## SIMON VISSERING

#### AMSTELODAMENSIS

# "LAAT TOCH BEGAAN!"

( III a

SIMON VISSERING AND THE EPISTEMIC VIRTUES OF LIBERAL SCIENCE

DAAN VAN DEN BERG 3703630 Daily Supervisor: Dr. Ad Maas First Reader: Dr. David Baneke Second Reader: Prof. Dr. Bert Theunissen Word Count: 21 233 Was het in de jonge jaren noodig de eigen wetenschappelijke overtuiging streng te concentreeren in goed gesloten formules, opdat van haar eene wezenlijke kracht zoude kunnen uitgaan, elke behoefte aan inspanning hield nu op te bestaan. Zijne gedachten kunnen daarom thans eene breedere vlucht nemen dan vroeger mogelijk was; elke eenzijdigheid wordt nu afgelegd, elke voorliefde voor eigen stelsel gebannen. Alleen het geloof van zijne jeugd is hem bijgebleven en met dat geloof zijn eerbied voor vrijheid. Dat "laat toch begaan", die uitdrukking in zijn mond bestorven, speelt hem blijkbaar nogmaals voor den geest, maar nu om dat gebod niet op anderen, maar op zich zelven toe te passen. Laat toch begaan ook die scholen, welke het geluk van de menschheid op andere paden hebben gezocht, op paden die in zijn oog dwaalwegen waren. Is het ideaal dat zij najoegen niet ook zijn ideaal geweest? En dan wie weet: het onschatbaar kapitaal dat straks als intellectueele erfenis van de negentiende eeuw hare opvolgster in den schoot valt, is vooral daarom zoo rijk omdat het uit eene weergalooze verscheidenheid van gaven is samengesteld. De taak om in dien rijken boedel kaf en koorn te scheiden, mocht aan het nageslacht verblijven; om vredig te sterven was hem de wetenschap genoeg, dat hij naar de mate zijner krachten iets tot verrijking van deze boedel had trachten bijtedragen. (Levensbericht van Johan Buys over Simon Vissering, in: Jaarboek KNAW, 1889)

In één woord: mijn ideaal is hier, als bij zoo vele andere zaken, *vrijheid*, als de eenige waarborg voor ontwikkeling van alle krachten. (Simon Vissering, in: *Studiën over Hooger Onderwijs*, 1867)

### Contents

The objectivist scientist	3
The old-liberal's worldview	7
Objectivity and liberalism	9
Simon Vissering	11
Vissering as economist and statistician	16
Vissering's interpretation of statistics	19
Definition and history of political economy	21
Science as a means for education	
Clash between theory and practice	23
Natural laws	24
Vissering and numbers	
Vissering and the technocratic ideal	27
Preliminary conclusion: Vissering as objectivist?	
Higher education in The Netherlands	
Religion	
The reconciliation of geloven and weten for Vissering	
Conclusion	
Bibliography	45

#### The objectivist scientist

Ad Maas has recently argued that the rise of objectivity in the nineteenth century should be connected to developments outside the field of science; more specifically, he has claimed that it can only be understood "against the background of socio-political orders that favored some virtues over others."<sup>1</sup> I view his article as a call for historians to embed 'epistemic virtues', like that of objectivity, in a broader historical context than just the scientific one. This thesis is written in response to that call. In light of it, I will analyze the 19<sup>th</sup> century Dutch liberal and economist Simon Vissering (1818-1888), and will try to make sense of his views on science in the context of his branch of liberalism and the society he lived in. We will see, first, that his science can indeed not be understood in isolation, and second, that his liberalism does not fit well in the framework of a strong connection between liberalism and the rise of objectivity, as Maas had argued.

I consider this biographical approach in an individual case study well-suited to the demands of contextualization put forward by Maas. Whereas sweeping generalizations require a sharp focus on some specific domains and the omission of others, the individual is best understood as a whole, uniting all domains. That is not to say, of course, that every personal element or detail is as relevant as the next. I will therefore utilize Maas's argumentative framework, and the authors he based it on, as the lens through which to bring Simon Vissering into view. This is simply a method to judge relevance and prevent getting bogged down in details, but it is far from innocent: the individual case study is not free of import for the overarching generalization. It might never directly confirm or refute, but it can corroborate or poke holes. My ultimate goal for this thesis is to poke some holes—but that is for later. First, I will introduce the analytical background and broader historical context. Heeding Maas's call, this thesis rests on two important pillars, which can be roughly described as the 'the objectivist scientist's virtues' and 'the old liberal's worldview'. I will here deal with the first, and the latter will be taken up in the next chapter.

Recent times have seen a waxing historical interest in scientific 'good practice' in moral terms, in what are aptly called 'epistemic virtues'. The word 'virtue' conveys the idea that epistemological convictions are intimately tied up with the individual expressing them, in an often thoroughly moral manner. Virtue epistemology is a broader philosophical field, but its concepts are now also used in history, most prominently by Lorraine Daston & Peter Galison's in their book *Objectivity*. Instead of delving into the philosophical technicalities of how certain virtues would make a theory true, they discuss how virtues historically came into being, specifically that of objectivity. The authors argue that objectivity as an epistemic virtue essentially involves 'personal restraint', or 'self-repression': the researcher which tries to erase himself from the scientific picture, so that there is nothing left but the bare facts (the 'view from nowhere', as Thomas Nagel has so wittily called it).

The rise of this specific understanding of objectivity, which Daston and Galison locate mid nineteenth century, is connected to the 'discovery' of the self as a distorting factor in scientific research. It was only when people started seeing *subjectivity* (i.e., the subject who exerts his or her influence) as having a dangerous influence, that *objectivity* could emerge in its current interpretation. Before this time, subjective influence on research outcomes, to the extent it was even considered as a thing in itself,

<sup>&</sup>lt;sup>1</sup> Maas, 'Johan Rudolf Thorbecke's Revenge', 173-174.

played a crucial role in scientific practice. It was the scientist him- or herself, i.e., the scientist's *intuition*, honed by years of scientific training and experience, that produced the truth. It was only the subject of the scientist that was able to extract meaningful results from—and impose categories on—the utter chaos which is reality.

This explanation of the rise of objectivity can be considered *internal* to science to the extent that it only deals with the, as Daston & Galison call it, 'discovery of the scientific self'. They see this discovery as an intellectual, mental development that happened quite isolated from other, extra-scientific, historical developments. An alternative explanation would be to explain objectivity by means of domains outside of science. Theodore Porter can be considered to be doing just that in his book Trust in Numbers. He agrees on Daston and Galison's definition of objectivity as selfrepression, but proposes an externalist explanation for its rise: the pressure on science as exerted by expanding bureaucracies. He contrasts objectivity as self-repression (mechanical objectivity) to what he calls disciplinary objectivity. This form of objectivity comprises the assumptions that are shared by a relevant community, in which the scientist-to-be can be initiated. If these communities are capable of keeping the ranks closed (and the assumptions inside), this form of objectivity suffices to justify the scientists' results to people outside the community. Their science will be 'proper science'. However, in the ever-expanding bureaucracies of modern nation states, not everyone could be initiated in every field to utilize the force of disciplinary objectivity. Therefore, authority could no longer result from a subject's personal expertise, and had to be sought somewhere else. This new basis for authority was found in the facts on themselves; getting rid of the suspicious scientist who produced them. Mechanical objectivity was a 'technology of distance', as Porter calls it; a way to justify scientific results to an audience (i.e., government officials) that could not be reached through traditional disciplinary means-and which was increasingly distrusting of science. The language most suited for this communication was that of numbers, because it could be seen as subject-independent. Mechanical objectivity was a way of saying: 'do not trust me, trust my numbers'.

This separation between internalistic and externalistic explanations in the history of science is by now a bit outdated: often, the two cannot be as easily separated as it was sometimes made to seem. At the moment, science is seen more broadly as a general *cultural* activity, and as such, connected to all other societal domains. This is reflected in the wide array of historical topics that is now studied under the umbrella of history of science. Following Maas, I propose the same holistic view for this thesis. The separation between internalism and externalism in the case of objectivity suggests a contradistinction where, for the purpose of this thesis, there is none. Porter and Daston & Galison may differ on which element they consider decisive for the rise of objectivity, but they agree on the phenomenon they are trying to explain: objectivity as an attempt to remove the subject from the scientific picture. And as such, it can be studied in relation to other domains than just that of science.

Drawing on the similarities allows me to analyze Vissering as an 'objectivist scientist'. An important task in historical research—or in any research, really—is to sieve through a possibly endless amount of information to see what sticks for the topic at hand. For a relatively small thesis like this, this process is even more important, because a full-blown biography was not within bounds of the possible (and even then, of course, not everything that can be said, could be said). The sieve I have used for this thesis, and that helped me determine what facts about Vissering were worth bringing up, is what I would like to call the 'archetype of the objectivist scientist'. In discussions about Vissering's relation to the rise of objectivity—and having Porter, Daston &

Galison, and Maas brewing in my mind—I realized more and more that in the back of my head there was this figure taking shape and urging itself upon me, against which I analyzed Vissering.

He looks like this.

- The objectivist scientist considers the method to arrive at truth that of mechanical objectivity, i.e.: removing from the scientific picture the individual who is doing the work, in an attempt to let the facts speak for themselves. The untouched photograph is the metaphor for and hallmark of this kind of objectivity, presenting the world in all its irregular and unpolished glory. The antithesis to this method is that of the scientist who does not outsource his authority, but justifies truth on the basis of his personal, expert intuition.
- For the humanities, where this method is often impossible due to the nature of the research material, the equivalent approach is that of source-criticism and representation: history as a 'picture' of the sources, *wie es eigentlich gewesen*. Importantly, it is source-criticism that indicates an objective approach, and not necessarily the more straightforward impartiality, for one can be objective without being impartial—one can have applied the best source criticism but subsequently utilize the sources to, for example, extol one's native country.<sup>2</sup>
- The objectivist scientist loves numbers. Numbers provide him with a formalized and highly structured language that can be uncoupled from its users, which allows for knowledge "independent of the particular people who make it."<sup>3</sup> This is especially interesting for scientists who have to sell their knowledge to government officials or fellow citizens; for numbers provide "a way of making decisions without seeming to decide."<sup>4</sup>

Those three follow directly from the works of Porter and Daston & Galison. For the purpose of this thesis, I will use two more:

- The objectivist scientist is a technocrat, in the loose sense that he wants political decisions to be based on scientific reasoning. He adheres to the idea of science as value-free; as floating in a non-political realm, and for precisely that reason considers science to be remarkably suitable to inform government policy.
- The objectivist scientist stresses the importance of practicing science for its own sake (i.e., 'pure science'); for ulterior motives would again introduce the subject into the scientific picture.

This is of course not an actual historical entity, but a condensation of the elements comprising the historical development towards objectivity. The closer some historical figure resembles the objectivist scientist, the better he fits the development. This is not meant as a presentist judgment, to be sure ('Vissering did not contribute to the goal of objectivity'), but as a method of *historical localization* ('Vissering fits the framework in this manner'). The objectivist scientist sets the playing field; it determines which information is relevant to compare and contrast contemporaries with, information with which he can then be put into the context of his time. This sieve-function is the first

<sup>&</sup>lt;sup>2</sup> Daston, 'Objectivity and Impartiality: Epistemic Virtues in the Humanities', in: Bod et al., *The Making of the Humanities, vol. III.* 

<sup>&</sup>lt;sup>3</sup> Porter, *Trust in numbers*, ix.

<sup>&</sup>lt;sup>4</sup> Porter, *Trust in numbers*, 8.

reason for positing it. Secondly, the objectivist scientist helps locating Vissering *historiographically*. What is highlighted through comparison with it is not without import for Maas's argumentation, because for his argument that liberalism and objectivity go hand in hand to work, we would expect 'perhaps the most confirmed liberal' to share sufficient traits with the archetypical objectivist science. We will see, however, that they differ in some crucial regards.

To sum up: this thesis will highlight Simon Vissering's epistemic virtues through the lens of the objectivist scientist. While doing that, it will explicitly pay attention to extra-scientific elements—especially Vissering's branch of old-liberalism, to which we will now turn.

#### The old-liberal's worldview

In 1848, democratic revolutions washed over Europe. Tensions in The Netherlands were less pronounced, but, seemingly impressed by foreign events, king Willem II 'turned liberal overnight' and appointed Johan Rudolf Thorbecke as head of a state commission to write a new constitution.<sup>5</sup> This constitution laid the basis for the modern Dutch state and all following constitutions, but Thorbecke and his fellow liberals cannot be understood simply as the first in line of a development towards modern democracy. Rather the opposite, for a modern perspective clouds more than it illuminates. These people were not even, strictly speaking, democrats.<sup>6</sup> After they put their framework into place, it soon ran off without them, in a direction they did not like. They were an interesting bunch.

Their central aim was *freedom*, which they believed would ultimately allow society to reach its liberal utopia. This development had to be enabled by the state through the framework of the rule of law. Power had to be taken away from the individual, fickle king and its resulting paralyzing capriciousness, and spread across the formal framework of cabinet and chambers. Private and public matters, which were often one and the same thing under the king, were strictly separated. Society was divided into different domains, which were all left as free as possible to ensure their separate development. *Enable* was the key word: the liberals set up the framework, but did not want the state to *intervene* in society, or to lead the way.<sup>7</sup> Almost all of them were jurists, so once they won their 1848 victory, politics was not so much a clash of ideologies as it was a legal discussion.

This much I think is well-known and fits a presentist perspective of a straight line from Thorbecke to Rutte. It captures the key changes that the liberals initiated, but it overlooks the distinctive worldview from which these changed originated. This worldview can be best described by an apt phrasing from Henk te Velde: the old-liberals "wanted to be the progressives of a traditional society."<sup>8</sup> They "believed in progress, but gradual progress, and presumed, often implicitly, that society would cling to the old ways in the fields of social order, culture and morality."<sup>9</sup> Their freedom, the word which came to define their ideology, was not our individual freedom of 'do whatever you want, as long as it falls within legal bounds'. Theirs was the freedom to do one's *duty*. It presupposed a harmonious society of like-minded people, who were all on the same page with regards to where to go and how to go there.<sup>10</sup> The old-liberals could safely cut ties between the state and society and call for freedom in all its domains, for they had no doubt in their mind that this would lead to the kind of liberal society *they* imagined. In this view, there was simply no need for state intervention—for why interfere with a process that would lead to utopia all by itself? It could only do harm.

The tension between individual and community can be illustrated by Cornelis Willem Opzoomer's legal doctrine. This was individualistic and based on facts, but at the same time posited a romantic 'national spirit' (*volksgeest*) and a cautiously formulated 'popular sovereignty' (*volksgevereiniteit*), "although [this was] little more than a parliamentary system based on census suffrage, which was considered an

<sup>&</sup>lt;sup>5</sup> Stuurman, Wacht op onze daden, 148-149.

<sup>&</sup>lt;sup>6</sup> Te Velde, 'Van grondwet tot grondwet', 174.

<sup>&</sup>lt;sup>7</sup> Te Velde, 'Van grondwet tot grondwet', 105.

<sup>&</sup>lt;sup>8</sup> Te Velde, Gemeenschapszin en plichtsbesef, 66.

<sup>&</sup>lt;sup>9</sup> Ibidem.

<sup>&</sup>lt;sup>10</sup> Ibidem, 22.

expression of public opinion."<sup>11</sup> Opzoomer considered it a 'positive' system, because "it took facts, not abstractions, as basis, and only wanted reform when necessity obliged to. [Opzoomer's theory] could also be characterized as a 'historical legal doctrine', i.e., a theory that took [historical] experience and the results of history as its only basis."<sup>12</sup> There could be only one principle, that of upholding the law, and all other speculation of different principles would "break on the facts".<sup>13</sup> It was this refusal to completely abandon romantic views on people and nation, combined with a more modern focus on facts and science, that characterized the doctrinal liberal movement.

Their intellectual output could be characterized as "essayistic".<sup>14</sup> The oldliberal's production consisted of papers, essays, reviews, sketches, etc., but they did not produce any momentous books. It is notable, writes Kossmann, that a period which knew many great systems in other nations, inspired *modesty*, out of all possible virtues, in The Netherlands. The liberal circle for which the intellectual products were meant, was averse of large systems. It were impartiality, practicality and criticism that were considered the central virtues. Large systems were considered both dangerous and senseless, and "were anyway meant for people in lower classes than the liberals".<sup>15</sup> Next to that, writes Kossmann, comes that the liberals had many other things to do. "They worked their sciences, their journals, papers, and spent much time on polemics. They knew each other personally; they were all individuals by nature and by principle; they disagreed about countless matters. In an atmosphere of learning, liveliness and frankness bordering on the vulgar, they fought over political, historical, constitutional and theological problems in a completely decentralized and therefore seemingly confused discussion."<sup>16</sup>

In sum, we could say that the old-liberals were modern in their interpretation of the state, but conservative with regards to its society: they were against the old class hierarchy of aristocracy as a means of government and against a formal class distinction, but nevertheless viewed society as a 'body' (the people) and a 'head' (the liberal gentlemen).<sup>17</sup> Their liberalism always presupposed the existence of a *burgerlijke* elite.<sup>18</sup>

Of course, the harmony which the liberals presupposed, and which was needed for their framework to function, turned out an illusion. This would increasingly come to show from 1870 onwards, and presented the liberals with a dilemma. The state and government were now based on liberal ideals, their framework was in place—they had, one could say, achieved a resounding victory. And yet, society was not headed towards a harmonious liberal community, but rather towards a pluralistic mass society that was characterized by disagreement and division. Their progressive faith might have been picked up by the church elites, but was rejected by the congregation. Politics increasingly became fragmented along religious lines. The old-liberals felt their world was falling apart.<sup>19</sup> Their characteristic optimism disappeared, and melancholy took over. Many old-liberals were sad and deeply disappointed for the remainder of their lives, a mental state they extensively shared with one another in their letters.<sup>20</sup> A new

<sup>&</sup>lt;sup>11</sup> Kossmann, De Lage Landen, 188.

<sup>&</sup>lt;sup>12</sup> Ibidem.

<sup>&</sup>lt;sup>13</sup> Ibidem.

<sup>&</sup>lt;sup>14</sup> Kossmann, *De Lage Landen*, 186.

<sup>&</sup>lt;sup>15</sup> Kossmann, *De Lage Landen*, 187.

<sup>&</sup>lt;sup>16</sup> Ibidem.

<sup>&</sup>lt;sup>17</sup> Te Velde, Gemeenschapszin en plichtsbesef, 24.

<sup>&</sup>lt;sup>18</sup> Te Velde, Gemeenschapszin en plichtsbesef, 54.

<sup>&</sup>lt;sup>19</sup> For the collapse of old-liberalism, see Te Velde, *Gemeenschapszin en plichtsbesef*, chapter 3.

<sup>&</sup>lt;sup>20</sup> Te Velde, 'Van grondwet tot grondwet', 143-144.

generation of left-liberals took over, arguing that a mere framework was not enough. The state should start to actively intervene in society; it should exert control over the economy, provide education and social legislation, and expand suffrage.<sup>21</sup> They criticized the old-liberals for their lack of a coherent system, and reproached them for not supporting democracy enough, for failing to attack the Church, for not valuing the state enough, for not *doing* enough in general. The left-liberals were annoyed by what they considered the vagueness of their predecessors, and tried to build an actual intellectual system in which they strung together their social, political and historical interpretations.<sup>22</sup> Eventually, however, the difference between them and the socialists could not be maintained, and most of the later left and radical liberals would be absorbed by them.<sup>23</sup>

#### Objectivity and liberalism

Now that we have got an impression of the liberalism under discussion, let's turn to Ad Maas's article and see how he connects the rise of objectivity with that of liberal ideology. He draws a link between objectivity as letting the facts speak for themselves, and the liberal preoccupation with a government and society based on the rule of law, with no place for personal authority. Maas establishes this connection by juxtaposing Thorbecke and Robert Fruin (seen as founding father of the historical discipline in The Netherlands), with Philip Willem van Heusde, historian of an older generation. Thorbecke's view on history-writing differed significantly with that of Van Heusde. Thorbecke's view was close to that of Leopold von Ranke: historians should show history as it really was and suspend their own judgment. History should be viewed through the eyes of its actors, without moralizing about its significance for the present day: it has etwas für sich. Van Heusde, on the other hand, had a predetermined way of viewing history as a story of God-given progress, a narrative into which he shoehorned the historical facts. Corresponding to Daston & Galison's idea of 'truth-to-nature', the precursor of objectivity, he "selected and idealized his data in order to distill their essence, the essence as he saw it, to be sure."24 He relied on his authority as a historian to get his story across, and not on the authority of the facts themselves, as Thorbecke would have it. Reason and moral values went hand in hand, so "finding truth was not an act of reason alone. [...] what was true was also morally right."25 To accomplish this, the scholar would have to use what was called 'common sense', a key concept at the time in the Netherlands, i.e.; he should use what we would now call his ' (expert) intuition' to determine what was true.

Maas connects Van Heusde's kind of epistemology to the Dutch political organization during the reign of Willem I: the king as a 'father of the household' who ruled on the basis of personal authority (the 'oeconomic administrator') and distributed the powerful jobs amongst a small circle of confidents. So, "the scholarly practice that was grounded in the authority of the individual scholar [...] found an equivalent in the oeconomic administrator. On the strength of experience and personality, the scholar knew what was true, while the administrator knew what was best."<sup>26</sup> Thorbecke's epistemology, on the other hand, fitted the liberal political approach that he would

<sup>&</sup>lt;sup>21</sup> Te Velde, *Gemeenschapszin en plichtsbesef*, 29.

<sup>&</sup>lt;sup>22</sup> Kossmann, De Lage Landen, 147.

<sup>&</sup>lt;sup>23</sup> Te Velde, 'Van grondwet tot grondwet', 156.

<sup>&</sup>lt;sup>24</sup> Maas, 'Johan Rudolf Thorbecke's Revenge', 176.

<sup>&</sup>lt;sup>25</sup> Ibidem.

<sup>&</sup>lt;sup>26</sup> Maas, 'Johan Rudolf Thorbecke's Revenge', 178.

champion in The Netherlands: "the personal style of rule was replaced by a formalistic approach – moral rule was to be replaced by formal rule, and public affairs had to be strictly separated from personal interests ['de publieke zaak wil publiek behandeld worden'; transparency was considered crucial]."<sup>27</sup> Later in the 19<sup>th</sup> century, this would be complimented by the 'objectivity in governance', which focused on statistics as a means to come to objective, (i.e., de-personalized) decisions on government matters.

So, the simultaneous move from truth-to-nature to objectivity in science and politics meant a shift in authority away from the subject. In science, the facts had to speak, not the scientist. In politics, authority was no longer based on the powerful individual, but on the formal rule within the system. The liberals initiated this switch, and drew their power from it.

This is how Maas combined political ideology and virtue epistemology: objectivity as self-repression fit the liberal aversion to personal, authoritative rule. I will now turn this stimulating interpretation towards the subject of this thesis proper, employing the following main question: to what extent can Simon Vissering be considered a liberal objectivist?

<sup>&</sup>lt;sup>27</sup> Maas, 'Johan Rudolf Thorbecke's Revenge', 183.

#### Simon Vissering

After the liberals took power in 1848, their position had to be consolidated. One of the ways to do this was to get fellow liberals into key positions with power over society, which Thorbecke did, by means of a conscious policy of assignments and dismissals.<sup>28</sup> It is here that we first come across Simon Vissering in general Dutch history: he was put in place by Thorbecke in 1850 at the new chair of political economy at Leiden University; always considered the breeding ground for the political elite in The Netherlands. It was evidently clear that this was a political appointment, meant to secure the political orientation of an important institute.<sup>29</sup> It was a good choice: Vissering may have been "the most confirmed liberal The Netherlands has known".<sup>30</sup> Vissering understood the nature of his appointment well, and put his liberal mark on political economy at Leiden from the very beginning. That was quite easy, for liberalism for him was not simply a political color, but a philosophy of life.<sup>31</sup> It is therefore that he, as professor in political economy *and* the quintessential symbol of old-liberalism in The Netherlands, is an interesting figure to look at for Maas's proposed relation between liberalism and epistemic virtues.

Vissering was born in 1818 in Amsterdam, in a Mennonite family of merchants that had moved there from Friesland.<sup>32</sup> Although he did not follow in his father's footsteps, the trade and industry scene would always have his interest, and he felt like an Amsterdammer—city of trade—for the rest of his life.<sup>33</sup> Between 1835 and 1842, he was registered as a student of both law and arts. Arts, because that is where his heart lay, and law, because that was what all people who wanted access to the higher echelons in Dutch society needed.<sup>34</sup> His most important teachers were Van Lennep (classics; also, interestingly, taught Dutch to Lodewijk Napoleon) in Amsterdam, and Bake (history; as discussed by Maas), Peerlkamp (classics), Thorbecke (whose chair in political economy he would later take over) and Van Assen (law) in Leiden.<sup>35</sup> He graduated both his studies in 1842, and then registered as a jurist in Amsterdam. However, he did not feel like becoming a lawyer, because he thought he lacked the character traits to be a successful one. For teaching, he also felt unsuited, and being a civil servant seemed boring.<sup>36</sup> He had a tough few years in Amsterdam, where he was still an outsider in the higher classes and as such, felt lonely and lacked the network to gain access to jobs.<sup>37</sup> For a few years, he was an economic commentator for the Handelsblad, focusing mostly on the abolition of corn laws in England. This position got him in contact with important names in the economic field; Ackersdijk, Den Tex, Van Hasselt and Portielje, with whom he would later write a well-received history of the corn laws in England. However, this position did not provide him the steady job he was looking for, and was terminated in 1845.38

<sup>&</sup>lt;sup>28</sup> Aerts, *De letterheren*, 191.

<sup>&</sup>lt;sup>29</sup> Boschloo, *De productiemaatschappij*, 37,191 and Aerts, *De letterheren*, 205.

<sup>&</sup>lt;sup>30</sup> Aerts, *De letterheren*, 140, and Buys, 'Levensbericht van mr. S. Vissering', 53.

<sup>&</sup>lt;sup>31</sup> Aerts, *De letterheren*, 140.

<sup>&</sup>lt;sup>32</sup> Blok and Molhuysen, 'Vissering, Simon', 1119.

<sup>&</sup>lt;sup>33</sup> Buys, 'Levensbericht van mr. S. Vissering', 27.

<sup>&</sup>lt;sup>34</sup> Buys, 'Levensbericht van mr. S. Vissering', 28.

<sup>&</sup>lt;sup>35</sup> Buys, 'Levensbericht van mr. S. Vissering', 28.

<sup>&</sup>lt;sup>36</sup> Vissering, *Mijn Album*, 68.

<sup>&</sup>lt;sup>37</sup> Buys, 'Levensbericht van mr. S. Vissering', 30.

<sup>&</sup>lt;sup>38</sup> Buys, 'Levensbericht van mr. S. Vissering', 37.

This situation would be temporarily resolved in 1847, when he landed a job as editor-in-chief of the *Amsterdamsche Courant*. However, it would barely last a year, for after the 1848 revolution, Vissering clashed with the conservative municipality council—who were in charge of the newspaper—over his liberal direction, and he resigned.<sup>39</sup> This posed Vissering with a huge (monetary) problem, for he had just married and started a family on the assumption that he had finally landed a steady job.<sup>40</sup>

Finally in 1850, he acquired his sought-after position, as Thorbecke's successor for the chair in political economy in Leiden, a position in which the love he received from his students falsified his belief that he was unfit for teaching.<sup>41</sup> This is where he wrote his major scientific work: the 'Handboek van praktische staathuishoudkunde'. This was the first comprehensive textbook of economics in Dutch.<sup>42</sup> It was not necessarily a very original or profound book, but an attempt at popularization and dispersion of the liberal economic principles. Vissering attached less value to theoretical renewal than to spreading the liberal truth, and used classical economics in an eclectic manner.<sup>43</sup> He succeeded very well in his goals, for "no debate about any question of economic importance could be raised without someone rushing in from left or right with an appeal to the authority of Vissering."44 His book went through four reprints between 1860 and 1878, and would long remain an authoritative source of economic information for both students and administrators alike.<sup>45</sup> This was not in the last place because Vissering did not leave his personality at home in his scientific works; he had a great style, a sharp pen and a dry sense of humor, which led the editor of De Gids, Everhardus Potgieter, to characterize him as: "schoon economist poëet".46 For justification of this point, the rejection he provided for a request to write something for the 'People's Encyclopedia' might suffice:

In the enormous field that the proposed People's Encyclopedia takes up, there is only a very small corner, that he [i.e., the author, Vissering] understood to be his terrain, one small portion of a section, about which he could say something useful, one single word (a drop in a sea of knowledge and science), that might escape the attention of others, and therefore he intended to direct the gaze of the board to *Statistics*. But there arose a big difficulty. Answering the three posed questions in the following manner:

- 1. What needs to be done? Everything possible.
- 2. What exists?
- 3. What is lacking? Everything.

might have come across as discourteous, like the famous answer to a certain competition about the best means for fertilization, which presented on thirty pages of folio but one, and always the same, dirty word (Vissering, *De statistiek in Nederland*, 108).

Nothing.

In the years in which Vissering was still trying to find his way, he kept a diary: between 1845 (he was by then 27 years old) and 1847, with a small entry in 1848 and 1852, he entrusted his private thoughts to paper. This diary is now lost, but luckily Mr. D. de Roo van Alderwerelt (1898-1981), who worked on a never-finished dissertation on

<sup>&</sup>lt;sup>39</sup> Buys, 'Levensbericht van mr. S. Vissering', 39-43.

<sup>&</sup>lt;sup>40</sup> Buys, 'Levensbericht van mr. S. Vissering', 43.

<sup>&</sup>lt;sup>41</sup> Blok and Molhuysen, 'Vissering, Simon', 1120.

<sup>&</sup>lt;sup>42</sup> Ibidem.

<sup>&</sup>lt;sup>43</sup> Aerts, *De letterheren*, 217.

<sup>&</sup>lt;sup>44</sup> Buys, 'Levensbericht van mr. S. Vissering', 46.

<sup>&</sup>lt;sup>45</sup> Blok and Molhuysen, 'Vissering, Simon', 1120.

<sup>&</sup>lt;sup>46</sup> Buys, 'Levensbericht van mr. S. Vissering', 39.

Vissering, left his transcription of the diary to the Dutch National Archive.<sup>47</sup> I will use it here to get a more personal glimpse of Vissering as a person.

He emerges from his diary as a paradoxical figure (or, we might say: a proper human): strong-opinioned yet indecisive, calculating yet emotional in his relationships, deeply religious but full of doubt about 'God's ways', and somewhat melancholic. He was stern with himself: his diary is full of admonitions about what he needed to do better ('read Vondel!'; 'less candy!'). This was also the mood in which he started his diary in the first place, that is, with an admonition about how he had failed in years prior to write one. "How many times have I not felt remorse in important moments that I had not started. And then I was ashamed of myself to start just in that momentous instant. Because it ought to have a decent preface, after all. Ita nos Deus fecit! Zwakke stumpers."48 He felt like one of the last ones in his circle of acquaintances to reach the goal of a stable position in society. He expressed doubts about the dullness of a predictable daily routine, but nevertheless considered a steady job the ultimate aim in life. Many of his entries therefore speak of his progress in networking, of how the people he met could be of use to acquire certain position. The eventual culmination in a job as editor-in-chief of the Amsterdamsche Courant marks the end of his diary in 1847; his marriage and the realization of his liberal ideals in the revolution of 1848 are brushed off in one entry, in which Vissering expresses regret about his failure to persist in writing. However, he would only return to his diary once, in 1852, to write down the passing of a friend.

Vissering worried a lot about coming across as arrogant, or about overstepping his place. He seemed not too dissatisfied with himself, but thought this irreconcilable with the humility that his Christian faith required of him. To remain humble therefore, he filled his diary with reminders of the things he was not good at, and how he was not in control of his life, but a plaything in God's hands. Nevertheless, he also wrote that he wanted "to become famous".<sup>49</sup> What made him somewhat special in liberal circles was that he eventually indeed turned out a self-made man, because he made it to full-blown professor despite his relative low birth. He was conscious and proud of this: "if I have to start begging, than rather for bread than for jobs!"<sup>50</sup> Above all, he wanted to remain an *honorable* person. His course of life also explains his meritocratic ideals, which would remain with him throughout his life, and affect his later views on, for instance, higher education.

We have already noted that Vissering was, like many of his old-liberal contemporaries, not necessarily very original in his thoughts. In his diary, Vissering showed awareness of this, and expressed his discontent. He agreed with Bake that the scholar should guard against never saying anything without quoting someone else, as if the scholar's own views did not suffice. He admitted that he suffered from this attitude and expressed the wish to change. However, he did not feel he had the time to completely immerse himself in one topic, even though he had the desire to do so. One of the reasons was that he felt that he suffered from the 'disease' of writing too much (*veelschrijverij*) which Bake warned against: Vissering felt his urge to take up the pen was too strong to spend too much time on one subject.<sup>51</sup>

<sup>&</sup>lt;sup>47</sup> Inventory nr. 2.21.202. Vissering had titled his diary *Mijn Album*, which I will stick with for the notes here. I will use the page numbers as written down in the transcript.

<sup>&</sup>lt;sup>48</sup> Vissering, *Mijn Album*, 1.

<sup>&</sup>lt;sup>49</sup> Vissering, *Mijn Album*, 60.

<sup>&</sup>lt;sup>50</sup> Vissering, *Mijn Album*, 6.

<sup>&</sup>lt;sup>51</sup> Vissering, *Mijn Album*, 55.

Vissering's view of humankind can also be gleaned from his diary. We cannot establish the direction of the causal arrow between these views and his classic economic thought, but we can for sure say that they fit together perfectly. Vissering was convinced that people were naturally egoistic—and that it was a good thing. He wrote an idea for a treatise as diary entry:

"Over zelfzucht en zelfopoffering."

Daarbij te betoogen dat zelfopoffering veelal òf onverstand òf inderdaad zelfzucht is. Voorbeeld: er staat een huis in brand en er moet een kind uit de vlammen gered worden. Daartoe zijn bereid

 $\underline{Jan}$ , die een borrel heeft gedronken en er nog een hoopt te ontvangen

Piet, wie f.100 worden beloofd

Klaas, die eene medaille van het Nut verwacht

Jacob, die zich verdienstelijk wil maken

<u>Dirk</u>, die het als een pligt beschouwt.

Michael, de vader van het kind

Justus, die in 't geheel niet denkt

Jozef, die zuiver uit medelijden voor dat arme schaap handelt.

De zes eersten kunnen min of meer gezegd worden uit zelfzucht te handelen. De 7<sup>e</sup> uit domheid.

Dan aan te wijzen, hoe zelfzucht en eigenbelang in onze natuur ingeweven zijn: met een goed doel!

Hoe daardoor de maatschappij in stand wordt gehouden. Te vergelijken Bastiat, Sophismes Economiques.

Conclusie: men moet het wagen de zaken van hare ware zijden te bezien. En het verkeerde, hatelijke der zelfzucht, het slechte eigenbelang is slechts <u>domheid</u>.<sup>52</sup>

Vissering also wrote how he teased his aunt with the idea that humans were bad by nature (*van nature slecht*), only to assuage that point by reflecting on the actions of his three-year old niece, who tried to pull him away and make him stop teasing. Vissering speculated that his must have been out of "a feeling of justice, of protection of the oppressed, and of personal courage, for in her eyes, in that moment, I was a tyrant."<sup>53</sup> Here, he seemed to imply that human nature may not be so bad after all.

About the nature of the *Dutch*, however, Vissering cherished no illusions: lazy, solidified and uninterested. *O flegma!*, he sighed, after discussing the manner in which people failed to assist with a dike breach in Zwolle.<sup>54</sup> He also felt uncomfortable with the rigid norms for social interaction of Dutch society: he loathed the traditional, 'boring' parties, and preferred informal socializing and the *beau monde*.

As a last point, when he writes of the women he met on those parties, he seems respectful and egalitarian. He had read female authors and discusses them in his diary on equal footing with their male counterparts. When he spoke of a female theater actress he had seen ('Mademoiselle Rachel'), he blamed the lukewarm reception she received from his friends and the public on her mediocre looks, whereas he considered her acting quite good. His marriage seemed relatively good; he held his wife in great esteem and loved her "from the bottom of his heart". Nevertheless, he also considered marriage "the school in which one has to learn self-denial, and will learn, out of love". He was not happy he was now part of the day-to-day worries and trifles, which he, until then, could escape in his study.

<sup>&</sup>lt;sup>52</sup> Vissering, *Mijn Album*, 52.

<sup>&</sup>lt;sup>53</sup> Vissering, *Mijn Album*, 69.

<sup>&</sup>lt;sup>54</sup> Vissering, *Mijn Album*, 24.

Many of the abovementioned character traits we will see glimmering through in the works discussed in this thesis. For the sake of argument, I will present and employ him as an old-liberal—which he was, obviously—but may this character sketch serve to remind us of his individuality, of his personal quirks and qualities.

#### Vissering as economist and statistician

For Maas's argument to work, the mid nineteenth century must have seen a close relationship between political ideology and science. This was certainly true for Vissering's field of political economy. As was already noted, his appointment as professor in Leiden was as much political as it was scientific. And more generally, principles from economic science and liberal politics went hand in hand.<sup>55</sup> Due to the powerful position and effective popularization of the old-liberals, their economic ideas became commonplace, and their concepts part of daily life. Economic theory always went further than simple description, possessing a normative tinge: society did not just function according to economic laws, it also *ought to* function in that way.<sup>56</sup> Often, old-liberalism and political economy were inseparable; it was frequently unclear whether a statement resulted from one or the other. Let us see how this worked for Vissering.

Aerts argues how, in 1850 in The Netherlands, two different models of science were in opposition. On the one hand, there was the established, albeit declining, and distinguished 'humanistic-literary' model, which had an idealistic and reflective character, and focused on finding central guiding principles, or leitmotivs. On the other hand, there was the 'positive' model, which was quickly gaining ground. It was based on the model of the natural sciences, and also focused on finding fundamental laws, but aimed to arrive at those in an inductive manner.<sup>57</sup> Statistics and political economy in Dutch universities was dominated by the former group: the literary and legally educated. However, it was nevertheless statistics and political economy that seemed to offer the prospect of useful new knowledge, knowledge that would free society and science of the 'idle speculations' of the humanistic-literary model.<sup>58</sup> It would uncover the laws that regulated society, and as such rationally determine the way in which policy needed to develop. Numbers as such might not be beautiful (a worry that resulted from political economy's origin in the humanistic-literary model), but at least they were incontestable and impartial. Moreover, the liberal elite were convinced that the objectivity and impartiality of statistics and the economic mechanisms converged on the truth. The sciences of statistics and political economy were therefore considered to have a binding authority that public administration needed to acknowledge.<sup>59</sup> "The legislator that did not follow by these statistical facts and economics laws, acted like a gambler with society at stake, argued Von Baumhaur, the new head of the statistics bureau at Internal Affairs, in 1849."60

This link between liberalism and science was not just a Dutch affair, and not reserved to political economy. There is a striking semblance between Vissering and a contemporary liberal physicist in Germany, Hermann von Helmholtz (1821-1894), whose scientific views merged seamlessly with his liberal ones.<sup>61</sup> Like Vissering, he thought his science compared favorably to that of predecessors because it was based on empirical facts, as opposed to the older 'speculative' forms of inquiry.<sup>62</sup> His work fitted the "liberal's drive to reform social and political decision-making by implementing concrete, practical and rational calculation in the place of personal judgement."

<sup>&</sup>lt;sup>55</sup> Boschloo, *De productiemaatschappij*, 48.

<sup>&</sup>lt;sup>56</sup> Ibidem.

<sup>&</sup>lt;sup>57</sup> Aerts, *De letterheren*, 216.

<sup>&</sup>lt;sup>58</sup> Ibidem.

<sup>&</sup>lt;sup>59</sup> Ibidem.

<sup>&</sup>lt;sup>60</sup> Ibidem.

<sup>&</sup>lt;sup>61</sup> Jurkowitz, 'Helmholtz and the liberal unification of science', 291.

<sup>&</sup>lt;sup>62</sup> Ibidem, 297.

Moreover, his "insistence on and drive toward a fully rational, even mechanical (but not materialist) image of nature represented a practical and *bürgerlich* approach that set controlling and ordering nature in the interest of society above personal contemplation and reverent, romantic idealization of nature."<sup>63</sup> Vissering would not go that far, as we will see, but it is clear that his combination of liberalism and epistemic virtues was not a local lucky strike, or reserved to his science of political economy.

Political economy (*staathuishoudkunde*) was the study of the way in which nations or 'the people' could 'amass wealth'; the working of the *volkshuishouding*; and the manner in which the state could facilitate this, and arose as a separate field around 1800.<sup>64</sup> It stemmed from the more general *staatswetenschappen*, an umbrella term for courses that dealt with (philosophy of) law and knowledge of state institutions. Until the rise of the so-called Historical School at the end of the nineteenth century, the dominant movement in political economy was what is now called the Classical School, which regarded Adam Smith with his *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776) as its founding father and text. This school was characterized by a strong belief in natural laws that determined the functioning of society ('society', for they did not yet speak of 'the economy' as a domain somehow separate from society). Setting free these natural laws would usher in an era of prosperity for all. For that reason, the school's most important adage was the abolishment of all protectionist measures, especially those impeding free trade.

Political economy was introduced in the Netherlands by Adriaan Kluit and, after his death in the Leiden gunpowder disaster of 1807, continued by his student Hendrik Willem Tydeman. From the 1820s onwards it became part of the compulsory curriculum for all Leiden law students, followed suit by other Dutch universities and the Amsterdam Atheneum.<sup>65</sup> The addition of 'political' to political economy—which was later dropped—underlined the importance the state played: the need for political economy as a science resulted from a desire to base (economic) policy on scientific principles.<sup>66</sup> (For the Dutch staathuishoudkunde, this was a bit different. Staat could be dropped, but *huishoudkunde* never caught on, and people eventually started using economie).<sup>67</sup> This waxing interest, argues Boschloo, did not result from something seemingly more straightforward, i.e., the Industrial Revolution and its resulting societal changes, because it took a long time from 1800 onwards for a demand for schooled economists to arise. The interest in political economy thus really resulted from within politics itself or from the political liberal class. Economics was therefore always closely intertwined with politics, be it with a negative view of state intervention itself: the extreme laissez-faire of the doctrinal liberals dictated that the state might facilitate, but the best it could do was to refrain from intervening.<sup>68</sup> It was also an expanding science, that could count on an increasingly interested class of government administrators and the general public. It grew in status and as such, it could assert its influence in spreading new economic and political views.<sup>69</sup>

Statistics as a domain of knowledge shared its origin with political economy, something which we will see Vissering dealing with later on too. Both names were used

<sup>&</sup>lt;sup>63</sup> Jurkowitz, Helmholtz, 294.

<sup>&</sup>lt;sup>64</sup> Boschloo, *De productiemaatschappij*, 11, 42.

<sup>&</sup>lt;sup>65</sup> Boschloo, *De productiemaatschappij*, 18-20.

<sup>&</sup>lt;sup>66</sup> Boschloo, *De productiemaatschappij*, 11.

<sup>&</sup>lt;sup>67</sup> Boschloo, *De productiemaatschappij*, 12.

<sup>&</sup>lt;sup>68</sup> Boschloo, *De productiemaatschappij*, 7-8; Stuurman, 182-183.

<sup>&</sup>lt;sup>69</sup> Boschloo, *De productiemaatschappij*, 43.

interchangeably for the same subjects in the first half of the nineteenth century.<sup>70</sup> When they were eventually separated, political economy dealt more with (establishing) laws, whereas statistics became more of an empirical method for collecting facts.<sup>71</sup> It could be separated into roughly three different approaches. The first approach held on to statistics' tight connection with political economy and the staatswetenschappen, and saw statistics simply as a description of everything related to the state.<sup>72</sup> Odd to the modern reader, this kind of statistics did not necessarily deal with *numbers* at all; an excessive focus on numbers was even regarded with some suspicion.<sup>73</sup> The upside of this was that every layman with an interest in statistics or political economy was able to follow its writings, which immensely helped in its popularization and spread.<sup>74</sup> The second approach retained its connection with political science, but considered numbers and tables the best way to express its descriptions, not only of the state, but also of wider social phenomena, including human behavior.<sup>75</sup> Klep has described this as the difference between systematization and quantification.<sup>76</sup> The third approach, developed already in the 1820s by Adolphe Quetelet, but which acquired dominance only at the end of the nineteenth century, retained the numerical focus, but separated statistics from the subject of the state, and started utilizing formal mathematics for its analysis. An historically well-known example of this approach are the hygienists, who examined the spread of infectious diseases in this manner. In practice, historical actors might not fit neatly into one specific approach. We will see that Vissering throughout his life moved somewhere between one and two.

The economic-liberal outlook would disappear from 1870 onwards, when the existence of eternal laws was challenged by the Historical School, and the 'social question' of poverty acquired dominance, because the awful circumstances of the poor failed to light up as the classical economists had predicted.<sup>77</sup> The liberal optimism dwindled as industrial centers in England and around Europe failed to develop anything that resembled harmony. Even in The Netherlands, which had not yet established any large industries by this time, economists from a younger generation started to openly doubt the (benefit of the) theory of laissez-faire. (Although, according to Boschloo, mostly because of a change in liberal mentality and not forced by circumstances, because at the start of the debate social circumstances in The Netherlands were not such that they required immediate intervention). This was a slap in the face of the oldliberals: those who did not believe that poverty would disappear by itself did not have enough trust in the economic laws, and therefore not in science. Even speaking of 'THE social question' was preposterous: there was no social question-there was only a natural state within a certain development, which would eventually disappear by itself. They were, however, not heartless; they just thought on a much larger timescale, and doing nothing was, they thought, the most effective way to alleviate the poor. Sticking to this economic line of defense, in spite of the growing pauperization of the working class, was one of the reasons that the old-liberals became increasingly marginalized after 1870.78

<sup>&</sup>lt;sup>70</sup> Boschloo, 18, Klep, 'A Historical Perspective on Statistics', 33.

<sup>&</sup>lt;sup>71</sup> Boschloo, *De productiemaatschappij*, 17.

<sup>&</sup>lt;sup>72</sup> Klep, 'A Historical Perspective on Statistics', 33.

<sup>&</sup>lt;sup>73</sup> Stamhuis, 'An Unbridgeable Gap', 86.

<sup>&</sup>lt;sup>74</sup> Boschloo, *De productiemaatschappij*, 15-17.

<sup>&</sup>lt;sup>75</sup> Klep, 'A Historical Perspective on Statistics', 35.

<sup>&</sup>lt;sup>76</sup> Klep, 'A Historical Perspective on Statistics', 65.

<sup>&</sup>lt;sup>77</sup> Boschloo, *De productiemaatschappij*, 237,341.

<sup>&</sup>lt;sup>78</sup> Boschloo, *De productiemaatschappij*, 194-195. Boschloo describes how left-liberals had the tendency to write 'kwestie' instead of 'quaestie', to the great annoyance of the dogmatic liberals. From

We will analyze Vissering's political economy and statistics from four perspectives. First, we will have a look at his definition of both domains, the way in which he kept them apart (or not), how he saw the relationship between theory and practice, and how he viewed (natural) laws in economics. Secondly, we will see how, characteristically for the old-liberals at the time, he viewed science mostly in its capacity for *teaching*. He considered political economy to be an essential part of education for politicians and citizens alike. Part of this was that he thought it to be a natural part of and a practical tool for the liberal ideal of transparency. The availability of statistical data would make it possible for people to *actually* monitor and keep in check government. Thirdly, we will examine Vissering's complicated relationship with numbers, and determine what this tells us about his position in the history of statistics. Finally, we will have a look at Vissering's technocratic ideals that follow from his view of economics.

#### Vissering's interpretation of statistics

Vissering's definition of statistics was somewhat murky, and changed throughout his life. In the mid nineteenth century, he seemed to have thought of statistics as something of an auxiliary science to political economy, something along the lines of 'political economy as the description and analysis of the phenomena of public life and the state', and 'statistics as the method to arrive at this description'.<sup>79</sup> However, he also used the concepts interchangeably. Later on, in 1875, he defined statistics as "the science of the phenomena of public life of one or more peoples, — the knowledge of *social facts*."<sup>80</sup> Here, he assigned statistics a domain more or less separate from political economy; 'social facts' as a category included more than just descriptions of the state (see below). His appreciation of numbers by then had increased too, which makes him fit the second, numerical approach of statistics discussed above. However, two years later in 1877, in one of his last years as professor in political economy and statistics, he again told his students that a simple collection of social facts in his course would not suffice: it was the edification of his students that he was after.

What we can say for sure however, is that for Vissering statistics was about *collecting facts*. What facts though, and how to go about it? Faithful to his ideal of popularization, Vissering wrote a booklet for citizens 'abroad' who wanted to do statistical work: *Handleiding tot wetenschappelijke waarnemeningen ten behoeve van reizigers, koloniale ambtenaren, consuls en andere residenten in vreemde gewesten*. However, for a booklet that was meant to help laypeople gather scientific data, Vissering was impractically vague. "The method of statistical research consists in the observation and grouping of those phenomena, that are susceptible [to this method]. This method is similar to astronomy and meteorology."<sup>81</sup> Vissering continued: "statistics cannot by experiment produce a phenomena, in the same way chemistry and physics cannot, and neither can it dissect one typical phenomenon, in the way in which they occur in reality (the *massenbeobachtung*, as the Germans say), writing them down, sorting them out and classifying them, comparing them and getting to know, from their

the style of writing one could predict the incoming critique, just like with the 'kritiese' students in the sixties (p. 204).

 <sup>&</sup>lt;sup>79</sup> Vissering provides this definition of political economy in his inaugural speech and his handbook of political economy (page 404). It follows the evolution of the delineation as sketched in Boschloo, 17.
<sup>80</sup> Vissering, *Handleiding voor Wetenschappelijke Waarnemingen*, 3.

<sup>&</sup>lt;sup>81</sup> Vissering, Handleiding voor Wetenschappelijke Waarnemingen, 3.

regular occurrence under the same circumstances, the laws of cause and effect, that govern the facts."<sup>82</sup>

The booklet leaves a lot to the assessment of the individual observer about what kinds of facts were relevant to statistics, but Vissering, in passing, provided a list of things that interested him. That is, basically everything that could be gathered about a people (as he would write somewhere else, "hier bestaan geen kleinigheden"): censuses that determine sex, age, marital status, origin, occupation, religious denomination; births, deaths, marriages; the state, nature, distribution and usage of land; registers of trade, shipping, means of transportation, fisheries, factories, and agriculture; public health, justice, crime rate, education, and charity; budget and accounts of the treasury. For the reader in un(der)developed states, who did not have the official statistics-bureau doors to knock on, and who wanted to know how he had to collect these facts-so readily available in reality, apparently—Vissering had the following answer prepared: "What he [the reader] has to observe and how he has to observe this cannot be explained to him in the manner of a common rule. His own intuition, experience, and training in statistical studies will have to guide his way in sorting the useless from the useful, to complement one comment with another, to check one observed fact with another and to weave separate phenomena together into a coherent picture."83

Clearly, Vissering held a relatively straightforward (or unsophisticated, if you wish) interpretation of facts—"[the knowledge of 'facts' means] that the statistician does not accept anything, but the thing that has been observed and recognized as an actually existing fact." Induction occupied the center stage: in statistics, writes Vissering, the simple observation and establishment of facts, or of a coherent series of facts, had to take precedent to more advanced forms of analysis, such as comparative research, or the finding of fixed phenomena or laws. One had to observe and count 'what is out there', and as long as it was done consistently, it was all right. It fits a more often seen contemporary pattern of what Theunissen called a "mixture of Baconian empiricism and Humean skepticism, mitigated by Scottish common-sense philsopohy."<sup>84</sup> Vissering did not consider there to be one, ever applicable methodology to statistics, and left a great deal to the discretion of the individual observer.

Vissering considered 'the Dutchman' to be particularly capable of doing this kind of research. "The Dutch scholar is, in correspondence with the national character, more positive than speculative. He values research over divination, criticism over conjecture; he likes to establish facts and figures better than to create hollow theories out of thin air. His desire for soundness and solidity preserves him from drawing conclusions without having thoroughly explored and researched everything; his assiduity allows him to easily perform this task, for which quicker minds might shy away, out of fear of boredom. This kind of constitution is exceptionally suitable for the study of statistics, which requires, before everything else, patience, caution, careful observation and serious attention also for the little things."<sup>85</sup> This fit a broader trend of anti-Hegelian liberals at the time; his large and all-embracing system, and also those of the French, were considered the cause of the social and political upheaval in their countries.<sup>86</sup>

<sup>&</sup>lt;sup>82</sup> Vissering, Handleiding voor Wetenschappelijke Waarnemingen, 3-4.

<sup>&</sup>lt;sup>83</sup> Vissering, Handleiding voor Wetenschappelijke Waarnemingen, 8.

<sup>&</sup>lt;sup>84</sup> Theunissen, *Nut en nog eens nut*, 87.

<sup>&</sup>lt;sup>85</sup> Vissering, De Statistiek in Nederland, 129.

<sup>&</sup>lt;sup>86</sup> Aerts, *De letterheren*, 241.

#### Definition and history of political economy

To get a grasp of Vissering's view of political economy, we will have a look at his inaugural speech after accepting the professorship for political economy in Leiden in 1850. Here, he provided a sweeping overview of what he considered to be both the general history of humankind *and* the development of political economy; a story of an eternal progression towards ever stronger rights, and ever more freedom, culminating in the "personal freedom, freedom of conscience, and civil freedom" of liberal society.<sup>87</sup> Humanist he was, he could not resist starting off by expressing his love for the Classics and stressing their importance, but immediately added that new times required new sciences. One of those new sciences was political economy, 'the science of public life'. The Ancients too might have already dealt with "wealth, money, productive and unproductive consumption", but what they did could not properly be called political economy, and even if they wanted, they could never even have developed it, "for they did not have the Religion of love, they did not have true freedom, and they did not honor labor".

"The right of the Ancients was the right of might"<sup>88</sup>, and Vissering hated it, with their economic system that was being kept upright by means of slaves and permanent wars. Even worse, they looked down on labor-their freedom was the freedom not to work. A whole different kind of freedom from the one "that makes our breasts swell with pride; which protects citizens against all harm, and guarantees him an autonomous position in between his equals."89 Greece, however, was overrun by the Romans, and Rome was eventually overrun by the Germans. Those were characterized by their independence of mind, regard for personhood, and appreciation of personal freedom. The eventual feudalism of the Middle Ages almost collapsed into the full autocracy of an empire, but the German's inborn love freedom prevented this. Serfs never morphed into full slaves, and even became free men over time. Lieges defied their kings. And Christianity was there to ensure a teaching of equality of all people as equal children under one Father. The Reformation meant another victory for individual freedom, and the Peace of Westphalia meant a huge leap for international and commercial law (i.e., a progression towards a stronger system of rights). This, unfortunately, lead to protectionism and the pursuit of monopolies, but those were swept away by, among other things, the French Revolution. And then came the age of the father of the economic school: Adam Smith, who "had restored labor to its rightful place"-against the Physiocrats, who had only recognized land as a means of production. <sup>90</sup>

Vissering then moved to the definition and goal of political economy. He did not agree with the common definition of "the science which teaches how wealth is produced and consumed", especially not with the added goal of 'happiness'.<sup>91</sup> There is no relation between wealth and happiness, said Vissering, and the definition was anyway too narrow (and too materialistic): for Vissering, political economy was the science of all phenomena of public life. It "shows how the laws, that God has put in nature, cause the particular abilities of different people to cooperate in order to promote the material wellbeing and the moral uplifting of every human", and its goal was not

<sup>&</sup>lt;sup>87</sup> Vissering, Vrijheid, het beginsel der Staathuishoudkunde, 586.

<sup>&</sup>lt;sup>88</sup> Vissering, Vrijheid, het beginsel der Staathuishoudkunde, 575.

<sup>&</sup>lt;sup>89</sup> Vissering, Vrijheid, het beginsel der Staathuishoudkunde, 576.

<sup>&</sup>lt;sup>90</sup> Vissering, Vrijheid, het beginsel der Staathuishoudkunde, 584.

<sup>&</sup>lt;sup>91</sup> Vissering, Vrijheid, het beginsel der Staathuishoudkunde, 586.

happiness, but "to dissolve the struggle between selfishness and charity in one perfect harmony: *freedom*!"<sup>92</sup>

That is, Vissering defended the classical economic view that everyone who pursues his own goals, automatically also promotes everyone else's goals (the common interest), and the reverse: promoting the common interest also entailed advancing one's own goals. This is where his *economic* views merged seamlessly with *liberal* principles, i.e., those of freedom, self-interest, individualism and private ownership.<sup>93</sup> Everyone needed to be left as free as possible for them to pursue their self-interest, for following one's self-interest would entail considering other people's interests too (het *welbegrepen eigenbelang*).<sup>94</sup> For this 'incentive' to work, private property needed to be absolute, for it would not be *self*-interest otherwise. Naturally, this also encompassed the liberal value of individualism (and, incidentally, putting communism in the wrong). 'Satisfaction' proved it: even after having collectivized all property, it could never be the case that one person ate, to satisfy the other.<sup>95</sup>

As free as possible, though, for this was economics *cum* old-liberalism. That is, "the freedom of labor does not include the freedom *not* to labor, and to live from another man's expense. [...] Here lies the boundary of duty." And also, "the freedom to use one's abilities, does not allow one to employ cleverness or might to rob ones neighbor. Here lies the boundary of societal order and state surety." Vissering concluded: "political economy teaches us, that true freedom is the only condition for the wellbeing of every citizen and the existence of society."<sup>96</sup> All peoples and systems, historical and modern alike, who ignored this principle of freedom, were doomed from the start. What was left for political economy was to spread the gospel, and to determine where and to what extent freedom needed to be implemented. If this, in light of all modern forms of protectionism, led people to recoil, no fear!: the walk of history was on their side.

#### Science as a means for education

Vissering was adamant that science was practiced for itself, but not in terms of research, or for knowledge expansion: the ultimate goal was always *education*. Vissering considered political economy and statistics to be part of a general education for the elite. He shared this not-quite research-ideal ('pure science, but for education') with contemporaries, for example with biologist Pieter Harting (1812-1885), who also viewed the university primarily in its capacity for developing enlightened and useful citizens.<sup>97</sup> Harting, however, did not care for humanism, and would gladly have given up schooling in the classics. This was unthinkable for Vissering, ever the littérateur.

He extended his educational view to his scientific work. He justified his handbook as something in between a reader and a textbook, not an easy read, but also not very deeply penetrating, intended for educated citizen who wanted to go beyond superficial debates in learned societies and descend to the principles of political economy. In addition, the book was meant for students, as part of their journey towards enlightened and cultured citizens. His handbook was basically a written down version

<sup>&</sup>lt;sup>92</sup> Vissering, Vrijheid, het beginsel der Staathuishoudkunde, 585-586.

<sup>&</sup>lt;sup>93</sup> Boschloo, *De productiemaatschappij*, 52.

<sup>&</sup>lt;sup>94</sup> Ibidem, 53.

<sup>&</sup>lt;sup>95</sup> Vissering, *Handboek van praktische staathuishoudkunde*, 510-511, as quoted in Boschloo, *De productiemaatschappij*, 54.

<sup>&</sup>lt;sup>96</sup> Vissering, Vrijheid, het beginsel der Staathuishoudkunde, 574.

<sup>&</sup>lt;sup>97</sup> Theunissen, Nut en nog eens nut, 61.

of his course in political economy, illustrative of what came first for Vissering: not original work, but dissemination.<sup>98</sup>

This fit the general trend for old-liberals at the time. But it also made sense for Vissering in light of his science. Whatever he said about 'establishing facts' first, connecting them later, for Vissering, 'The Truth' was actually already know. To him, the Big Names had done his epistemologically difficult work for him, and the only thing left was to implement and enforce it—and maybe expanding it here and there. From this perspective, the focus on popularization and practice made perfect sense, for the bulk of the *original* work had been done already.

Moreover, Vissering's educational view of science fit his liberalism, for the liberal ideal of transparency itself (summarized in Thorbecke's famous adage 'de publieke zaak wil publiek behandeld worden') for Vissering required statistical data to be readily available and accessible. Transparency would not just force the state to be more open, but also force the public to be more inquisitive. Statistical information from and about the state would be the indispensable medium through which this inquisition could be enabled. The contemporary involvement of the public in matters of state was all well and good, wrote Vissering, and he could only welcome even more public involvement, but he "would like to add the desire, that the interest is accompanied by knowledge; knowledge of principles and knowledge of facts [kennis van beginselen en kennis van zaken]", without which the newly acquired public's influence, which Vissering already discerned everywhere, would do more harm than good.<sup>99</sup> If statistics was not used to inform citizens and provide them the tool to monitor the government, what more would it be than "a satisfaction of some vain curiosity, or, even worse, a mere pastime, like someone counting the flowers on a wallpaper, or measuring the square feet of a room, in which he has to abide for a while?"<sup>100</sup> For liberal transparency to work, citizens had to be educated, and statistics and political economy would be indispensable for that.

#### Clash between theory and practice

This combination of the preceding two ideas—that the only thing left to for political economy was to determine to what extent economic theory needed to be put into practice, and that science's most important role was to educate a wider public—provoked the critique that Vissering's political economy was not a science at all. A younger peer and left-liberal, Samuel van Houten, had pursued this argument, and claimed that political economy was more of an 'art' (*kunst*) than a science, that is, simply "a system of rules which needs to be followed in order to attain a certain goal."<sup>101</sup> In slightly anachronistic terms, we could say that Van Houten considered political economy more of an 'applied' science than a 'pure' science. 'Application' or 'practice' was a topic that was near to Vissering's heart, something which he reflected on personally as well. He included in his diary a quote from *The Atheneum*, a British journal, about Cromwell: "[The principal phase of Cromwell's mind which has, or ought to have, the most attraction, is its practical talent.] This is the test of a truly great man ; that his thoughts should be things, and become things in instantaneous act, and not for a moment mere speculations and abstractions, perpetually theorizing but never

<sup>&</sup>lt;sup>98</sup> Vissering, *Narede*, 398.

<sup>&</sup>lt;sup>99</sup> Vissering, De Statistiek in Nederland, 115.

<sup>&</sup>lt;sup>100</sup> Vissering, De Statistiek in Nederland, 116.

<sup>&</sup>lt;sup>101</sup> Vissering, *Eene oude quaestie*, 188.

doing."<sup>102</sup> This had impressed the younger Vissering. However, he had to reconcile this preoccupation with 'doing' with the fact that in order for political economy to be considered a science at all, it needed to be practiced for its own sake—it needed to engage in abstract thinking. Van Houten had argued that political economy simply applied what was already predetermined, as if no theorizing was going on, and was therefore nothing but a book of recipes for statesmen looking for policy measures. This hit where it hurt.

Vissering agreed that political economy's nature might be equivocal, but thought it inevitable and unproblematic. The name staathuishoudkunde, Vissering argued, might indeed suggest that it produces handbooks which statesmen can simply consult in order to know what they needed to do. If this were the case, it would solely be an art. Even in a more favorable interpretation, political economy dealt with the "management by the state of the public interest", but that would still count as an art.<sup>103</sup> To claim the title of 'science', political economy needed to be practiced for its own sake. And, argued Vissering, this was the case. All big names—Smith, Say, Malthus, Ricardo-had stuck to "pure observation of phenomena, their causes, and the logical deduction of their consequences." Indeed, admitted Vissering, they too had included in their theories advices on how to organize a state. But this was a good thing: theory and practice should not be strictly separated, but go hand in hand. By putting a theory into practice, "one gains the fruit of experience, which is the origin of all science."<sup>104</sup> "The continuous testing of theory against reality is the test, which decides on the soundness of the first. Those who want to swim, will have to get their feet wet."<sup>105</sup> The only thing that would be wrong, Vissering said, was to subordinate science to political goals, "like the communists do".<sup>106</sup> So, "let us truly and impartially strive for increasing our knowledge; let this be our *science*. Let us employ our acquired knowledge to the best of our ability and power, for the good of all; let this be our *art*. Other than that, let us guard against vain and infertile pedantry."107

#### Natural laws

Closely related to the clash between theory and practice for Vissering was the existence of natural laws in political economy. After all, 'practice' to Vissering meant 'finding out how, in a specific situation, to put the natural laws of economic theory into practice'. Doubting whether these general laws were even applicable in some cases for Vissering too easily transformed into doubting whether they existed at all. He agreed that it might not always be *for the best* to apply the 'principle of freedom', but this did not mean that its *existence* had to be questioned.

What did these natural laws consist of? Vissering provided the following framework for how the 'phenomena of public life' worked. Everyone could fulfill his needs by means of the material goods that are out there in the world, but that person would have to *labor* for it. Furthermore, everyone would try to get as much goods relative to the amount of work that person had to do to obtain it, and that person's wants would expand in case his "power over creation" increased. In society, everyone applied

<sup>&</sup>lt;sup>102</sup> Vissering, *Mijn Album*, 40. I have added the preceding sentence for context from *The Atheneum*, no. 946, p. 1193.

<sup>&</sup>lt;sup>103</sup> Vissering, *Eene oude quaestie*, 179.

<sup>&</sup>lt;sup>104</sup> Vissering, *Eene oude quaestie*, 192.

<sup>&</sup>lt;sup>105</sup> Vissering, *Eene oude quaestie*, 194.

<sup>&</sup>lt;sup>106</sup> Vissering, *Eene oude quaestie*, 193.

<sup>&</sup>lt;sup>107</sup> Vissering, *Eene oude quaestie*, 194.

oneself to the labor that fit that person's natural abilities best, and would trade the resulting goods with other people. Only once this trade of goods had become possible "under all circumstances" by a means of exchange (money), would the division of labor be optimal. And the means of exchange would have to have a fixed value, so that the exchanged goods would be able to receive their price relative to it. Vissering then wondered rhetorically: "are these not common principles, that apply in all societal circles, wherever these have been formed? Are these not natural laws, which govern people in their interactions with other people, and from which it is impossible to withdraw without demolishing societal traffic itself?"<sup>108</sup>

From Vissering's natural laws, the liberal political principles followed naturally for him. This was the task he saw for 'practical' political economy. "The complete science of political economy is nothing but the continuous lesson: do not be fooled by appearances! She has to warn against violence and lawlessness and the harming of the common interest and against acts that, with the best of intentions but blinded by some shining special interest, neglects the sustainable common interest, which no one favors, because it concerns no one in particular."<sup>109</sup> Of course, complete freedom could not be unscrupulously applied just everywhere. Often, argued Vissering, societies had been built in ignorance of the natural laws of political economy, and bringing them to back to 'a natural state' would destroy them. A factory that had been built in an unnatural place and kept standing by means of protectionism, would not survive the shock of complete freedom. What was needed, therefore, was gradualness, an eye for local circumstances. Eventually, every society (including the colonies, Vissering was adamant about this) had to be organized around the central principles of political economy, but it did not have to be all at once.

This bring us to his clash with the Historical School. They had argued, according to Vissering, that experience tells us that economic laws only hold in specific circumstances, if then. As we saw above, Vissering surely left room for contingencies: local conditions could inhibit the application of natural laws-but the underlying natural laws still held. The questions of the Historical School however, Vissering claimed, were meant to undermine the existence of natural laws itself. But, "insofar [the Historical School's] system is true, it is not new; and what is new, is false." If the Historical School taught that one should not start with an absolute theory and fit in the facts later, it only repeated what Adam Smith had argued already-and what made him stand out favorably to his predecessors, the physiocrats-and if the Historical School stated that, for specific circumstances in specific times one needed to look for specific laws, it was wrong, for it undermined the status of political economy as a science. For "in this way, the prescriptions of political economy are nothing more than the fruit of random opinions, of silly whims, which find their justification only [...] in the excuse, that they are true in this or that particular case." Just as one does not conclude that the law of gravity is wrong because a leaf does not come down as quickly as a bead, we should not conclude that the natural laws of political economy are wrong because they do not apply perfectly in every particular situation.<sup>110</sup> Doubting the natural laws of political economy meant doubting its status as a science.

<sup>&</sup>lt;sup>108</sup> Vissering, Narede, 411.

<sup>&</sup>lt;sup>109</sup> Vissering, *Narede*, 411-412.

<sup>&</sup>lt;sup>110</sup> Vissering, *Narede*, 408.

#### Vissering and numbers

Vissering had an equivocal relationship with numbers. As we saw above, especially in his earlier life, he considered statistics to be very close to political economy, i.e.; statistics dealt with the accumulation of facts about the state. These facts could be almost anything, from the amount of marriages to the balance of trade. He always subscribed to the idea that the best and 'most positive' way to *express* these facts was in numbers. For they, according to Vissering, allowed us to view phenomena in isolation, and to combine them in ways that made us see new and unexpected interrelations. In this way, "like the astronomer who, by observing and writing down the position of stars, can deduce the natural laws according to which the stars move, the statistician can deduce the natural laws that determine the walk of public life."<sup>111</sup>

But this emphasis on numbers would always remain something of a lip service, without putting much of it into practice. Even though we find him say of statistics that "its principles are numbers, its first part consists of adding and subtracting, its second part of equations"112, his actual statistical work remained more qualitative than quantitative.<sup>113</sup> This is reflected in the position Vissering is assigned in the history of statistics.<sup>114</sup> As mentioned above, statistics in the nineteenth century could be divided into three approaches: the qualitative description of state matters, the quantitative description of broader social phenomena, and the mathematical approach. Vissering can be seen moving between the first two. It was the mathematical approach, first championed by Adolphe Quetelet, that would turn out to be most fruitful (and mostly ignored in The Netherlands) and that was also adopted for non-economic terrains (such as for medicine by the hygienists). This was when statistics became more of a *method*, disconnected from its actual content. This separation, Vissering would resist until the end of his working life. With his description of statistics as 'the science of the phenomena of public life' in 1875, he wrote that he explicitly wanted to prevent the situation in which everything that could be captured in numbers, could then also be called statistics. Statistics had to be connected to the state-there simply is no statistics of the 'heavenly stars or the vegetable kingdom', Vissering stressed.<sup>115</sup>

This interpretation also becomes clear in Vissering's own appreciation of the history of statistics, which he shared with his students in his opening speech of his statistics class of 1877/1878. Vissering did not appreciate Quetelet and the mathematicians for their mathematical approach per se, but for their meticulous observation and presentation of facts. The older statisticians, according to Vissering, either did not care about numbers, or were too easily content with them, never subjecting them to a proper source-criticism. (Vissering could not help but mention that this led to an 'amusing argument' in which the mathematical school for not contenting itself simply with presenting its numbers, but also analyzing them for "relationships and interconnections". "They did not determine their outcome beforehand, which *had* to be proven. They only inquired after what *could* be proven from the indisputably acquired facts." Finally, the synergy of Quetelet had extended statistics from a narrow focus on demography, to a "science of the facts of public life", in which there was place

<sup>&</sup>lt;sup>111</sup> Vissering, Handleiding,

<sup>&</sup>lt;sup>112</sup> Vissering, De Statistiek in Nederland, 111.

<sup>&</sup>lt;sup>113</sup> Stam, '*Cijfers en Aequaties*', 162.

<sup>&</sup>lt;sup>114</sup> Stamhuis, 'An Unbridgeable Gap', 78-86.

<sup>&</sup>lt;sup>115</sup> Vissering, *Handleiding*, 3.

for both the narrower mathematical statistics and the broader *Staatkunde*. That is, Vissering credits the mathematical school for their methodological improvements, not for their mathematics per se.

Vissering, despite his confession in a letter to Quetelet that he considered him his "master", would always firmly remain in that non-mathematical camp, and not just because Quetelet's mathematics went over his head.<sup>116</sup> He felt that numbers were simply not suitable for describing many things that he also considered part of statistics, due to its interrelationship with political economy. Vissering wrote: "the meaning of numbers in statistics is sometimes overestimated. [...] This happens when people, like some do, do not acknowledge any statistics but the one that 'speaks in numbers'. But are there not facts and phenomena of public life, that are not expressible in numbers, or for which numbers are only of a subordinate quality: for example the degree of moral and intellectual development of a people, for which many other elements are relevant besides the number of convictions or of school-going kids." We see this moral tinge also in his appreciation of Quetelet. He expressed to his students of 1877 the wish that Quetelet's followers, "standing on his shoulders", would see past his narrow focus on 'social physics', and would be able to tell us something about 'social ethics'. "We can revel in the blessing of a science, which judges its destiny to be not just unraveling the secrets of nature, but also to pave a way to the solution of the grand mystery, which has occupied sages of all times and all peoples: the question of the free will of a people under the dominion of the laws of nature." Clearly, Vissering had far more laudable goals in mind for statistics than simple descriptions of nature.

And again, we see Vissering's quirky and equivocal appreciation of numerical statistics in the way he spoke of the hygienists. In 1877, after the new education bill of 1876 was passed, Vissering's statistics course was no longer an obligatory part of the curriculum of law students. In his opening speech, he therefore expressed the hope that people from outside the faculty would still find their way to his course, "not for his, but for their sake", because medical students, especially the hygienists, would need to be "initiated in the art of observing the phenomena of the course of diseases, the causes of death, probability of life and death."<sup>117</sup> Clearly, Vissering realized that the hygienists had successfully been adopting statistics, and thought they would therefore have a need for his course. What he apparently did not realize, was that they applied statistics in the more methodical, mathematical sense that he was antithetical to, and for, the horror, direct practical purposes, not for general educational purposes. He clearly recognized that something was changing in his field, but did not appreciate what exactly. This is all the more strengthened by the fact that directly after mentioning the hygienists, Vissering also recommended his statistical course to theologians, who would, by means of statistics, get to know the secrets of the human heart, and humanists, who would need statistics "to explain and value the handed-down facts of the history of peoples."<sup>118</sup>

#### Vissering and the technocratic ideal.

Vissering tried to get the importance of statistics into the limelight by justifying the need for statistics on the basis of its educational use for politicians. Without statistics, he contended, they would not have real knowledge of the state of affairs of a country; they "would be feeling their way blindly", a point which Vissering had seen confirmed in the famine and starvation of thousands on Java, which he considered to have been

<sup>&</sup>lt;sup>116</sup> Stamhuis, 'An Unbridgeable Gap', 94.

<sup>&</sup>lt;sup>117</sup> Vissering, De statistiek aan de Hoogeschool, 257.

<sup>&</sup>lt;sup>118</sup> Vissering, De statistiek aan de Hoogeschool, 258.

preventable had there been, at the very least, a correct census. There was, however, no way for politicians to get informed in this way, for there was no place to get this knowledge from, even if they wanted to.

So, what was needed, was a central institution overseeing the collection of facts. There might have already been a whole lot of initiatives, wrote Vissering, from state committees to learned societies to particular individuals, but the result was a complete mess: "this is not statistics, in the same way as a pile of wood, brick and mortar is not a house."<sup>119</sup> It missed an "*ordenende hand*" to collect, organize, compare and conclude. There was something wrong with all sources of contemporary statistics, according to Vissering. Ministers and desk clerks were not after truth by means of pure science, but had particular political goals in mind. The Lower House did not recognize the importance of statistics, and complained about 'not seeing life behind the dead numbers'. The annual rapports of the Provincial States displayed a complete lack of uniformity. Commercial parties had no wish to share in the new 'public nature' of the government. The result was that the 'precious materials' (*kostbare bouwstof*) of statistical data (Vissering's favorite metaphor) remained either inaccessible or useless for public and politicians alike.

The question was: who or what had to be assigned the task of being the ordenende hand? Not a learned society or, god forbid, a committee: "we know from experience full well what is implied with 'committees' in this country; what they do, or rather, what they do not do."<sup>120</sup> No, the state needed to take matters into its own hands. It had to revive the dilapidated statistical bureau of 1826. It had to put in charge one man, with full personal responsibility-één zij de baas-who would dedicate his life and work to the bureau. And not unimportantly: the bureau had to be completely independent of the capriciousness of political administrators. "As an institute of pure science, it must be located outside the domain of politics, and it must be able to assert itself, even against a minister. It must be invested with authority against civil servants, and must be able to demand from them, not request, the information it needs."<sup>121</sup> This way, it could most effectively deliver the knowledge liberal society needed. The public could keep a check on government, as the liberal ideal of transparency required, and "the States-General will not be embarrassed in the way they are now, when they, only half informed, or distrustful of the information, reject a bill without a legitimate reason, or accept one simply on trust [op goed geloof]."122 Vissering concluded about his ideas, with his characteristic liberal optimism: dit zal niet uitblijven.

#### Preliminary conclusion: Vissering as objectivist?

We can certainly say that in the case of Vissering, we cannot view his science separate from his old-liberal political orientation. Indeed, sometimes it is impossible to tell where his liberalism ends and his science begins. But how do his views compare to those of the objectivist scientist? Can he be considered an objectivist, and does that fit his liberal views?

The answers are of the variant: 'seemingly, but...'. He certainly did not look kindly on scholars who, like Van Heusde in Maas's article, posited their theory first, and fit in the facts later. He respected the natural laws of classical economics precisely because he considered them to have been *inductively* discovered. He chastised an older

<sup>&</sup>lt;sup>119</sup> Vissering, De Statistiek in Nederland, 116.

<sup>&</sup>lt;sup>120</sup> Vissering, De Statistiek in Nederland, 131.

<sup>&</sup>lt;sup>121</sup> Vissering, De Statistiek in Nederland, 133.

<sup>&</sup>lt;sup>122</sup> Vissering, De Statistiek in Nederland, 134.

generation of political economists for thinking of facts far too lightly, and for not applying sufficient source-criticism to the data for their statistical descriptions. I am unsure, though, whether this in itself is enough to consider Vissering a +1 in Maas's book. These epistemic virtues could also be viewed as a general respect for the empiricist model of science, which was shared more broadly by liberals, for example by Opzoomer. The link with objectivism is at best thin.

Vissering also certainly stressed the need for numbers—increasingly so as he grew older—but more rhetorically than in action. His statistics retained that eclectic and predominantly qualitative quality of an earlier kind, which hardly fits the statistics of an 'objectified state apparatus' that we think of in the context of objectivity. At the end of his university career, he could still consider the kind of statistics that went after the question of human free will a higher variant than that which described diseases, or societal phenomena. He anyway thought of his science predominantly as a means for education, not as something for solving practical questions. However, he *also* considered statistics and political economy in the capacity to deliver data about the state, which could then be used by legislators, and by people who wanted to exert control over government, making the liberal ideal of *openbaarheid* work. I think we can say a bit more about that by means of his technocratic ideal.

This ideal has all ingredients of a proper objectivist: Vissering wanted no political meddling in his scientific statistical institution, its members needed to be able to withstand ministers, and its information had to be used to inform policy. He felt that politicians did not properly appreciate the importance of numbers, arrived at by means of pure science. However, a closer look at Porter's discussion of technocracy might give us pause after all.<sup>123</sup> Porter separates technocrats coming from a 'French tradition' and those that are (in my words) objectivists that strive for self-repression. The first can be said to come from a position of power, the latter from a position of weakness. French engineers were technocrats simply because they loathed the hassle that came with democracy. Why bother with political debates about the best policy, if the best policy could simply be deduced by scientific reasoning? Objectivists, on the other hand, lacked the authority to make such bold statements. To get those in power to listen to them, they had to resort to other means. Their call for impersonal quantification resulted precisely from this powerlessness: they had to argue to it was not *them* making their statements, but the facts themselves! In this way, they farmed out the authority that they lacked. Porter writes of this difference between technocracy and objectivists:

Technocracy means elitism tending to authoritarianism, in the interest of productivity and efficiency. The pursuit of quantitative rigor flourishes mainly in conjunction with democracy, though perhaps not a vigorous participatory democracy. Technocracy implies experts in authority. The technocrat Hubert Lagardelle even called for "the reintroduction into social life of the aristocratic element . . . , the rehabilitation of government by elites." The regime of calculation involves a bid to empower experts who have at most a limited ability to subvert democratic control. Technocracy presupposes relatively secure elites. Quantitative decision rules are more likely to support a bid for power by outsiders or the effort of insiders to fend off powerful challengers.<sup>124</sup>

This suggests a different interpretation of Vissering's ideal: he seems more of a technocrat in the French than in the objectivist sense. The old-liberal elite he belonged

<sup>&</sup>lt;sup>123</sup> Porter, Trust in numbers, 145-147.

<sup>&</sup>lt;sup>124</sup> Porter, *Trust in numbers*, 146.

to had no need for impersonal quantification, for they themselves were the ones dominating the political discourse. Despite not always being in direct political power, the period 1848-1870 is nevertheless considered a *liberal* period.<sup>125</sup> The old-liberal 'body'-view of society, with the liberal elite as its brain, fits the 'aristocratic' interpretation of technocracy of Hubert Lagardelle as mentioned in the Porter-quote. Of course, Vissering pleaded for a functioning *openbaarheid* by educating 'the people' in political economy and statistics, which we may view as the exact opposite of a technocrat trying to *subvert* democratic control. However, when old-liberals spoke of 'the people' in these regards, they were not thinking of 'the masses' (as we do nowadays), but of the like-minded *gegoede burgerij* of the traditional class society, to which they themselves belonged.<sup>126</sup> The most we could say is that this idea cleared the way for the eventual democracy in which objectivity could flourish, but that kind of democracy was far from the elitist ideal the old-liberals had in mind.

<sup>&</sup>lt;sup>125</sup> Te Velde, Gemeenschapszin en plichtsbesef, 12.

<sup>&</sup>lt;sup>126</sup> Te Velde, *Gemeenschapszin en plichtsbesef*, 15.

#### **Higher education in The Netherlands**

We will now step back from the objectivist scientist somewhat, and get a look at Vissering's liberalism and epistemic virtues through his involvement in the Dutch higher education reforms. Theunissen has argued that most interpretations of natural science in the first half of the nineteenth century can be fit between three poles: the humanist and religious inspiration of Jan van der Hoeven's Christian Enlightenment, Pieter Harting's liberal rationalism and positivism, and Gerrit Jan Mulder's conservative societal 'useful knowledge' (i.e., useful for moral and religious uplifting).<sup>127</sup> Vissering can be located somewhere between the pole of Van der Hoeven and Harting (leaning towards the latter), albeit with an economic twist: Vissering's laissez-faire clearly leaves its mark on his views on education. We will analyze his views by taking a close look at his *Studiën over Hooger Onderwijs* from 1867.

In the table of contents for the collection from which this piece originated, in 1872—5 years after the publication of his studies—Vissering reflected on the bills for higher education that had been proposed since his piece first came out. All of them, according to Vissering, made the same mistake: they all involved far too much regulation. Vissering, true to his liberal and economic principle of freedom, wanted to leave university and students alike as free as possible to safeguard their development. He noted that some people have criticized him for this as being too idealistic. Even if that were the case, writes Vissering-although he himself thought otherwise, of course-it would only be to counteract the opposite and "too realistic" forces. Vissering's dreaded overregulation consisted in, for example, prescribing by the letter which exams, in what courses, students had to take. Students needed to be stimulated to follow their own chosen path in order to ensure a sustained intrinsic motivation for their studies. Unfortunately for Vissering, history would agree with his enemies: to better prepare students for the jobs they would get after university, the eventual bill of 1876 would prescribe in more detail their educational tracks and required exams. The bill followed and enabled a broader university-development from education-oriented institutions with an encyclopedic ideal of knowledge, to professionalized research institutions which focused on specialization and knowledge increase.<sup>128</sup>

As in so many other cases, Vissering in this piece juggled two lines of argument that reflected his old-liberalism: his predilection for both freedom *and* edification (sometimes with a nationalistic tinge). He combined this with a crossover-position in two discussions: that between *Bildung-* and *Forschung-*supporters, i.e., university either as a place for teaching versus a place for research, and between the people that saw higher education as an occupational training (e.g. that of civil servants), and those who saw the university primarily as a means for edification. For Vissering, the university was for teaching science and not for occupational training; but science only as a means to educate and enlighten the people who study at university, *not* for mere knowledge increase. This way of looking at science and higher education he shared with fellow liberal Pieter Harting, who also focused on educating enlightened citizens.<sup>129</sup>

Vissering was not happy with the specialization-trend. He quoted Mill on the topic: what good is a man, Mill asked, who, to know one little thing thoroughly, needs

<sup>&</sup>lt;sup>127</sup> Theunissen, Nut en nog eens nut, 97.

<sup>&</sup>lt;sup>128</sup> Theunissen, *Nut en nog eens nut*, 99, and Caljé, P., *Student, universiteit en samenleving: de Groningse universiteit in de negentiende eeuw*, 340-356. Nevertheless, this bill was soon after criticized for focusing too much on practical education and not enough on edification and general knowledge.

<sup>&</sup>lt;sup>129</sup> Theunissen, Nut en nog eens nut, 61.

to ignore all others things? He would add only an "infinitely small part" to the common wants and needs. Furthermore, experience taught us that studies limited to small subjects bred small and petty minds. It would cause biases to stuck and shrink human nature to such an extent, that it would be unfit for doing great things. General knowledge should always be the goal of education. Students needed to thoroughly learn the "foundational truths" of a subject, but not more. We always needed to keep in mind "nature and life in their great outlines".<sup>130</sup>

The natural sciences for Vissering had similar educational purposes: not for their quest towards truth, but for their ability to teach students how to *recognize* truth. 'Positive' sciences were necessary because they taught us the "essence of nature" ("het wezen der dingen"). If universities would not teach positive sciences at all, students were "at the mercy" of those who claimed to know truth, "like master and slave". Students needed to be able to distinguish between truth and falsity, and the best way to teach this skill was through positive sciences. Nevertheless, it is clear that Vissering better felt at home in the more humanist camp.

Vissering constructed his vision on education on the basis of a tripartite division of education by Friedrich Schleiermacher.<sup>131</sup> He was thus one of the few partaking in the higher education debates who explicitly based himself on a German school of thought.<sup>132</sup> Schleiermacher's view on education preceded and probably inspired those of Von Humboldt, and thus, we can locate Vissering squarely on the left side of *Bildung* versus Forschung.<sup>133</sup> Following Schleiermacher, Vissering distinguished between the school for basic education, the academie for training in fundamental science, and the universiteit right in the middle: the university should provide both edification (burgerschapsvorming) and training in fundamental science. Doing both was Vissering's synthesis between what he saw as two camps. On the one hand there were the pure scientists, according to whom the university "has to do nothing but to represent fundamental science well. The grander and more splendid this representation is, the better the state has satisfied its obligations."134 On the other hand were those who saw for higher education only a role in the education of good civil servants (*staatsdienaren*). Those people, according to Vissering, argued that fundamental science is and should not be dependent on the state. The state's interest lies only with educating competent civil servants and enlightened citizens for as little money as possible, for "[the state] cannot spend with one hand, without groping in the citizen's purses with the other", and "it has to be wary not to favor special interests under the pretense of public interests." Vissering's middle ground consisted of the following: university had to do both edification and fundamental science: even the most fundamental scientific training always had to be carried out with the goal of edification in mind. Vissering therefore described his own position as equivocal: he appreciated fundamental science for its own sake, but not really, because it did have an ultimate goal: edification through education.

How to achieve all this? Here, Vissering showed himself to be the laissez-faire liberal he was. He considered the earlier bill of 1815 to be somewhat liberal precisely because it did not overly regulate higher education, but Vissering thought it could be deregulated quite a bit more. The old bill, according to him, still drowned in prescribing precisely which courses were part of which studies, and that in a lavish manner. He

<sup>&</sup>lt;sup>130</sup> Vissering, Studiën over Hooger Onderwijs,

<sup>&</sup>lt;sup>131</sup> According to Vissering, based on his *Gelegentliche Gedanken über Unviversitäten in deutschen Sinne* (1808). Vissering probably got most of his views expressed here from the same article.

<sup>&</sup>lt;sup>132</sup> Theunissen, Nut en nog eens nut, 101.

<sup>&</sup>lt;sup>133</sup> Forster, 'Humboldts Bildungsideal und sein Modell der Universität', 20.

<sup>&</sup>lt;sup>134</sup> Vissering, Studiën over Hooger Onderwijs, 236.

spent multiple pages describing the outlandish amount of knowledge, *outside* the core specialization, the student was deemed to possess after his studies, and concluded dryly: "[the reader must by now] be tired and baffled by so much erudition. I have spared him [i.e., the reader] nothing, to have him recognize, that our legislator surely has applied the principle of *studium generale* in its widest interpretation."<sup>135</sup> This had been a mistake, according to Vissering. That is, not necessarily the wide interpretation of *studium generale*, because Vissering was all for a proper general education. No, the fact that all those extra courses were prescribed, *enforced*—that was the mistake. Combined with the fact that an academic degree was required for many jobs, it had caused university to degenerate into "a factory of doctors, lawyers and ministers."<sup>136</sup> "[Students] leave the academy, ready to set foot into the wider world; that is: to apply next week for a job as clerk of the cantonal court."<sup>137</sup>

That is not exactly what Vissering had in mind for higher education. To fix this deterioration, students had to be left absolutely free to follow their own interests. Vissering put it as follows: "I cannot think of a higher education, that has not at its very core and as its goal the principle of free, autonomous development of the mind, and which designates as the way towards this, free and autonomous study."<sup>138</sup> To reach this goal, Vissering wanted to dispense with all compulsory exams and courses, especially in the propaedeutics. This made sense especially because university was meant to deliver enlightened citizens, not practitioners: "an exam, that allows access to a "learned class" in society, is not just a redundancy, but a joke. In the eyes of the public, it labels all those who have successfully completed it as an able man, as a "man of learning" [geleerde], if you wish. Indeed it proves nothing more, than that he, to the satisfaction of his examiners, has been deemed capable in those areas of knowledge, about which he knew beforehand he would be questioned, and which he learned before the exam."<sup>139</sup> There was no point in coercion through examination, wrote Vissering, for "the only condition for good study is love for that study. And only he, who practices science for itself, has love for his studies. He who is driven to his studies only because of the fear for failing on his exams, or for the material benefits, [...] will, whatever his abilities, however large his diligence, never be a good student, nor an able man. Above all, he will be lacking in that noble learning, that higher devotion of the mind, which is the flower of all science, and which also delivers citizens for the practical life of society, whose influence has a salutary effect on the present and the future, and who are the fame and strength of their people."140 But what about the students who cannot deal with all this freedom, you might wonder? Vissering answered: "whatever you want. Those who are not fit for studying, let them be wine-traders or grocers."141

On the topic of whether the state had to pay for this magnificent institution, Vissering's liber laissez-faire clashes with his more conservative, nationalist-tinged wish for edification. For the secondary school of the *gymnasium*, Vissering had still expressed his trust in what he called the "free functioning of societal forces", in what we might now call free market competition. If secondary schooling was relieved of all state intervention, the best schools would automatically get the upper hand and

<sup>&</sup>lt;sup>135</sup> Vissering, Studiën over Hooger Onderwijs, 249.

<sup>&</sup>lt;sup>136</sup> Vissering, Studiën over Hooger Onderwijs, 291.

<sup>&</sup>lt;sup>137</sup> Vissering, Studiën over Hooger Onderwijs, 267.

<sup>&</sup>lt;sup>138</sup> Vissering, Studiën over Hooger Onderwijs, 277.

<sup>&</sup>lt;sup>139</sup> Vissering, Studiën over Hooger Onderwijs, 283.

<sup>&</sup>lt;sup>140</sup> Vissering, Studiën over Hooger Onderwijs, 286.

<sup>&</sup>lt;sup>141</sup> Vissering, Studiën over Hooger Onderwijs, 288.

prevail.<sup>142</sup> However, in the case of university, Vissering wrote: "do we, for this topic, which deals with an enormous common interest for our people, only take into account that which the state is *minimally* obligated to do?"<sup>143</sup> In the same vein, Vissering was against the wish for a Paris-like centralization of universities into one institution, which many liberals (among which Opzoomer and, for some time, Thorbecke) expressed. He feared that the concern for the quality of education, in which this centralization was wrapped, was a mere front for cost-cutting. Vissering also directly connected the fact that the universities were spread across the country to the level of general knowledge of the population (which was, irrespective of whether Vissering was right about the reason, indeed high).<sup>144</sup> Clearly, when Vissering's economic principle of laissez-faire clashed with his political wish for national edification, the latter prevailed.

<sup>&</sup>lt;sup>142</sup> Vissering, Studiën over Hooger Onderwijs, 309.

<sup>&</sup>lt;sup>143</sup> Vissering, Studiën over Hooger Onderwijs, 344.

<sup>&</sup>lt;sup>144</sup> Te Velde, Van grondwet tot grondwet, 113-114.

#### Religion

The historiography has since long abandoned the simple idea that science and religion *must* be in opposition: too many 'great scientists' were religious and considered their faith a prime mover for their science, changes in religion seemed to go hand in hand with changes in science, and the concepts were anyway too grand to make any meaningful generalizations.<sup>145</sup> Nevertheless, despite the fact that science and religion historically may not have been in actual, direct opposition, this did not stop an explosion of debates on why they were after all (or were not) from arising in the nineteenth century.<sup>146</sup>

Religion in general was part of life in a mild way in the second half of the 19<sup>th</sup> century. It was always there, but on the background; it had influence, but without emphasis. The minister mostly had a large social role as part of local elites. In church, "[he] presented his faith steadily and civilized, more as the cement of society than something of dogma or religious zeal."<sup>147</sup> Nevertheless, the debates on the clash between religion and science were pressing for the liberals. Their values of freedom, rationality, individualism and anti-authoritarianism could clash directly with those of religion. Although full-blown atheism did not exist in the nineteenth century, liberal circles started to adopt more and more progressive interpretations of religion as the century progressed.<sup>148</sup> A small clique drew the seemingly inevitable conclusion and left the church.<sup>149</sup> Kossmann notes that the liberals knew among their ranks the special category of the 'apostate minister'.<sup>150</sup> In line with the times, liberal protestants (the vrijzinnigen) developed a new and anti-dogmatic form of theology, with a focus on a more private experience of faith in God, summarized nicely by Willem Muurlings 1846 adage "niet de léér, maar de Héér".<sup>151</sup> This modern or progressive theology resulted from a focus on scholarship from professors of theology at university, who were confronted with a withdrawing government due to the separation of church and state, and a separation of congregation and nation (gemeente- and natievorming) in the 1840s, and an increasingly independent and critical public, which demanded to be addressed on an equal footing. The liberal citizen who had acquired new political power, now also demanded a say in matters of church.<sup>152</sup>

Especially pressing for the liberal protestants was the relationship between religion and science. The liberals, often priding themselves with their rationality and knowledge of science, ran into problems when it came to integrating this with their faith. Taking science seriously increasingly meant abandoning a literal interpretation of the Bible especially that of Genesis and the existence of miracles. A reconciliation or synthesis of *geloven* and *weten* (faith and knowledge) therefore became the central challenge for the liberal protestants.<sup>153</sup> This endeavor, by the way, did not last very long: when the old-liberals left the field after 1870, they took this preoccupation with them; their

<sup>&</sup>lt;sup>145</sup> See for a recent overview (2010): Peter Harrison, *The Cambridge Companion to Science and Religion*.

<sup>&</sup>lt;sup>146</sup> Krop, 'Natuurwetenschap en theologie', 16.

<sup>&</sup>lt;sup>147</sup> Te Velde, Van grondwet tot grondwet, 115.

<sup>&</sup>lt;sup>148</sup> Aerts, *De letterheren*, chapter 14.

<sup>&</sup>lt;sup>149</sup> Kossmann, De lage landen, 213, and Te Velde, Gemeenschapszin en plichtsbesef, 40.

<sup>&</sup>lt;sup>150</sup> Ibidem.

<sup>&</sup>lt;sup>151</sup> Muurling, *Philaletes. Over de waarheidsliefde*, 42-43, as quoted in: Paul, 'Waarheidszin en waarheidsliefde', 32.

<sup>&</sup>lt;sup>152</sup> Bos, In Dienst van het Koninkrijk, 359.

<sup>&</sup>lt;sup>153</sup> Paul, 'Waarheidszin en waarheidsliefde', 26-27.

attempt at harmony was smothered in more radical theological and political schools. It turned out that 'the people', which the liberals had been trying so hard to edify, when they got the chance, would rather turn to the more orthodox interpretations of, for example, Abraham Kuyper.<sup>154</sup>

Pivot in the endeavor for reconciliation was Cornelis Willem Opzoomer. It has been argued that this was indeed the *only* goal he had in mind for his philosophy: to save Christianity.<sup>155</sup> He was a prototypical old liberal: "free-thinking, but not an atheist; radical, but not a socialist; in favor or emancipation, but moderately (that is, not for women)".<sup>156</sup> The most important tasks he had in mind for the state were the enabling of individual personal development, and legal certainty.<sup>157</sup> In his works, like his liberal contemporaries, Opzoomer was not necessarily an original thinker. However, he functioned as a crystallization point, developing philosophical coherence and meaning for his fellow liberals.<sup>158</sup>

Opzoomer set fort his philosophy (or, as some complained, his *history* of philosophy) in his inaugural lecture for the acceptance of his professorship of philosophy in Utrecht in 1846 (he was only 25 by then; 3 years younger than Vissering). He argued that the path towards reconciliation between the natural sciences and religion ran through three stages in human history: from a naïve, childlike acceptance of the experience of nature (the first stage), via reflection on the status of knowledge, which lead to Kantian dualism—creating an unbridgeable gap between form and content, faith and knowledge (the second stage)—to a reconciliation between God and humankind through reason, where reason could show us that 'reality was one' (the third and final stage).<sup>159</sup> Opzoomer would later have a change of heart and shift from a rationalist system to an empiricist model, but also in a system which posited the senses as the basis for all knowledge (as opposed to reason), Opzoomer kept a warm place for faith.

He did so by adding a touch of his previous idealism to his empiricist philosophy, constructing a hybrid. To the five senses of empiricism, he added a sixth: that of *innerlijke waarneming*, or *gevoel*. This extra source of knowledge (*kenbron*), which comprised the four subdomains of arts, morality, politics and religion, allowed him to have more sources of knowledge than just the empiricist's perception of the outside world, but did not condemn him to a strict idealist position, in which all knowledge would result from innate concepts.<sup>160</sup> Opzoomer could thereby relegate religion to the domain of *innerlijke waarneming*, separating it from science, and at the same shielding it from its destructive influences. The natural sciences simply could not touch religion, for they encompassed different domains. Faith was based on *innerlijke waarneming*, knowledge on the empirical input of the outside world. God could be 'known', but only coming from the inside.<sup>161</sup>

#### The reconciliation of geloven and weten for Vissering

Vissering knew and read Opzoomer's speech. Opzoomer was in 1846 the first to hold it in Dutch instead of Latin<sup>162</sup>, and Vissering privately thanked him for that in his diary:

<sup>&</sup>lt;sup>154</sup> Krop, 'Natuurwetenschap en theologie', 28-29, and Te Velde, 'Van grondwet tot grondwet', 174.

<sup>&</sup>lt;sup>155</sup> Van Dooren, 'Het wezen der kennis', 25.

<sup>&</sup>lt;sup>156</sup> Ibidem, 11.

<sup>&</sup>lt;sup>157</sup> Ibidem, 28-29.

<sup>&</sup>lt;sup>158</sup> Ibidem, 11.

<sup>&</sup>lt;sup>159</sup> Thissen, De Spinozisten, 144.

<sup>&</sup>lt;sup>160</sup> Van Dooren, 'Het wezen der kennis', 22.

<sup>&</sup>lt;sup>161</sup> Ibidem, 25.

<sup>&</sup>lt;sup>162</sup> Thissen, *De Spinozisten*, 143.

"in this manner, he has created for us a philosophical language, or rather, he has shown that our language can also be philosophical."<sup>163</sup> Vissering deemed the speech beautiful and interesting, but also considered its analysis overly historical. He felt that Opzoomer's third stage of development too easily coincided with their own time; now that Krause and Opzoomer had finally reconciled humanity with itself, "we can lay our head down and say: this is it, we are done!"<sup>164</sup> For Vissering, this came across as "silly", "for it is supposed to lead to the reasoning, *there we are*, now in the year 1846, humanity has grown up. That is not the struggle and reconciliation for our thinking and our knowing that I have imagined."<sup>165</sup>

Nevertheless, as we will see, Vissering's solution for the struggle between faith and science had all characteristics of Opzoomer's philosophy, even 24 years later. He never quoted him (Vissering did not quote a lot anyway), but judging from the similarities and the fact that we know Vissering had read Opzoomer, he must have been a major inspirator. As a pious man<sup>166</sup> *and* a confirmed liberal, the debates hit home for Vissering. How close to home, we can glean from the fact that in an otherwise unrelated piece on higher education, Vissering had quoted Mill on the question of whether to leave the church: "if all who interpret [religion's] services in a liberal manner would leave church, then education in matters of spirit for the masses (*volksonderwijs*) would be left to those, who adhere to the text in the most narrow-minded and literal way. Therefore, [...] let those who can stay in church with peace of mind, stay. *It is easier to reform a church from the inside than from the outside*. [my emphasis]"<sup>167</sup> Clearly, Vissering felt like staying, but not without a fight. We will therefore have a look at how Vissering was able to keep up both his liberalism and science, and how this influenced his scientific values.

As a first, it is good to note that Vissering's laissez-faire faith in freedom was not *just* a liberal or economic principle, as we have discussed it so far—it was also based on a strong belief in divine providence. The religious foundation of 'laat toch begaan', was a strong belief in the flawlessness of Creation: "de Schepper heeft het beter gemaakt dan gij het vérmaken zoudt."<sup>168</sup> This demonstrates that his classical economics was far from the atheist and materialistic ogre that his opponents made it out to be.

We will further analyze this combination of science and religion by means of his article *Geloovige Wetenschap* (1870), in which Vissering argued against a brochure titled *De Kerk en de Volkswelvaart* by Jan van den Biesen, who contended that political economy was an irreligious science (*ongeloovige wetenschap*). Van den Biesen was a very devoted Catholic; a member of multiple Catholic societies and papers, who spent his life fighting the liberal doctrine.<sup>169</sup> In his brochure, he had linked the pursuit of science to the biblical story of the Fall, in which the devil promised humankind that eating from the tree of knowledge would make them be like gods, knowing the difference between good and evil. This, according to Van den Biesen, was the source of all contemporary misery, and its influence was still being felt in the form of science, the contemporary equivalent of Eve's mistake. The solution, however, was not to

<sup>&</sup>lt;sup>163</sup> Vissering, *Mijn Album*, 65.

<sup>&</sup>lt;sup>164</sup> Ibidem.

<sup>&</sup>lt;sup>165</sup> Ibidem.

<sup>&</sup>lt;sup>166</sup> Buys, 'Levensbericht van Mr. S. Vissering', 26, 31.

<sup>&</sup>lt;sup>167</sup> J.S. Mill, as quoted in Vissering, Studiën over Hooger Onderwijs, 179-180.

<sup>&</sup>lt;sup>168</sup> Buys, 'Levensbericht van mr. S. Vissering', 52.

<sup>&</sup>lt;sup>169</sup> Blok, P.J., and P.C. Molhuysen., 'Biesen, Mr. Jan Jacob Willem van den', in: *Nieuw Nederlands biografisch woordenboek: Deel 1 1911.* 

http://www.dbnl.org/tekst/molh003nieu01 01/molh003nieu01 01 0653.php, viewed on 29-05-2018.

abandon science, but to change it into something else—into *religious* science. "While [...] the highest placed persons, the most learned men, lapse into the most tangible, most miserable digressions due to the unwillingness to come to knowledge<sup>170</sup> through faith [...], the most ordinary, forgetful man is saved simply by knowing his catechism."<sup>171</sup>

This is the line of argumentation Vissering analyzes in his article. Interestingly, on multiple junctions, he does not take the argumentative turn one would expect from a liberal, objective scientist. On these points, we can see the influence his faith had on his scientific values.

Vissering himself too, before dealing with Van den Biesen, started off with connecting science to the story of the Fall. By doing this, he made clear that he wanted to fight Van den Biesen on his own terrain; that he would not be arguing that religion had no place in science at all. However, Vissering drew a different conclusion from the parable by giving it more of a Socratic twist. For him, the upshot of the story was not that the pursuit of knowledge led to "miserable digressions", but instead to the bitter irony in the devil's promise: obtaining knowledge would turn humans into gods, but when finally their eyes were opened, they realized they were naked. We cannot even resist this continuous temptation of the devil's call, for the ratio that would oppose his promise itself is the result of the original Fall. A bitter irony indeed. Vissering wondered: would this then always be the result of the pursuit of science? In that case, Van den Biesen's religious science did not sound so bad.<sup>172</sup>

It is clear from the outset that to answer this question, Vissering would not take the argumentative route of a fundamental separation between science and religion. "Religious science!", he asked, "is that not an incongruity? Are those not two concepts, that necessarily exclude each other?" He answered: *it depends*. "There is two sorts of believing and two sorts of knowing. There is a form of believing and a form of knowing that almost effortlessly blend together. And there is also a form of believing and a form of knowing that cannot go together, just in the same way as it is impossible for two bodies to occupy the same space."<sup>173</sup> Vissering then explicated these different forms. We will see that in doing this, Vissering goes into some interesting variations on the liberal anti-authoritarian argument.

First up are the forms of believing and knowing that go together effortlessly. Believing "in the most ordinary sense", according to Vissering, "is nothing but accepting in good faith what we are told is the truth, without us being able or willing to bring this to certainty through observing or thinking." And "knowing in the most ordinary sense is nothing else than our awareness of the handed-down knowledge<sup>174</sup> of the matter, which appears as the truth before us."<sup>175</sup> Vissering provided as examples the knowledge that Napoleon had beaten the Prussians in 1806 near Jena, and that The

<sup>&</sup>lt;sup>170</sup> Van den Biesen here uses the concept *wetenschap*, fully utilizing its dual (and therefore, ambiguous) meaning of both knowledge *and* science. Vissering too adopts this word-play.

<sup>&</sup>lt;sup>171</sup> J.J.W. van den Biesen, as quoted in Vissering, *Geloovige Wetenschap*, 198.

<sup>&</sup>lt;sup>172</sup> Vissering, Geloovige Wetenschap, 196-197.

<sup>&</sup>lt;sup>173</sup> Vissering, Geloovige Wetenschap, 198.

<sup>&</sup>lt;sup>174</sup> Vissering uses, possibly on purpose, the word *overlevering*, which has a biblical connotation. The *Van Dale* also tells me that this is mostly a *Catholic* connotation, which might be an extra sly dig at the devout Catholic Van den Biesen. That this word-meaning holds for 1870 too, we can see in the *Woordenboek der Nederlandsche Taal*, which has an article from 1907 on *overlevering* which endorses this interpretation.

<sup>&</sup>lt;sup>175</sup> Vissering, Geloovige Wetenschap, 198.

Netherlands had a surface area of 3.265.521 hectare.<sup>176</sup> This kind of knowledge, according to Vissering, we accept on the basis of someone's authority, because there is no way we can arrive at these facts through our own thinking. "Here, our knowing is believing."177 And because we had been doing this for generations, the accumulation of our (scientific) knowledge had expanded so much. However, this did not mean that our knowledge never changed. We accept much on the basis of authority, but only "until another authority, which we judge to be superior, comes to replace the old [my emphasis]"178

This meant, according to Vissering, that our believing was also, up to a point, knowing. For we do not just accept anything that we are told: "we distinguish between reasonable and blind faith, and reject the latter."179 We judge, wrote Vissering, whether the authority is credible, and whether what he or she says is not contrary to what we have learned through our own eyes. He illustrated this with a tale of Gijs the innkeeper, who, in principle, accepted everything he was told. He could be made to swallow all kinds of fantastical stories, until someone told him that he had seen Gijs's father hanging from the gallows on a desert island in the Indian ocean. "That is a lie, Gijs bursted out, me father is honestly buried in the Kartuizer's cemetary!" Gijs knew, for he had buried him there himself. Here, blind faith had reached the epistemic bedrock of gullibility, i.e., personal experience. Even when it came to believing, we judge with our rational faculties what to believe, and what to reject.

Then came the forms of knowing and believing that would not go together. There is a kind of knowing, Vissering argued, that did not "come from the outside", that was not open to revision by personal experience: knowledge of logical and mathematical axioms, and knowledge of natural laws (Vissering suggested, for example, "if A > B, then AC > BC", and "Saturn circles the sun in *this* amount of time"<sup>180</sup>). "This is, in one word, all science, which, by starting from an undisputed and undisputable maximsomething that is certain and undeniable—comes to its decisions through pure logical thought."181 Here, Vissering again mentioned Gijs: this was the kind of logical thinking that made him not believe the story, for logic (and physics) ruled out that his father was on a desert island.

And then, wrote, Vissering, there is a form of believing that also does not "come from the outside", but that "germinates, lives and works on the inside of man himself."182 "This is the kind of faith that does not make us repeat what another, on whose authority we trust, has said to us, but the kind that has become a certainty (dat ons tot zekerheid geworden is), even if everyone else claims the opposite. This is a kind of faith that does not ask for proof, but suffices as is (*dat zich zelf genoeg is*). This is the kind of faith that is impervious to reasoning, and that does not justify its existence through reasoning. This is the kind of faith that locates itself across knowledge, for it moves outside of knowledge's bounds. [...] This is the kind of faith, of which it has been said: blissful are those who do not see, and yet believe."183

It is clear, wrote Vissering, that these are not forms of religious science nor scientific faith (geloovige wetenschap noch wetenschappelijk geloof). There was

<sup>&</sup>lt;sup>176</sup> The contemporary number, based on data from the UN, is 4.154.300 hectare. See: https://nl.wikipedia.org/wiki/Lijst\_van\_landen\_naar\_oppervlakte

<sup>&</sup>lt;sup>177</sup> Vissering, Geloovige Wetenschap, 199.

<sup>&</sup>lt;sup>178</sup> Vissering, Geloovige Wetenschap, 200.

<sup>&</sup>lt;sup>179</sup> Vissering, Geloovige Wetenschap, 200.

<sup>&</sup>lt;sup>180</sup> Vissering, Geloovige Wetenschap, 202. <sup>181</sup> Vissering, Geloovige Wetenschap, 202.

<sup>&</sup>lt;sup>182</sup> Vissering, Geloovige Wetenschap, 202.

<sup>&</sup>lt;sup>183</sup> Vissering, Geloovige Wetenschap, 203.

nevertheless, according to him, a connection between the two, for "[t]he man of science *believes* in his science, and draws from this belief the *strength* to say, not only what is, but what will be and what must be. [my emphasis]" It is difficult to grasp what exactly Vissering was after here, for this seems to be a bit more than a simple *connection*: Vissering here construed science in outright religious terms. The same held for its counterpart, knowledge, for Vissering said: "I *know* my Saviour is alive."<sup>184</sup> This was clearly supposed to be not just 'knowing', but a form of *religious* certainty likened to *scientific* certainty. This certainty, however, as we have seen, was not acquired through empirical research, but came from the inside. For Vissering, laws of logic and physics (some of them, anyway) were simply *there*, "on the inside", unalterable. It was empirical science that was open for empirical revision. Vissering in the examples does not mention political economy, but he was enough of a rhetorician to drive home his point through implication: for him, the laws of political economy too were unalterable, *natural* laws.

Van den Biesen now confused these different forms of knowing, according to Vissering. He wrongly assumed from the fact that, because there is a form of knowledge that we can only arive at through belief in an authority (that we have *reason* to believe though, Vissering would add), we have to arrive at *all* knowledge through faith. That necessitated science to become religious science, but it did not stand, according to Vissering.<sup>185</sup> To argue why, he analyzed what it was exactly that Van den Biesen meant by 'religious science' in the case of political economy, in the form of three questions: why would political economy be irreligious? how could it become a religious science? and: what new insights would this yield?

Van den Biesen considered political science irreligious, according to Vissering, because it had ignored the teachings of the Church in favor of a naked, egoistic pursuit of material prosperity. This pursuit had been established in pagan Antiquity, and had led solely to misery and suffering. Then Christianity came to teach "sacrifice, faith, abnegation, mortification and charity"<sup>186</sup>, to lift man back up, for prosperity could only come through a "pure, truly virtuous (*zedelijke*) state of mind". Here, Vissering noted dryly that Van den Biesen might have explained what exactly this contrast between the flourishing Middle Ages under the dominion of the Church and the misery of the Old World consisted of, but, alas, "the writer has considered this superfluous". The modern political economists now, argued Van den Biesen, had adopted the pagan's naked materialism, in direct opposition to the teachings of the Church. Therefore, their science was irreligious science.<sup>187</sup>

So, in what way could it become a religious science? Easy, says Vissering: Van den Biesen had, after all, argued that faith meant accepting something as truth on the basis of another person's authority.<sup>188</sup> That meant political economy would have to start accepting the authority of other persons. Van den Biesen had a few suggestions; some names which he thought had done a better job at developing a Christian political economy than, say, Smith, Malthus, or Bastiat.<sup>189</sup> This, Vissering considered a grave

<sup>&</sup>lt;sup>184</sup> Vissering, *Geloovige Wetenschap*, 203. The emphasis is in the original, but in capitals with a different font. The effect is similar.

<sup>&</sup>lt;sup>185</sup> Vissering, *Geloovige Wetenschap*, 205.

<sup>&</sup>lt;sup>186</sup> Van den Biesen, as quoted in Vissering, *Geloovige Wetenschap*, 208.

<sup>&</sup>lt;sup>187</sup> Vissering, Geloovige Wetenschap, 205-214

<sup>&</sup>lt;sup>188</sup> Vissering, *Geloovige Wetenschap*, 215. The original is a bit more *Geloven is iets voor waar aannemen* op gezag van een ander.

<sup>&</sup>lt;sup>189</sup> An example of Vissering's subdued but deadly wit, that does not fit the argument here but that I do not want to hold back, and so provide here (in Dutch): "Aan Adam Smith wordt [door Van den Biesen] in 't voorbijgaan verweten (blz. 20), "dat zijn werk onovertreffelijk droog, verward en langdradig is."

mistake, and not just because those were exactly Vissering's favorite writers. He expressed great disappointment about the fact that someone who had warned his readers about the devil's promise of godship, himself revealed to have "the most ordinary and crude faith in authority (*autoriteitsgeloof*) in this or that writer which he has accidentally stumbled upon."<sup>190</sup> Here, we might expect liberal Vissering to push this point, and dismiss this kind of silly *autoriteitsgeloof* across the board. The archetypical liberal was, after all, all for the autonomous, independently reasoning individual.

But Vissering did not reject Van den Biesen's faith in authority as such. Instead, he took another liberal route, arguing that Van den Biesen *should have stayed in his own domain*: if he had told his fellow Catholics that he rejected those economic works because the Church *had said so*, for reasons beyond discussion from believers, Vissering would have left him in peace.<sup>191</sup> It was only because he had entered the domain of (scientific) rational open debate, that he had made himself susceptible to attack. There, his appeal to good faith was void. By taking this argumentative route, separating religion and science into different domains, Vissering was saying: faith in authority is not problematic as such—just do not do it in science.

It is telling then, that Vissering did not end on this point, but after having separated these domains, once again merged them, by ending himself on a religious note—be it with a liberal twist. He addressed Van den Biesen and his fellow believers: "You are free to praise or condemn the men, who practice a scientific discipline and who oblige the public with the fruits of their study, to read or not read their works, to find them interesting and important or dry and dull, to study or reject their systems, to penetrate their ideas or misunderstand them, and do all this to the best of your ability or inability."<sup>192</sup> This was the liberal part: the call to open, rational debate, in which everyone is allowed to participate. "But", wrote Vissering, "I demand from you respect for science." Why, we wonder? Because of its practical benefits for society? Its ability to edify the people? Its penetration of natural matters? No, Vissering demanded respect for the men of science, because "science too is a gift of God, a flicker of light of the highest truth. She is a precious treasure, given to humanity to tend and multiply, and to pass over between generations. [my emphasis]" Van den Biesen had to respect the faith of men of science, for it was their religion, writes Vissering, that allowed them to stick to their scientific calling in the face of the existential void that came with the Socratic realization that the more they learned, the more they realize they knew nothing. It was this perseverance; that these men, with the help of God, persisted in their chosen paths, that Vissering wanted to call religious science.

Here then, we see how Vissering kept his liberal, scientific *and* religious balls in the air: he pulled them apart into different domains, but, eventually, it was faith that formed the basis of the others.

Dit is gewis eene goede reden van verontschuldiging voor den Heer Van den Biesen, als iemand hem mocht verwijten, dat hij het niet gelezen heeft." Vissering, *Geloovige Wetenschap*, 211. <sup>190</sup> Vissering, *Geloovige Wetenschap*, 216.

<sup>&</sup>lt;sup>191</sup> For the separation of domains as a liberal principle, see Te Velde, *Van grondwet tot grondwet*, 135.

<sup>&</sup>lt;sup>192</sup> Vissering, Geloovige Wetenschap, 219.

#### Conclusion

This thesis was set up within the framework of Maas's argument. The idea was to find out what would come floating to the surface if we checked his proposition that science, liberalism and objectivity needed to be understood together, against an individual. To do that, the main question read: to what extent can Simon Vissering be considered a liberal objectivist? It is now time for some conclusions, with which I will hopefully make good on my promise in the preface to poke some holes in Maas's argument.

The choice of topic for this thesis fell on Simon Vissering, because as 'perhaps the most confirmed liberal' *and* an economist, he fit the framework perfectly. We have seen in this thesis how we can indeed interpret his (views on) science as *liberal* (views on) science. The political and scientific domains were intertwined to such an extent, that it was often impossible to determine who was speaking; the liberal or the scientist. We have seen this in his views on political economy, statistics, higher education and religion. The exact points of entanglement have been put forward above, but as paradigm case we could mention the fact that Vissering's epilogue of his handbook provides as 'goal' for political economy, an exhortation full of liberal principles. There could not be a better proof for Maas's point that mid nineteenth century, we cannot view scientific practice separately from the political context it finds itself in.

However, whether liberalism and the rise of objectivity are as closely connected as Maas suggested, is a different kettle of fish. Again, Vissering could be considered an ideal 'test case', thanks to his political credentials. It adds a fourth case study to the three that Maas used to sketch the simultaneous rise of liberalism and objectivity. As is always the problem with case studies, this is of course only one individual, but we can interpret Vissering as reflecting a wider liberal movement (he is seen as the *quintessential* liberal, after all). And as mentioned in the preface, I do not think individual case studies can be wholly innocent with regard to the framework they originate from, anyway. So, can Vissering be said to support Maas's connection between liberalism and objectivism?

The answer is no, not really. First we need to observe that Maas spoke of liberalism in general, but that the examples he mentioned and the times he discussed imply that we must be dealing with *old*-liberalism. We have seen in the chapter on the old-liberal's worldview that this introduces a problematic element to the otherwise nice fit between liberalism and objectivity. For Maas, the crucial change that suggested this link was the shift in authority from individual authoritative regents to the framework of the rule of law. However, the old-liberal's conservative view of society, as opposed to their modern view of the state, hints at far less radical revolution. Old-liberals felt comfortable with the formal changes because they were sure that *they* would be the ones in power, and that society would develop according to their model. It was not that they were anti-authoritarian per se; they just did not want power to lie with the aristocracy. When the historical developments belied their expectations, they cynically turned to nationalism, up to and including the call for a 'strong man'.<sup>193</sup> The best we might be able to say is that they put in place a framework in which objectivity could ultimately flourish-but unintendedly. Which, of course, leaves intact Maas's suggestion to understand objectivity against a political background.

Vissering's views on science corroborate this interpretation. The epistemic virtue of objectivity as self-repression requires the scientist to leave his personality at

<sup>&</sup>lt;sup>193</sup> Te Velde, Gemeenschapszin en plichtsbesef, 56.

home. One of the reasons Maas considers Van Heusde more of a truth-to-nature adept, was that he asserted his personality in everything he wrote. This was certainly the case for Vissering as well. His handbook was as much a scientific manual as it was an admonition to follow the principle of freedom. As we have seen in the preliminary conclusion, his old-liberal moralism badly fits the mold of the objectivist scientist. His aim for both his science and his education was edification and enlightenment. Science had to be practiced for its own sake, but only because that was the best way to ensure these forms of uplifting.

Part of objectivity as self-repression meant abstaining from imposing personal religious views on science (even though the virtues of humility and self-abnegation had more than a little Christian ring to them, as Nietzsche noticed in contempt)<sup>194</sup>. Vissering did advocate inductive reasoning and criticized concocting a theory first, fitting the facts in later, but at the same time, he stressed that his religious views still explicitly formed the basis of his science. He followed Opzoomer in separating the religious from the scientific domain, but only to glue them back together later on.

I am thus doubtful of a strong connection between old-liberalism and the rise of objectivity. I am, however, all for overarching historical generalizations. I therefore want to end this conclusion with a suggestion for further research. Maas's connection between liberalism and objectivity might simply be better located a bit later. I have two reasons for that suggestion. Maas, true to his ideal to embed objectivity in a broader context, briefly mentions developments in art that might reflect the rise of objectivity, too. He, for example, interprets the movement of the Tachtigers as a countermovement to objectivity, because their representatives stressed the need for *l'art pour l'art* and individual expression, which Maas considers antithetical to 'letting the facts speak for themselves'.<sup>195</sup> But the Tachtigers, to the extent that they reflected the broader art movement of naturalism, had a very interesting additional goal with their art-for-itsown-sake: they wanted to show reality as it really was, in all its rawness.<sup>196</sup> They opposed the old-liberals ('de suffe broekjes') for their moralism: whereas the oldliberals had wanted to depict reality as it *ought* to be (a moralistic tinge which we have seen plenty in Vissering's economic views!), they were after reality as it really was. This was exactly the kind of moralism of which I have said that it badly fit the objectivist mold. The art developments might therefore suggest that objectivity arose more towards the end of the nineteenth century, not because of, but in opposition to the old-liberals.

Moreover, the end of the nineteenth century saw the rise of left- and radical liberals (the latter of whom the *Tachtigers* were closely connected to) who defended a similar naturalistic view in the political domain. They too developed their views in opposition to the old-liberals: whereas the elitist old-liberals had considered themselves the head of a societal body, these radical liberals wanted parliament to be a *photograph*, a "faithful picture", of the people. Political reality, too, had to be depicted naturalistic. This could be heard from socialists and anti-revolutionaries too.<sup>197</sup> Also, in terms of an 'objectified state apparatus', it was the left-liberal Hendrik Goeman Borgesius who stressed the importance of statistical questionnaires to get an image of society and check whether government intervention was effective at all. To hold these kinds of views, one has to first consider government intervention an option at all—unthinkable for Vissering.

<sup>&</sup>lt;sup>194</sup> Daston & Galison, *Objectivity*, 232.

<sup>&</sup>lt;sup>195</sup> Maas, 'Johan Rudolph Thorbecke's Revenge', 187.

<sup>&</sup>lt;sup>196</sup> Te Velde, 'Van grondwet tot grondwet', 137.

<sup>&</sup>lt;sup>197</sup> Ibidem, 138.

Combine this with the less than perfect fit between old-liberalism and objectivity I have argued for above, and I would propose further research into whether Maas's connection between objectivity and political ideology might be better shifted more towards the end of the century. Old-liberalism might not have been the instigator of objectivity, but more of a punching bag *against* which objectivist views could develop.

#### Bibliography

Aerts, Remieg., *De letterheren: liberale cultuur in de negentiende eeuw: het tijdschrift* De Gids (Amsterdam 1997).

Boschloo, Teunis., De productiemaatschappij: liberalisme, economische wetenschap en het vraagstuk der armoede in Nederland, 1800-1875 (Amsterdam 1989).

Buys, Johan., 'Levensbericht van Mr. S. Vissering', *Jaarboek KNAW* (Amsterdam 1889) 26-59.

Caljé, Pieter., Student, universiteit en samenleving: de Groningse universiteit in de negentiende eeuw (Hilversum 2009).

Daston, Lorraine and Peter Galison., Objectivity (New York 2010).

Daston, Lorrain, 'Objectivity and Impartiality: Epistemic Virtues in the Humanities', in: Rens Bod, Jaap Maat and Thijs Westeijn (eds.), *Making of the humanities: Volume III, The modern humanities* (Amsterdam 2014).

Forster, Michael, 'Humboldts Bildungsideal und sein Modell der Universität', in: Michael Dreyer, Michael N. Forster, Kai-Uwe Hoffmann and Klaus Vieweg (eds.), *Die Bildung der Moderne* (Marburg 2013).

Gaukroger, Stephen., Objectivity: A Very Short Introduction (Oxford 2012).

Jurkowitz, Edward., 'Helmholtz and the liberal unification of science', *Historical Studies in the Physical and Biological Sciences* 32:2 (2002) 291-317.

Klep, Paul and Ida Stamhuis., *The statistical mind in a pre-statistical era: The Netherlands* 1750-1850 (Amsterdam 2002).

Kossmann, Ernst., De Lage Landen, 1780-1980. Twee eeuwen Nederland en België (Amsterdam 1986).

Maas, Ad., 'Johan Rudolph Thorbecke's Revenge: Objectivity and the Rise of the Dutch Nation State' in: J. van Dongen, H. Paul (eds.), *Epistemic Virtues in the Sciences and the Humanities: Boston Studies in the History and Philosophy of Science* (2017).

Porter, Theodore., Trust in Numbers (Princeton 1995).

Stamhuis, Ida., '*Cijfers en Aequaties' en 'Kennis der Staatskrachten'*. Statistiek in Nederland in de negentiende eeuw (Amsterdam 1989).

Stuurman, Siep, Wacht op onze daden: het liberalisme en de vernieuwing van de Nederlandse staat (Amsterdam 1992).

Theunissen, Bert., Nut en nog eens nut. Wetenschapsbeelden van Nederlandse natuuronderzoekers, 1800-1900 (Hilversum 2000).

Velde, Henk te.,

- 'Van grondwet tot grondwet. Oefenen met parlement, partij en schaalvergroting, 1848-1917', in: Remieg Aerts et al., *Land van kleine gebaren: Een politieke geschiedenis van Nederland 1780-1990* (Nijmegen/Amsterdam 1999).
- Gemeenschapszin en plichtsbesef. Liberalisme en Nationalisme in Nederland (Den Haag 1992).

Vissering, Simon.,

- 'De statistiek aan de Hoogeschool', De Gids 41 (1877) 244-258.
- Herinneringen: Politische Vertoogen (Amsterdam 1863).
- Herinneringen: Verspreide Opstellen (Amsterdam 1863).
- Handboek van praktische staathuishoudkunde (Amsterdam 1878).
- Handleiding tot het statistisch onderzoek (Utrecht 1875).
- Mijn album. Nationaal Archief Den Haag, inventory nr. 2.21.202
- 'Vrijheid, het beginsel der Staathuishoudkunde', De Gids 14 (1850) 571-593.