consisted the base for classical value theories.

Cantillon's analysis of unequal exchange that may, and indeed does, occur between rich and poor countries where price level deeply vary might have some implications for political and economic realities of today's world. His examination supplies us with a novel lens thorough which we can re-examine the trade on a global scale, like that between the rich North and poor South, as well as the economically developed West and the developing East, both the trade between nation-states, and even at a local scale, in commercial activities between cities and towns etc. Indeed, a masterly utilisation of this theory may even illuminate how a nation with a small amount of land and poor population, like Switzerland, has historically managed to get such enormous wealth by turning into a financial hub that has permanently sought for new ways of keeping her currency valuable in the global market. All these insights, however, have been postponed to further studies on two grounds: firstly, to keep the focal point around mercantilist trade balance doctrine that manifested itself through the transmittance of real money stock (of gold and silver) and secondly, as the financial aspects could be, and indeed

are, much more complicated than what is required for this project. Hence, financial aspects of the unequal exchange phenomenon have been deliberately ignored in this dissertation. Nevertheless, further studies may well illuminate such perspectives and thereby contribute to the literature on mercantilist or non-mercantilist forms of unequal exchange theory.

If I am allowed to summarise my journey and the course of this dissertation as a PhD project, and thereby give some suggestions as to potential further studies, this project started as a thesis aiming to reveal the historical context of the monetary views of Richard Cantillon, in addition to the potential sources of his economic ideas such as those about circulation of money or the so-called three-rent theory *etc.* Over time, however, partly by the difficulties raised but mostly due to novel discoveries made during the process, the project has turned into its current version focussing mainly on more real aspects of the *Essai*, including its population theory, social organisation theory and value theory *etc.* Nevertheless, it must be noted that, despite the course of my journey, I am still of the opinion that, the merits and virtues of Cantillon's *Essai* definitely deserves independent PhD projects as to the historical roots and context of his monetary views. A due analysis of such merits, accompanied by detailed research and desire to reveal its historical and intellectual sources, I am personally sure, can easily end in a completely independent dissertation on his monetary views. Indeed, the research project may find itself, with some luck, making enormous contribution to our knowledge of early and mid-18th century British mercantilism, which is still less researched. The *Essai* has more than enough to promise for such projects which may be the subject of further studies.

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