

‘With the Risk of Being Called Retrograde’. Racial Classifications and the Attack on the Aryan Myth by Jean-Baptiste d’Omalius d’Halloy (1783–1875)

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Abstract. Renowned for his geological studies, Jean-Baptiste d’Omalius d’Halloy also pursued a far less known anthropological career. In different ‘editions’ of his main work, the first Belgian armchair anthropologist tried to divide the world population into races, branches, families and peoples. As a true figure of transition between the 18th and 19th century, he used both human and natural sciences to establish his racial classification, based on natural characters and geography, but also evolution, history and language. Influenced by both William Frederic Edwards and Paul Broca, d’Omalius often defended polygenist views, despite his catholic and monogenist conviction and his refusal to accept the multiple origin of humankind. It is also notable that d’Omalius, like Tacitus and Montesquieu before him, claimed that the sole origin of humankind could to be situated in Northern European, which for d’Omalius still represented the homeland of the most civilized races. Critical of the ‘Aryan myth’, he stated that ‘Germanic’ culture and language had spread over Asia and not the other way around, an argument that caused conflict within learned societies and at international conferences. For the first time, based on new archival material, this article offers an overview of Belgian anthropology before the creation of Société d’Anthropologie de Bruxelles in 1882.

Keywords. Anthropology, Aryanism, Belgium, organism, origin of humankind, racism

1. Introduction: Misleadingly Modest

The aristocrat Jean-Baptiste d’Omalius d’Halloy has been widely acknowledged for his geological studies within the field of the history of sciences (Vanpaemel, 2001, pp. 259–260; Groessens and Van Dyck, 2007; De Bont, 2007). The first aim of this article however is to show that d’Omalius also was one of the first Belgian scholars to deal with anthropological questions (Couttenier, 2005, p. 27; De Bont, 2008, pp. 55–56).¹ A geologist publishing on anthropology might seem peculiar today, but for many natural scientists of his time, the discussion on geological formations was closely intertwined with the debate on natural species, and since ‘man served as the key reference against which all of nature is measured’ (Brown, 2016, p. 54), research on species was inextricably linked to the natural history of humankind (Duchet, 1971, p. 230). Hence, in several ‘editions’ of his

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major anthropological work (d'Omalius d'Halloy, 1840, 1845a, 1850, 1853a, 1859, 1864a, 1869), the geologist d'Omalius tried to classify the world population into races, branches, families and peoples and discussed central questions concerning the origin of humankind.

Although other scholars (Dupont, 1876, p. 276; Couttenier, 2005, p. 374) and, indeed, d'Omalius referred to these publications as mere 're-editions' with changing titles and 'modifications of classification' (d'Omalius d'Halloy, 1845a, p. vi), closer analysis revealed that these texts show meaningful differences. The successive additions and corrections offer an intriguing insight into the shifting ideas of the first Belgian armchair anthropologist publishing within a changing scientific and political climate. Somehow misleadingly modest, d'Omalius explained the changes in his 'small work' as the result of both the 'natural development of humankind' and 'the feeble progress that I was able to realize in a science, still in his infancy, for which I have anything but the necessary knowledge' (d'Omalius d'Halloy, 1845a, p. v). However, the study of new archival material, kept in Brussels, Liège and Paris, shows that d'Omalius was well informed about the English, German and especially the French anthropological debate. Analysis also made clear that d'Omalius was influenced by numerous authors, such as Gottfried Leibniz, Charles de Montesquieu, Johann Friedrich Blumenbach, Georges-Louis Leclerc de Buffon, Georges Cuvier, Bernard de Lacépède, James Cowles Prichard, William Frederic Edwards and Paul Broca. In combination with his exceptionally long and multidisciplinary career, charted in numerous publications between 1839 and 1874, d'Omalius's ideas offer insights on disjunctions and continuities within European ethnology and anthropology, and debates on the location of the common (monogenism) or multiple (polygenism) origin of humankind within 'a nested series of contexts' (Stocking, 1987, p. xii) using diverse methods.

Most monogenists were environmentalist, explaining physical and cultural differences by migration and changing environment. Most were also Aryanists and claimed that human races had a common origin in Asia. Polygenists contradicted this in essence biblical view, and believed that different races originated in different locations and were of a more permanent nature. The second aim of this article however is to make clear that many intermediate positions existed that combined arguments of both 'sides'. The monogenist anthropologist d'Omalius for example accepted the 'polygenist' idea of permanent races in more recent times. As a geologist however, familiar with paleontological insights proving the antiquity of man, he did also accept environmental influence in prehistory. Although he would never accept polygenism, he also called monogenism a still unproven 'hypothesis'. Moreover, influenced by his racial and political views, d'Omalius disagreed with the widely accepted 'monogenist' idea of the Asian origin of humankind and became an adherent of the 'Out of Europe' theory. The result was a quite unique combination of insights, offering the polygenist Paul Broca common grounds for collaboration and forcing monogenists de Quatrefages and d'Omalius to disagree. Due to this complex position d'Omalius also has been misunderstood in recent research. Because scholars trying to prove views quite different than those of d'Omalius selectively copied his ideas on the Teutonic origin of humankind, the Belgian scholar has mistakenly been portrayed as an adherent of the Aryan



Fig. 1. The bronze statue of d'Omalius by Guillaume Geefs (1881) on the Square d'Omalius in Namur represents the Belgian scientist as 'The Creator of Belgian Geology (1738–1874)'. Note that both date of birth and death are wrongly indicated. Moreover, d'Omalius is sided by only two instruments: hammer and map (d'Omalius d'Halloy, 1822). No reference is made to his anthropological career. Photograph by the author.

myth, an idea he fought throughout his career. The third aim of this article therefore is to correct this false image. The text will however start with an overview of d'Omalius's career and main anthropological insights, using his division of humankind into races, branches, families and peoples, as the central guideline (Figure 1).

2. Science and Politics

The young d'Omalius was sent to Paris by his parents to complete his education with visits to theaters, societies and lessons in eloquence, but their only son soon became fascinated

by the Jardin des Plantes and the Muséum d'histoire naturelle (MHN). d'Omalius already knew Buffon's work, but now was able to personally attend the inaugural lecture by Lacépède, Buffon's successor, concerning 'the history of races or the principal varieties of the human species', a topic that would intrigue d'Omalius for more than 70 years.² Lacépède divided human kind into four races, but not all his contemporaries agreed. Cuvier, another Parisian and mentor of d'Omalius, delimited only three races based on skin color: the Caucasian, the Mongoloid and the Ethiopian race (Cuvier, 1817, p. 94). Despite d'Omalius's initial admiration (Dupont, 1876, p. 189), he soon disagreed with Cuvier's ideas on the invariability of species and called his catastrophism 'a purely spurious hypothesis' (d'Omalius d'Halloy, 1831, p. 526; De Bont, 2007, pp. 116–117). As will be demonstrated, d'Omalius would also disagree with Cuvier on the question of human races. In his influential *Eléments de géologie* (1831), the Belgian geologist had already accepted that present forms had evolved from earlier ones, but the 'respectable evolutionist' refused to see the polyp as 'the first stock of its noble race' (d'Omalius d'Halloy, 1831, p. 530; Corsi, 2005, p. 71). As Raf De Bont has shown, the catholic representative of 'spiritual evolutionism' also refused to discuss natural selection as a possible explanation for evolution. Although d'Omalius never openly referred to Charles Darwin, the Belgian scientist was mentioned in the third edition of *On the Origin of Species* in a list of authors already discussing the possibility of new species being 'produced by descent with modification' (Darwin, 1861, p. xvi; De Bont, 2007).

After his education in France, d'Omalius returned to Belgium and became involved in local and national politics. He was the mayor of Skeuvre³ and turned into a 'warm admirer' of king William I. Knighted in the Order of the Netherlands Lion, he was appointed Governor of the Namur Province of the new United Kingdom of the Netherlands (Anonymous, 1822, p. 49; Witte, 2014, pp. 54, 80–81, 319, 410). As a 'southern' Orangist, d'Omalius was elected as a member of the Academy in Amsterdam (van Berkel, 2008). In the opposite direction, many 'northern' Dutch scholars became members of the Royal Academy of Sciences and Letters in Brussels, created in 1772 by Maria-Theresia, but reinstated by William I after a period of inactivity from 1794 onwards. The 33-year-old d'Omalius was nominated as one of the Brussels-based Academy's youngest members (Lavalleye, 1973, p. 49; Hasquin and Strauven, 2010). It is also telling that d'Omalius was promoted to *doctor honoris causa* (1829) at the State University of Leuven, which opened during the reign of William I.⁴ After the Belgian Revolution and the disintegration of the Orangist movement, d'Omalius remained remarkably integrated into Belgian politics and sciences. He was elected senator (1848–1875) and vice-president of the senate (1851–1870). At the Academy, he was repeatedly elected to be director of the sciences class and even became president of the prestigious institute.

Academy membership offered the opportunity to publish in the *Bulletin*⁵ and to establish relations with other scientists, like Adolphe Quetelet. The latter directed one of the 10 themes of the *Encyclopédie populaire* on natural sciences and medicine, and asked d'Omalius to publish three volumes on ethnography, geology and mineralogy (d'Omalius

d'Halloy, 1850, 1853b, 1860a; Vanpaemel and van Tiggelen, 2009). However, since d'Omalius was the only one to deal with ethnography within the Academy, his lectures provoked no debate (De Bont, 2008, p. 56). While d'Omalius tried to explain worldwide racial diversity, Quetelet mainly concentrated on western society and used the concept of the 'homme moyen' to develop his social physics. However, as the British anthropologist Edward B. Tylor already noticed, the 'mean man' method remained unfamiliar among anthropologists until the end of d'Omalius's career (Tylor, 1872, p. 361). Moreover, Geert Vanpaemel recently showed that Quetelet regarded statistics as part of the political and moral sciences and thus had little influence on his colleagues in mathematics and natural sciences (Vanpaemel, 2002, p. 54). Although d'Omalius initially stated that ethnography belonged to the moral and political sciences (or history), because it dealt with 'the origin and customs of nations in different periods' (d'Omalius d'Halloy, 1834, p. 9); later he became convinced that 'the description of peoples' was part of natural science, because its principal 'modes of actions' were derived from natural characters (d'Omalius d'Halloy, 1845a, pp. v, 1).

3. *Deceptively Reluctant*

Despite membership of different learned societies, d'Omalius still lacked colleague specialists in ethnography. Since the 'gentleman scientist' never held a university chair (De Bont, 2007, p. 128), a Belgian ethnological society was never established, the Anthropological Society of Brussels was only created after d'Omalius had died, and no influential foreign anthropologists became corresponding members of the Belgian Academy, d'Omalius joined the Société ethnologique de Paris (SEP) in 1845, where he had the opportunity to discuss important anthropological debates.⁶ Still, d'Omalius operated within a relatively small group of male scientists where 'everyone' had read 'everything'. Hence, d'Omalius did not feel the need to quote his colleagues in his publications. He explained this lack by the limited length of his work and the fact that he only quoted authors formulating new or doubtful facts, 'that not yet had taken their place in science' (d'Omalius d'Halloy, 1845a, p. vi). The absence of clear references makes it difficult to determine d'Omalius's inspirations, but rich archival material and intertextual analysis made clear that d'Omalius texts were 'rhetorically sophisticated artifacts' (Hyland, 1999, p. 341) and were influenced by many scholars, such as Edwards, the creator of the SEP (Blanckaert, 1988; Staum, 2003, pp. 129–130, 202–203).

Without quoting the latter, and thus implicitly assuming that his views were scientifically accepted, d'Omalius was clearly influenced by Edwards's *Des caractères physiologiques des races humaines* (1829), his racial interpretation of history and the 'polygenist' idea of 'permanent types'.⁷ According to d'Omalius, the goal of ethnography was to divide humankind into races, branches, families and peoples based on natural characters, such as forms and colors, and social characteristics, like language, history, customs and religion

(d'Omalius d'Halloy, 1844, p. 99, 1845a, p. 1). However, the monogenist d'Omalius argued that the analysis of more persistent 'zoological characters' always had to dominate 'social characteristics', resulting in a 'more natural division' (d'Omalius d'Halloy, 1839, p. 281).⁸ After all, natural features were believed to be 'the only ones that could not lead to error, because they express a positive fact, that one might even call *unchangeable* in the actual state of the globe' (d'Omalius d'Halloy, 1844, p. 101 [my emphasis]).

The use of historical, linguistic and evolutionist arguments by contrast, easily led to mistakes in classifications. First, d'Omalius agreed with Edwards that language was easily subjected to change (Edwards, 1829, p. 6; d'Omalius d'Halloy, 1839, p. 280). But, if language was the only criterion, did French-speaking, African slaves living in Haiti, belong to the French race? Furthermore, if one day Europe was to submerge, and only the French speaking people in the Alps survive, would future ethnographers, relying only on linguistics, catalogue these people as Haitians, physically changed due to the cold climate? (d'Omalius d'Halloy, 1844, p. 102). Second, the historical study of races was seen as 'launching oneself into more or less hypothetical research', because conquerors often imposed their name on the conquered (d'Omalius d'Halloy, 1839, p. 282, 1845a, p. 7). Third, after reading the work of James Cowles Prichard (Prichard, 1843; Stocking, 1987, pp. 48–53; Augstein, 1999),⁹ d'Omalius refused to accept cultural evolutionism and schemes placing human societies on a three-stage scale of savagery, barbarism and civilization. Evolutionist anthropologists believed that all cultures evolved in a uniform manner, an idea that threatened d'Omalius's rigid classifications (d'Omalius d'Halloy, 1845a, pp. 9–10). According to Prichard for example, contact with civilization resulted in changing psychological and physical characters, and thus implied the possibility of a mutable racial diversity (Prichard, 1843, vol. 1, pp. 101, 146). However, like Edwards, d'Omalius was critical of Prichard's work, accusing him of only selecting arguments that favored the thesis he was defending, making his work 'contestable' (Edwards, 1829, pp. 18, 35; d'Omalius d'Halloy, 1845a, pp. 8–10).

When d'Omalius chose skin color as the natural character to first divide humankind into races, he still seemed to follow Cuvier. However, d'Omalius stated somehow deceptively, that he 'reluctantly' had to deviate from his teacher's classification (d'Omalius d'Halloy, 1845a, pp. vi, 5). Deceptive because d'Omalius had already refuted Cuvier's ideas on catastrophism, and he now added a brown and red race, because 'intermediate nuances' made demarcation lines extremely hard to retrace (d'Omalius d'Halloy, 1839, pp. 279–280). Deceiving also because the two additions did not result in any real innovation, since d'Omalius's work was clearly based on older work by Blumenbach. The latter monogenist had already divided humankind into five 'varieties': the Caucasian, Mongoloid, American, Malay and Ethiopian.¹⁰ Blumenbach regarded the European variety as the primeval one, whereas the African and Asian varieties were seen as the most remote from this 'prototype race' (Blumenbach, 1804, p. 283; Blanckaert, 2003a, p. 145). His classification was primarily based on skin color, but also on aesthetic characters. Because he considered the Georgians – and especially women – as the most attractive Caucasian people, the region

south of Mount Caucasus was seen as the common origin of humankind (Blumenbach, 1804, pp. 192, 299; Bindman, 2002, p. 201; Baum, 2006, p. 77). Although some anthropologists of his time immediately noticed the influence of Blumenbach,¹¹ d'Omalius himself only admitted to this inspiration at a later stage of his career, by stating that it was no shame 'to have followed the same path' (d'Omalius d'Halloy, 1856, p. 800).

4. *The Permanence of Types vs. Latitudes, Attitudes and Alimentation*

Because his ethnographic classification into races was based on skin color, d'Omalius was forced to take a position in the debate on the permanence of types versus the influence of climate and living conditions. Although monogenists and polygenists differed in opinion, differences were not absolute. As already mentioned, most monogenists mainly explained human diversity by environmental causes. However, and this is often overlooked, some also pointed out to the more permanent nature of physical traits. According to Blumenbach, 'degeneration' occurred as a result of migration from the initial origin of humankind and changing milieu, but physical changes could also become hereditary. Descendants of Portuguese colonizers, living in Africa for centuries, whose skin had become black, and Belgians putting their babies asleep on their side, resulting in elongated skulls, offered proof in this case (Blumenbach, 1804, pp. 114, 119–128, 152, 223). Prichard claimed that skin color could change from black to white or vice versa, a proof of the unity of humankind, but physical changes also could become permanent (Prichard, 1843, vol. 1, pp. 127–128; vol. 2, p. 244). Polygenists minimized outside influences and argued that characters of former populations could be retraced among modern peoples, because permanent types kept their physical features despite changing climate. Critical of the work of Prichard, Edwards for example argued that colonists became tanned, but preserved their 'type' for centuries (Edwards, 1829, p. 15). Likewise he argued that historians mistakenly believed that conquered races 'disappeared' as if their features got 'lost in the mass of the population' (Edwards, 1829, p. 41, 1841, p. 119).

d'Omalius also minimized the impact of 'social characteristics', but struggled to combine the idea of permanent races with monogenism. If humankind had one single origin and races were permanent, how could differences be explained? At first, d'Omalius refused to deal with controversial questions concerning 'the origin of the different modifications of humankind' (d'Omalius d'Halloy, 1845a, p. 7). After all, ethnography dealt with the description of peoples and not with their history. Hence, natural classifications could be made independently from the conditions that caused human differences (d'Omalius d'Halloy, 1844, p. 98). Moreover, research was often biased to defend religious beliefs; as if these discussions did not belong to 'an order of things too elevated to be attained by a naturalists' hypothesis' (d'Omalius d'Halloy, 1844, p. 99). In this case, d'Omalius was referring to the freemason Lacépède, who explained racial differences by climate, that appeared more influential after the last geological catastrophes than in the contemporary

world (Blanckaert, 1992, pp. 98–104). The French naturalist also stated that the first humans were black and had turned paler after the earth had cooled down and defended the perfectibility of man in stages from savage to civilized (Lacépède, 1801, p. 23, 1830, vol. 1, p. 254; Blanckaert, 1992, p. 108). Critical on cultural evolutionism, d’Omalius stated that current differences between people were too big to be attributed to ‘the action of causes that have been acting since the last great geological revolutions’. Only ‘the state of things before the last geological revolution’ could exert such ‘energetic actions’ on organisms that these could explain the succession of species (d’Omalius d’Halloy, 1844, pp. 99–100, 1845a, p. 12). When he added that ‘[all] this leads us to believe that the present differences of humankind go back to the order of things before the present state of the terrestrial globe’, the catholic d’Omalius felt the need to reassure his readers that his views were ‘by no means in opposition with the unity of the origin of humankind’ (d’Omalius d’Halloy, 1845a, pp. 11–12).

d’Omalius not only defended arguments frequently used by polygenists, he also refuted most ideas of monogenist evolutionists and environmentalists (Blanckaert, 1992, p. 146). The latter simply could not explain why current populations in similar climates showed physical differences and why the same physical characters were found in diverse environments: a point that Edwards had already made (1829, p. 11). According to d’Omalius ‘latitudes, attitudes and alimentation’¹² could not explain human differences: ‘[...] If warm climate and the deficiency of civilization are considered to be the cause of the elongated snout and woolly hair of Negroes, why are these forms not developed in other warm and barbarous countries?’ (d’Omalius d’Halloy, 1844, p. 100). He accepted that external influences could result in hereditary changes (d’Omalius d’Halloy, 1864b, p. 189), but also believed that these changes were minimal. Especially inspired by Edwards, d’Omalius stated that peoples showed the tendency to ‘preserve their types’ (d’Omalius d’Halloy, 1844, p. 110). Despite his earlier reservations towards history, d’Omalius stated that current principal modifications in humankind had existed since ‘the last geological revolutions;’ a popular argument often used by polygenists. Edwards for example referred to Egyptian monuments on show in London that showed Persians, Semites and Ethiopian Negroes; types that had remained unchanged for centuries (Edwards, 1829, p. 21; d’Omalius d’Halloy, 1845a, p. 11; Blanckaert, 1988, p. 35).

Instead of relying on milieu and manners, the monogenist d’Omalius explained modifications in humankind by crossbreeding, ‘sudden movements’ and ‘slow interventions of more fertile races that will penetrate insensibly in the environment of a less fecund race that will end up disappearing’ (d’Omalius d’Halloy, 1845a, pp. 12–17). However, like the polygenist Edwards, he simultaneously limited the influence of crossbreeding because increasing ‘racial distance’ made the ‘procreation of hybrids’ more difficult since racial diversity could disappear after the *mélange* of hybrids with individuals of pure races, and because races had taken ‘a certain fixity that stems from more or less early times’ (d’Omalius d’Halloy, 1845a, pp. 183, 186). Moreover, hybrids always showed more characteristics of one of their parents, ‘as if nature could not but lend itself to pity over the

establishment of a new form' (d'Omalius d'Halloy, 1844, p. 100). Remarkably, d'Omalius used the same example as Blumenbach to prove the idea of permanent types. Descendants of Portuguese men, settling in the Congo after 1482 and 'uniting successively' with Congolese women, took on characters of the latter, and thus had to be ranged, both by the naturalist and the ethnographer, among the 'Negroes' (d'Omalius d'Halloy, 1839, p. 281).

Although the anthropologist d'Omalius limited the influence of milieu on races in historical times, the geologist in him reached further back in time than Edwards and ancient Egypt. By using paleontology, proving the antiquity of man, d'Omalius now stated that crossbreeding and milieu in a more distant time could have resulted in 'insensible nuances', confirming Leibniz's principle of continuity: *natura non facit saltus*. Still critical of catastrophism, d'Omalius again assured his readers that he believed in an 'admirable order' in the universe, but conservation did not exclude the possibility of change (d'Omalius d'Halloy, 1858b, pp. 563–565; De Bont, 2008, p. 55). Although both d'Omalius and Armand de Quatrefages defended monogenism and the 'unbridgeable distance' between man and ape (de Quatrefages, 1861, pp. 17–33; d'Omalius d'Halloy, 1866, p. 560), the latter distanced himself from the Belgian 'paleontologist', who's insights were only based on material differences and not on psychology. Whereas de Quatrefages separated man from animal on the basis of morality and religiosity, d'Omalius 'only has an eye for incomplete beings and above all, dead beings' (de Quatrefages, 1861, p. 302). In a private letter to the chair holder of anthropology in the MHN, d'Omalius explained that they both were monogenists and that he respected 'our sacred books'.¹³ However, 'we don't *always* agree, despite the fact that I *always* have admired your talent and spirit [...]', d'Omalius continued. While the environmentalist de Quatrefages never questioned monogenism and rejected polygenism, d'Omalius was convinced that racial differences already existed since 'the most ancient historical times'.¹⁴ In a later *séance publique* of the Academy, d'Omalius again made clear that he did not question the 'admirable arrangement' of the universe, but paleontology showed that hereditary transformations could result in far more important changes than the current differences in the human 'genre' (d'Omalius d'Halloy, 1866, pp. 558–559). Still an overall conclusion lacked. As a geologist, d'Omalius clearly accepted transformism and the antiquity of man, but anthropology and paleontology simply lacked sufficient fossil findings to answer the 'scientifically insoluble' question of the origin of humankind.¹⁵ d'Omalius never accepted 'intolerant' polygenism, but also referred to ideas concerning humankind descending from a 'monad', as 'pure hypotheses' (d'Omalius d'Halloy, 1866, p. 559).¹⁶

5. *Progressive Movement vs. Retrograde March*

Notwithstanding d'Omalius's belief in natural characters, the limits of his ethnographic classification immediately became apparent. Despite earlier criticism,¹⁷ d'Omalius continued to use skin color to divide humankind into 'races', although he had to acknowledge

that the epithets white, yellow, brown, red and black were not absolute. These labels only indicated that generally more white, yellow, brown, red, or black people belonged to these groups than other races. As a result, d'Omalius was even forced to classify some people in a certain race 'of which the color does not correspond to the denomination given to that race' (d'Omalius d'Halloy, 1845a, p. 4). The further division of races into branches, families and peoples based on zoological characters, which will be discussed in the next paragraphs, proved even more difficult. d'Omalius still tried to divide the white race into four types, based on the color of eyes, hair and skin, but demarcation lines remained unclear (d'Omalius d'Halloy, 1839, pp. 280, 282). Since he refused to accept historical or linguistic arguments, d'Omalius seemed to have come to a dead end.

Surprisingly, d'Omalius now turned to geography in order to divide races into branches and to escape the impasse. The black race for example, was split into a western and eastern branch. His divisions for the brown race were based on the publications of Jules Dumont d'Urville, who participated in three French expeditions to Oceania and Antarctica. Geography also helped to divide the white race into European, Scythian, Hindu-Persian and Aramean branches; populations that originated respectively to the northwest, northeast, southeast and southwest of the Caucasus Mountains (d'Omalius d'Halloy, 1839, p. 283). By following the assumption that the white race had originated in the Caucasus, east of the Black Sea, d'Omalius again followed Blumenbach who had developed the idea of the 'Caucasian race' (Poliakov, 1974, pp. 178–180; Baum, 2006, pp. 58–89). According to Blumenbach, the Caucasian variety lived in Europe, Northern Africa and parts of Asia (up to the Ganges). The idea that beauty was also to be found in Asia, would lead to the creation of the 'Aryan race', another myth, which will be discussed in the next paragraph (Bindman, 2002, pp. 25, 66, 166).

However, while Blumenbach situated the origin of humankind on the southern slopes of the Caucasus, d'Omalius felt that this could lead to the idea that the Aramean branch was the most civilized, breaking 'all zoological and social affinities', because 'peoples as brown and as barbarous as the nomads of the great African dessert' were placed before 'the most white and civilized people of the earth' (d'Omalius d'Halloy, 1839, pp. 283–284). Europeans northwest of the Caucasus had to be placed first, just like 'white races' had to be placed before 'colored races', establishing a 'decreasing series as regular as possible' (d'Omalius d'Halloy, 1839, p. 284). Later on, d'Omalius left the idea of the Caucasian race all together. Dovetailing geology and anthropology, he stated that the origins of peoples were not be found in mountainous regions, but rather in fertile valleys; a point that was already made by Prichard (Prichard, 1843, vol. 1, p. 183; Baum, 2006, p. 110). In the end, d'Omalius located the single 'starting point' of humankind somewhere between the places of origins of the Teutonic and the Slave people (d'Omalius d'Halloy, 1844, p. 104).

Although he was a monogenistic abolitionist, like Blumenbach, d'Omalius certainly was not egalitarian. They both confirmed the hierarchical ordering of human diversity, making their racial legacy paradoxical (Duchet, 1971, p. 138; Staum, 2003, p. 128; Baum, 2006, p. 89). d'Omalius initially did count Arameans, Scythians and Hindu-Persians

among the white race (d’Omalius d’Halloy, 1839, pp. 289–290), but he also argued that the most civilized people on earth belonged to the European branch of the white race. No longer troubled by his earlier reservations against evolutionism, d’Omalius stated from 1844 onwards that some races, like the Hindus, were affected by a ‘retrograde march’, a notion developed by his ‘adversary’ Prichard (d’Omalius d’Halloy, 1844, p. 110; Prichard, 1843, vol. 1, p. 256). The white race, on the contrary, and especially the European branch, showed marks of ‘progressive movement:’ growing power, territory and population. Thanks to the art of navigation the Europeans had brought half the world ‘under the yoke’ (d’Omalius d’Halloy, 1850, p. 17). Despite the ‘state of stability now imprinted in organic nature’, d’Omalius even compared this progress with the development of more perfect natural species, from fish, through reptiles, to mammals, as it was demonstrated by paleontology (d’Omalius d’Halloy, 1844, pp. 111–112). Note that d’Omalius’s views on progressive European culture differed from Blumenbach’s idea of the Caucasian ‘prototype race’, that was already ‘the most pleasing’ and thus needed no further improvement. However, Blumenbach’s work remained influential since d’Omalius also used aesthetic characteristics to determine races. The white race for example had a beautifully proportionate face, fine lips, big eyes, a big and straight nose, long straight hair and vertical teeth (d’Omalius d’Halloy, 1845a, p. 19). Members of the black race on the contrary had a small skull, flat nose, short curly hair, thick lips, oblique placed teeth and black skin. ‘Negroes’, a family in the western branch of the black race, who lived in the region of the Congo river were believed to be strong, robust, docile, apathetic, but ‘became hard working once forced to labor’ (d’Omalius d’Halloy, 1845a, p. 177). Twenty years before the thirteenth amendment, d’Omalius stated that Negroes were very fertile, given the great number of slaves exported to America, ‘where this cruel commerce is still not forbidden’ (d’Omalius d’Halloy, 1845a, p. 176) (Figure 2).

6. Out of Asia vs. Out of Europe

After a ‘permanent’ racial classification was installed based on skin color, and geography had ‘solved’ the problem of the division of races into branches, d’Omalius still had to split up branches into families and peoples. Surprisingly, again, he now did accept linguistic and historical criteria, allegedly because divisions based on natural characters were impossible due to crossbreeding. The European branch of the white race was divided into a Teutonic, Latin, Slave, Greek and Celtic language family. The Teutons were further separated into German, Dutch and Flemish people, living in the north of Belgium (d’Omalius d’Halloy, 1850, pp. 20–29). According to d’Omalius, the Teutons had a high stature, a high incidence of blue eyes and blond hair and the most white skin color, ‘not even susceptible to browning after living for a long period in the most hot countries’ (d’Omalius d’Halloy, 1850, p. 20). The reformed Christian Teutons had reached the apogee of civilization (d’Omalius d’Halloy, 1845a, pp. 29–30). The French, Spanish, Portuguese, Italian and



Fig. 2. Etchings by Henri Hendrickx on the frontispiece of *Des races humaines ou éléments d'ethnographie*, edited by Jamar (d'Omalius d'Halloy, 1850), showed different races, branches and peoples. On the left page, portraits of Carl Linnaeus (left top) and Abd El-Kader (right top), member of the SEP, famous Algerian military and religious leader opposing French colonial rule, respectively represented the European and Aramean branch of the white race. Both the anonymous Hindu (left bottom) and Malaysian (right bottom) belonged to the brown race. In the middle a Kalmuck of the yellow race. On the right page, members of the red race and a 'Negro' of the black race were represented. In later 're-editions' similar lithographs were made by Léveillé (d'Omalius d'Halloy, 1859, 1864a) and Guillaume Severeyns (d'Omalius d'Halloy, 1869).

Walloon peoples by contrast were ranged in the Latin family (d'Omalius d'Halloy, 1850, pp. 24–28). The Walloons, living in the south of Belgium, were characterized by their average length, black hair and black eyes and a skin susceptible to become brown due to the 'action of the sun' (d'Omalius d'Halloy, 1845a, p. 39).

Note that the Orangist d'Omalius made no effort to stress the unity of the Flemish and the Walloons after 1830 and the creation of a Belgian nation-state (Tollebeek, 1998). Note also that the French speaking d'Omalius located the apogee of civilization in Germanic and not in Celtic culture. This can partly be explained by d'Omalius's political ideas and his admiration for the protestant king William I with a Prussian family history, but d'Omalius was also a warm admirer of Montesquieu and Tacitus.¹⁸ Following stereotypes drawn from Tacitus's *De origine et situ Germanorum*, 'a most dangerous

book', Montesquieu was already convinced that the origin of culture had to be located east of the Rhine, thereby creating yet another *Germanenmythos* (Montesquieu, 1749, vol. 1, pp. 367, 380, 440–441; Kipper, 2002, pp. 47–48; Krebs, 2011, pp. 145–149). While Montesquieu believed that people in colder climates, like youngsters, showed more courage, self-confidence and 'knowledge of superiority', and people in warmer areas were more timid, like old men, other savants disagreed and situated the origin of humankind in Asia; a region that Montesquieu still described as inhabited by barbarous people lacking courage (Montesquieu, 1749, vol. 1, pp. 361, 366). Again, d'Omalius sided with Montesquieu and refuted the widely accepted philological theory of his day, namely that European languages and Sanskrit showed remarkable resemblances, leading to the idea of an 'Indo-European civilization'. In fact, d'Omalius's initial reluctance to accept linguistic criteria in his racial classifications, can be explained by his aversion for Aryanism, a widely accepted myth constructed by a wide range of savants despite the lack of historical, archaeological or paleontological evidence (Poliakov, 1974; Olender, 1992; Arvidsson, 2006).¹⁹ According to Cuvier for example, the white or Caucasian race could be divided into three branches: the Scythian, the Aramean and the Germanic-Indian-Pelasgian branch. The latter three peoples were united into one branch because their languages were affiliated (Cuvier, 1817, p. 96).

According to d'Omalius, however, linguistic or physical similarities offered insufficient proof that Hindus were ancestors of Europeans (d'Omalius d'Halloy, 1844, p. 103). While Cuvier ranged Germanic, Indian and Pelasgian people in one race, d'Omalius refused to place 'the most white people' with 'the most brown people' within the same branch (d'Omalius d'Halloy, 1839, p. 283). As already mentioned, d'Omalius initially united the European, Hindu-Persian, Aramean and Scythian branch in the white race. However, in a new 'edition' of his work, d'Omalius moved the Persians into the Aramean branch (d'Omalius d'Halloy, 1850, p. 40). While Blumenbach still used a portrait of the Persian Mohammed Jumla as a representative of the Caucasian race in his *Abbildungen naturhistorischer Gegenstände* (1810) (Baum, 2006, p. 90), d'Omalius opted for Carl Linneaus in *Des races humaines* (1850). Moreover, in 1844, d'Omalius had already removed the Abyssinians and 'hybrid' Hindus, seen as the result of black and white race mixture and characterized by a 'retrograde' evolution, from the white race and relocated them in the brown race (d'Omalius d'Halloy, 1844, p. 105). Hence, he disagreed with authors who ranged Hindus among the white race, based on osteological and linguistic characters, 'despite their tainted color' (d'Omalius d'Halloy, 1856, p. 801). '[...] Disposed of the Hindus and Abyssinians, the white race forms a much more natural group, more in harmony with its denomination' (d'Omalius d'Halloy, 1844, p. 107). No longer troubled by the Hindu-Persian branch, moving the blurred boundary between Europe and Asia to the west (Baum, 2006, p. 75; Bindman, 2002, p. 14), d'Omalius now no longer needed geography to divide the white race into branches. The analysis of hair, eye and skin color was sufficient after all to determine 'three natural types:' a blond European, a black Aramean and a reddish Scythian branch (d'Omalius d'Halloy, 1850, p. 16).

Already in 1839, influenced by Montesquieu and political and racial views, d'Omalius formulated his 'Out of Europe' theory, by stating that all peoples of the European branch had lived in Europe since the most remote historical times (d'Omalius d'Halloy, 1839, p. 283). Instead of looking for the beginnings of European civilization in Hindustan, wasn't it more likely that the origin of the white race was located in the region where that race was found in its most pure state today? (d'Omalius d'Halloy, 1844, p. 103). Although he was not the first to shed doubt on the Asian origin of European peoples (Poliakov, 1974, pp. 195, 203; Olender, 1992, pp. 1–2) d'Omalius now inverted the direction of migration and argued that Hindustan, initially populated by black people, was conquered by a white population coming from Northwestern European valleys, introducing civilization and 'Indo-Germanic' languages (d'Omalius d'Halloy, 1848, p. 556). By referring to the modern European colonization of Asia by Europe, in a west-east direction, d'Omalius stated that the situation in Asia could be far better explained by assuming that 'in former times, things had happened as they occurred today', a provoking hypothesis that would lead to heated debates both within ethnology and anthropology (d'Omalius d'Halloy, 1856, p. 810).

7. *Hindu Type Polynesians and Submerged Continents*

As has been demonstrated in the first part of the article, by the time d'Omalius joined the SEP he had already established his peculiar anthropological insights, which combined monogenism with elements of polygenism. The following part of the text will further discuss d'Omalius's critique on Aryanism that situated the common origin of humankind in Asia. Much attention will be devoted to his collaboration with the influential anthropologist Broca, but frictions already surfaced in November 1847, when d'Omalius assisted a meeting of the SEP where Pierre Dumoutier presented a selection of 11 plaster casts made during his travels to Oceania with the aforementioned naval officer Dumont d'Urville (1837–1840).²⁰ Based on their physical characters, members of the SEP divided the casts into a coarse Melanesian and more refined Polynesian type, following the 18th century cliché equating Polynesia with a more advanced civilization (Rochette, 2003, p. 257).²¹ Although Dumoutier was convinced that all people shared psychological characters and were capable of improvement – the reason why he made a cast of the Polynesian sacristan and musician Punau – he also confirmed this dichotomy by stating that the Polynesian Mapoumawahi showed European physical features and belonged to the 'Hindu type'. Although they shared monogenist beliefs, d'Omalius did not agree. As an opponent of Aryanism, he argued that Polynesian mythology made no reference to large Asian mammals and languages showed no similarities with Sanskrit (d'Omalius d'Halloy, 1845a, pp. 144–145). Moreover, eastern winds dominated the South Pacific Ocean, making migrations from America more plausible (Figure 3).²²



Fig. 3. On the left, the bust of the Polynesian Mapoumawahi (Aukena islands), now kept in the Musée de l'Homme (Inventory number 859). Dumoutier painted the 'Hindu type' bust with black hair, red lips and a brown skin color. The Tasmanian Gwenny on the right was painted in an overall black, and belonged to the inferior Melanesian type (Inventory number 916).

Marks of continuity between ethnology and anthropology can be found here, since the discussion on Polynesia was repeated within the Société d'Anthropologie de Paris (SAP), where d'Omalius became an associated foreign member only a few months after its creation by Paul Broca.²³ The debate in the SAP (re)started after a presentation by the polygenist Joanny Périer, who claimed that Polynesian islands, inhabited by permanent races, were once united in a now submerged continent (Périer, 1860, p. 192). The monogenist de Quatrefages on the one hand disagreed and he used the same image as d'Omalius: if water levels were to rise in Europe leaving only the mountain peaks suitable for habitation, peoples would show marked physical and moral differences. However, Polynesians showed great cultural homogeneity that only could be explained by migration (de Quatrefages, 1860). The polygenist Broca on the other hand refused to accept the idea of migrations from a common origin and thus agreed with Périer's hypothesis of a lost Polynesian continent to explain Polynesian cultural similarities. Like d'Omalius and de Quatrefages, he compared the situation with a hypothetical submerged Europe, where navigators would only find Sanskrit speaking peoples, all belonging to the family of the 'Indo-German' populations. Broca even referred to eruptions in the Andes and the recent creation of the American continent as a possible explanation for the submersion of Polynesia (Broca in the discussion after Périer, 1860, pp. 214–217).

The geologist in d'Omalius was again compelled to react and politely explained to the Anthropological Society secretary that the American continent was as old as the European one. d'Omalius called the hypothesis of a disappeared continent 'ingenious', but without geological proof, and stated that the Polynesian islands were created by local volcanic activity (d'Omalius d'Halloy, 1860b, pp. 218–219). Later on, Broca kindly quoted the 1845 edition of the '*Traité des races humaines*' [sic] by d'Omalius and now stated that linguists were not to be trusted. Languages were always subject to change, whereas physical elements were much more stable, even after cross-breeding; an argument that d'Omalius had already made (d'Omalius d'Halloy, 1839, pp. 280–281, 1845a, pp. 6–7). When Broca stated that '[...] in anthropological studies, one has to relegate the information furnished by linguistics into the background and give way to physical characters' (Broca, 1860a, p. 254), d'Omalius respectfully went along: 'I think that characters taken from language have to be placed well below characters of the organization' (d'Omalius after Broca, 1860a, p. 262). A few years later, Broca would repeat his argument, quoting d'Omalius and praising his 'erudite and venerable colleague' for his rare modesty because he corrected himself in different editions of his work (Broca, 1862, pp. 270, 292, 317–319; Desmet, 2001, pp. 58, 62; Poliakov, 1974, p. 257).²⁴

Since they both admired Edwards (Broca, 1860a, pp. 255–256, 1873, p. 582; Blanckaert, 1988, p. 46), the monogenist d'Omalius and the much younger polygenist Broca soon agreed on the 'mobility' of linguistic characters, or the 'spontaneous alterations' in language on the one hand (d'Omalius d'Halloy, 1845a, p. 9; Broca, 1862, p. 291), and the more persistent 'zoological' characters, or the 'fixity of human organization' on the other hand (d'Omalius d'Halloy, 1839, p. 281; Broca, 1862, p. 285). Although they were aware that 'osteological characters' were variable and not 'absolutely immutable' (d'Omalius d'Halloy, 1859, p. 10; Broca, 1862, p. 283), both scholars postulated the permanence of types and limited the influence of climate, evolution and cross-breeding (d'Omalius d'Halloy, 1845a, p. 183; Broca, 1862, pp. 283–285), capable of disturbing Broca's racial 'anthropological' and d'Omalius's 'ethnographic' classifications. Broca for example stated that crossbreeding between very different races often resulted in 'almost sterile unions' and thus 'naturally' limited itself (Broca, 1860a, p. 260). d'Omalius again agreed and provided the example of the very fertile 'metis' of Africans and Portuguese (another 'brown' race), who after crossbreeding with Africans for centuries, still spoke Portuguese, but had become as black as Africans; an argument he already made in 1839 (d'Omalius d'Halloy, 1839, pp. 281–282; d'Omalius after Broca, 1860a, p. 262). Likewise, both d'Omalius and Broca were reluctant to accept cultural evolution, as it was discussed by Prichard (Blanckaert, 2003b, p. 52), and Darwin's far-reaching ideas on natural evolution.²⁵ But they did not agree on every subject.

First of all, they differed in opinion on the Aryan myth. Broca first accepted the idea of a 'family of Indo-Germanic peoples' sharing a Sanskrit origin (Broca in discussion after de Quatrefages, 1860, p. 217) and only later called the connection between European languages and Sanskrit debatable (Broca, 1862, p. 297). After all, language parallels did

not necessarily imply a common racial origin. As a polygenist, Broca called the continuing search for a common ancestor typical of the current 'times of ignorance', because linguists, much like Darwin, needed large time spans to explain existing differences between people since their common origin (Broca, 1862, pp. 272, 277). Second, while Broca only seemed to trust anthropological facts based on the analysis of physical characters, and refuted variable linguistic facts, d'Omalius questioned this split: 'Anthropology is a Science [...]', dealing with both social facts and natural history, and as a result, 'social facts are also anthropological facts, just like natural facts'.²⁶ Third, d'Omalius still based his 'ethnographic' classification on skin color in the 1850s and 1860s, a period of growing success for Broca's 'anthropological' analysis. James Hunt, president of the Anthropological Society of London, criticized d'Omalius's terminology: 'ethnography' had to be called 'descriptive anthropology' (Hunt, 1865, p. cvi). d'Omalius did admit that skin color was 'transient' and that every classification based on one physical feature was artificial. Still, osteological features were also susceptible to change (d'Omalius d'Halloy, 1856, p. 803, 1859, p. 10, 1865, p. 247), even more than skin color, which still offered a more valuable basis for classifications with 'less artificial' results (d'Omalius d'Halloy, 1859, p. 10). And last but not least, the geologist d'Omalius questioned Broca's 'presentism' and his arguments against the unity of humankind, 'pleas that, in my eyes, prove nothing, because the author limits himself to explain that the differences between human races are the result of external causes since the earth is in its present state, but he says not a word on what might have occurred before'.²⁷

8. *'We save not a single soul'. The Attack on the Aryan Myth*

Mainly due to the lack of fossil records (Delisle, 2007, p. 44) and non-existent population genetic research, linguistic, cultural and physical resemblances still gave rise to the assumption of a shared Aryan origin, despite the critique of d'Omalius. Discussions continued in the SAP (1864–1865) and during the International Congress for Anthropology and Prehistoric Archaeology (ICAPA) in Brussels (1872). The first discussion started after a presentation by Franz Ignaz Pruner-Bey, an environmentalist defending Aryanism. According to Pruner-Bey, climate determined skin color, as David Livingstone had experienced during his voyages in Africa where his hands and face turned brown. Hence, skin color – the basis of d'Omalius's classification – needed to be combined with the analysis of the shape of the skull (Pruner-Bey, 1864a, pp. 69, 90). As Claude Blanckaert has shown, Pruner-Bey followed the insights of the Swedish anatomist Anders Adolf Retzius, a monogenist contemporary of d'Omalius, who developed the cranial index method, relatively easily obtained by dividing the length by the width of a skull, to classify people into dolichocephalic and brachycephalic races. Pruner-Bey applied the cranial index method to Aryanism, by stating that autochthone European populations were brachycephalic and were invaded by dolichocephalic Aryans (Blanckaert, 1989,

pp. 181–182). Later, he stated that Hindus, Persians, Greeks, Romans, Slaves, Celts and Germans initially had an ‘oval’ cranial shape, that later on had developed into brachycephalic and dolichocephalic skulls due to environmental influences (Pruner-Bey, 1864a, pp. 123–129; Blanckaert, 1989, pp. 184–195).

Both Broca and d’Omalius criticized Pruner-Bey’s insights. After all, accepting Retzius’s method implied that some Europeans suddenly shared traits with ‘primitive’ races: ‘A character that unites both Scandinavians and Negroes in the group of dolichocephalics, for sure is not a natural character [...]’ (Broca, 1863, 38–44; Blanckaert, 1989, p. 175). d’Omalius reacted in an unusually direct manner and posed three questions to the SAP bureau. First, he asked for proof of the Asian origin of European populations. Second, he urged the study of the possibility that languages had come from Europe and had spread over Asia and not vice versa. And third, d’Omalius wondered whether the ‘Celts’ had migrated out of Asia, or rather might be seen as ‘the descendants of autochthonic people of Western Europe’ (Dally, 1864).²⁸ Although it was stated at his funeral that d’Omalius had ‘a lot of friends, a great number of admirers and not one single enemy’ (Brialmont, 1875, p. 61), his challenging questions did put the cat among the pigeons. The above discussion lasted over one year.

After all, most members of the SAP supported Aryanism. According to Pruner-Bey, d’Omalius’s suppositions were based on an ‘unstable basis’. The former still tried to prove the Asian origin of Europeans, by arguing that all large nation movements in the past (Aryans migrating to Europe) and today (Europeans colonizing America) occurred from east to west following the ‘law of ethnic movement’. He also linked the migration of Aryans with findings of dolichocephalic – he no longer used the term oval – skulls in Asia, the Bosphorus and Europe (Pruner-Bey, 1864b, pp. 223–226). In a letter to d’Omalius, Broca informed his Belgian colleague about the counterattack, using military metaphors: ‘Pruner-Bey has shot the whole Retzius artillery at us, but we save not a single soul’.²⁹ Aryan myth defenders used similar combative figurative language. Gustave Liétard for example regarded the Aryans as the porters of civilization and argued that the ‘pure ethnographers’, relying on historical and anatomical characteristics, had not been able to reach the unanimity of linguists and mythologists ‘in a perfectly disciplined battalion, if you will pardon me the expression [...]’ (Liétard, 1864b, pp. 334–335).

Broca himself remained undecided on Aryanism. Despite earlier criticism, he now stated that Indo-European languages and triumphant civilization had an Asian origin. But given his polygenist ideas – and remarkably following the insights of d’Omalius – he also assumed that an autochthonous Celtic population was already living in Europe before the Indo-European era. Moreover, guided by his belief in permanent types, Broca was convinced that the migration of Aryans had not led to the extermination of Europeans, but rather to racial diversity. Changing habits and physical changes, yes, but due to the numerical superiority of indigenous Europeans, foreign blood became diluted, leaving the possibility to recognize ancient types; a point Edwards had already made (Broca after Liétard, 1864a, pp. 303–315). Later on, Broca was again more critical on Aryanism. He

now refused to accept concepts like Pruner-Bey's dolichocephalic 'craniological Celts' the 'archeological Celts' introducing metal working and civilization into Europe from Asia, and the 'traditional Celts,' a group with different physical characters that had spread Indo-European language to Europe. Although he still accepted an Asian root of European languages, the Asian origin of the European races finally was incongruous with Broca's polygenism. In the end, only the 'historical Celts' were left; an autochthonous European population that was already living in Europe before the introduction of Indo-European languages (Broca, 1864).

Only a few other members of the SAP questioned the Asian origin of European races. By referring to the work of d'Omalius, some refused to accept the Asian origin of the 'Celts' and located their origins in Europe (Périer, 1864). Others questioned Pruner-Bey's theory on migrations following 'atmospheric currents' and wondered how it was possible that, although Europe was an Aryan nation, there were no traces of Aryans left (Dally after Liétard, 1864a, pp. 298–300). According to Achille Bonté, Aryanists always ended up with 'distinctions *that bothered them*'. When he accused Pruner-Bey of withholding evidence, quoting him incorrectly, 'mutilating' the text of others and 'falsifying' their ideas in a 'doctorial and jestingly' tone – making him in the end 'outrageously untrustworthy' – all grounds for a rational discussion seemed to have submerged (Bonté after Liétard, 1864a, pp. 289, 295, 297; Bonté, 1865, pp. 34–48). After months of discussions, d'Omalius felt he was offered neither historical, nor linguistic proof of Europeans of Asian origin, despite the 'savant dissertations, that allow me to better understand the considerations that serve as the basis of opinions I want to undermine' (d'Omalius d'Halloy, 1865, p. 238).

Still, it is interesting to see that Paul Broca, the polygenist founder of the Society supported the monogenist d'Omalius, who called the discussion on polygenism and monogenism 'inordinate' (d'Omalius d'Halloy, 1864b, p. 189). As already mentioned, both anthropologists preferred natural characteristics over linguistic arguments and the permanence of types over the environmental influence. Now, Broca also agreed with d'Omalius's ideas on the European origin of Europeans, although he never fully supported the idea of a 'white conquest of black India'. Broca also criticized the Belgian anthropologist indirectly when he pointed to the limited results of anthropological studies based on stature, and hair and skin color. Despite his initial critique, Broca was convinced that cranial and facial measurements were needed to determine brachycephalic and dolichocephalic European races (Broca after d'Omalius d'Halloy, 1864b; Broca after Bonté, 1864). d'Omalius however never performed measurements on skulls and kept using skin color as the primary basis of his classification (d'Omalius d'Halloy, 1869, pp. 2, 7). In other words, d'Omalius still followed Blumenbach, 'with the risk of being called retrograde, which wouldn't suit me bad at the age of 82' (d'Omalius d'Halloy, 1865, p. 247). Note that d'Omalius now applied the Prichardian notion 'retrograde' to himself, a term he had earlier used to describe regressing Hindu culture. By the use of irony, putting both his body and mind in perspective, a rather modest d'Omalius seemed both harmless towards adversaries, and wise to those supporting his theories.

Perhaps comfotingly imperfect, d’Omalius also remained disturbingly sure of himself. After all, d’Omalius copied an argument of Broca here, his results were not as ‘inadequate’ as those of Retzius: ‘[...] I am convinced that not one member of the Society [SAP] thinks that there are more links between a Germanic and a Negro than between a Germanic and a Slave’.³⁰ Seemingly again influenced by Prichardian anthropology, d’Omalius added that ‘the aptitude for civilization’ was the most distinctive character of humankind and thus had to be taken into account in ethnographic classifications, assuming that ‘colored races’ had never attained the same degree of civilization as the ‘white race’. Note however, that d’Omalius indicated that his notion of ‘*aptitude* for civilization’ was very different from Prichard’s ‘*state* of civilization’ (Prichard, 1843, vol. 1, p. 165). While the latter was the result of social relations, the former was ‘a natural character resulting from organization’ (d’Omalius d’Halloy, 1865, p. 248). Although d’Omalius previously criticized Broca for his unlimited trust in anthropological facts and his lack of attention for social facts,³¹ d’Omalius was pleased to notice later on that research had increasingly become based on natural characteristics. Not so modest this time, he stated:

I do have reason to congratulate myself, because today one adopts rather generally a big principle that I strongly have preconized since I have been involved in ethnography, namely that natural characteristics, like forms, colors and aptitudes have to predominate over social characteristics, like languages, customs and historical denominations (d’Omalius d’Halloy, 1872, p. 609).

9. *Selectively Deaf. Or Blind?*

The unresolved question of the origin of humankind still provoked debate during the sixth ICAPA in Brussels in 1872. At the age of 89, d’Omalius was asked to preside over the event. Dupont and especially the French archaeologist Gabriel de Mortillet urged d’Omalius to accept.³² d’Omalius first refused because of his ignorance in archaeology, old age and troubling deafness,³³ but especially de Mortillet insisted, calling d’Omalius ‘a master to all of us concerning anthropology, [...] geology and prehistoric archaeology [...]’.³⁴ d’Omalius finally accepted and was honored at several occasions: during an excursion to Dinant de Quatrefages proposed a toast (Kaeser, 2001, p. 217) and Guillaume Geefs presented his sculpted bust (van Lennep, 1993, pp. 214–215).³⁵

Although d’Omalius did not discuss any new work, Clémence Royer, the first female member of the SAP, defended many of his insights. She refuted the idea of blond Aryans invading Europe and rather believed that the Aryan language with a European origin had spread to Asia (Royer, 1873; Harvey, 1997). The Flemish historian Léon Vanderkindere however, clearly disagreed with d’Omalius.³⁶ In his high-flying doctoral thesis on the influence of race, the freemason Vanderkindere had only referred once in a simple footnote, and in a conceited manner, to the work of the catholic d’Omalius, who had been dealing with the subject for 30 years: ‘We will not deal with the hypothesis of M. d’Omalius d’Halloy, who, in opposition to all science and all critique, insisted on letting the Aryans

come from Europe to Asia' (Vanderkindere, 1868, p. 87). According to Vanderkindere, both Celts and Germanics were Aryan races. Still, the Germanic people, ancestors of the blond Flemish, belonged to an 'individualistic race', given their white skin, robust stature and large brain capacity. The inferior Celts, a 'socialist race' and ancestors of the Walloons, showed prognathism and their lack of colonies was 'an evident mark of their inferiority' (Vanderkindere, 1868, pp. 48, 98). Again, aesthetic qualities, and especially those of women, were used to determine the Germanic face with firm contours, fresh and soft skin and 'the radiance of the blood flowing beneath the transparent skin' (Vanderkindere, 1872, p. 60). The Celtic Walloons had a massive skeleton and dull skin color; in the countryside even worthy of the epitaph 'redskins' (Vanderkindere, 1872, p. 65). Influenced by an emerging Flemish Movement, rather than d'Omalius's Orangism, Vanderkindere stated that Belgium had never known 'a real unity, it is the country of contrasts' (Vanderkindere, 1872, p. 5). Rudolf Virchow, also present during the conference, remained skeptical. Although he agreed that the Walloons and the Flemish belonged to a 'different type', he stated that populations showed an infinite number of 'individual variations', making it impossible to deduce racial characters (Virchow after Lagneau, 1873, p. 561; Virchow, 1873a, pp. 567–568). After the conference however, undoubtedly influenced by increased nationalistic tensions after the 1870–1871 war and the 'Prussian discussion' with de Quatrefages (Jeanblanc, 2004, pp. 77–92; Manias, 2009, pp. 752–754), Virchow stated that the Flemish skull showed clear Germanic characteristics. Still, further anthropological research was needed to see 'how much German blood was still present in the majority of the Flemish' in order to determine the exact descent of the German and dolichocephalic *Urkopf* (Virchow, 1873b, pp. 114–115).

d'Omalius remained remarkably absent during the presentation of his much younger Belgian colleague. In a private letter to Virchow in August 1873, d'Omalius explained that his deafness had prevented him from hearing Vanderkindere's presentation.³⁷ However, d'Omalius did participate in other discussions, making it plausible that the Belgian scholar was rather selectively deaf to avoid discussion with Vanderkindere and to politely decline presidency over the conference. Archival research even suggests that d'Omalius was turning blind rather than deaf at the end of his life. In praising Ernest T. Hamy for his homage on the recently deceased Edouard Lartet (Hamy, 1872), d'Omalius admitted that he had just finished, 'not reading, my infirmities prevent me these days to do that myself, but to hear your eulogy of Lartet being read, and I feel the real need to congratulate you with this work [...]'.³⁸ Although d'Omalius never openly reacted to Vanderkindere, the *eminence grise* of Belgian anthropology clearly disagreed with his Aryan insights and deplored that Virchow followed the opinion of 'Van Kinderen' [sic] in the discussion on Germanics and Celts: 'I see you share an opinion that I permit myself to undermine'.³⁹ d'Omalius also remained unconvinced by craniology – seen by Vanderkindere as the cornerstone of 'direct anthropological study' (Vanderkindere, 1873, p. 569) – a method that so far had been unable to shed light on the matter of the Celts, a population with 'blood of the blond type in their veins' that had its origin among the German Teutons and not in Asia

(d'Omalius d'Halloy, 1859, pp. 36, 110).⁴⁰ In private correspondence to a member of the SAP, d'Omalius added that these blond Celtic Teutons not only had conquered western Europe, but also had migrated to Asia, proving that d'Omalius defended the idea of the European conquest of Asia until the end of his career, 'perhaps due to the stubbornness of an old man'.⁴¹

However, when d'Omalius's letter was read out loud during a meeting of the SAP, the whole debate started all over again. A new and confusing discussion lasted 2 years this time, but again offered little consensus. While some still located the 'Celtic' origins in Asia, d'Omalius and Broca launched their final attack on the Aryan myth. Broca called it a 'fantasy tale' produced by a 'completely imaginary anthropology' (Broca, 1874, p. 663). In reference to his article of 1864, Broca renamed the 'traditional Celts', as linguists defined them, as the 'Celts of ignorance' (Broca, 1873, p. 580). In one of his last publications, d'Omalius kept linking the history of the blond Celts with a Teuton dialect to a Germanic origin, now located in the Danube basin (west of the Black Sea) from where they had conquered Asia (d'Omalius d'Halloy, 1874). However, neither Broca nor d'Omalius would ever witness the end of the discussion on the origin of humankind. It was only in the 1950s and 1960s that the 'locus of hominid origins' shifted from Asia to Africa (Dennell, 2001, p. 45). Needless to say the general acceptance of the 'Out of Africa' theory would have been quite a surprise to d'Omalius, who still stated that African peoples had remained 'barbarous or savage' and 'never had extended their conquests over other races' (d'Omalius d'Halloy, 1845a, pp. 171–172).

10. Conclusion: A Misunderstood Janus Figure

This article aimed to provide an overview of a geologist's anthropological insights, largely unstudied to date, that combined monogenism with polygenist ideas. As a true figure of transition between the 18th and 19th century, d'Omalius used both human and natural sciences to establish his racial classification, based on natural characters, but also on geography, evolution, language, history and paleontology. Although he was admired by many of his peers, his 'retrograde' methodology, rather eclectic combination of anthropological insights, and especially his criticism of Aryanism, also resulted in isolation and misinterpretation. In the end, both polygenists and monogenists could agree, but also disagree with the Janus figure d'Omalius.

The former for example, regarded his choice for skin color as the main criterion for racial classifications as outdated. But they still agreed with d'Omalius's ideas on permanent races and the refusal to accept environmental arguments, although they also deplored his use of migration to explain monogenism. Like d'Omalius never agreed with ad random natural selection in the debate on natural species, although he clearly accepted transformism (De Bont, 2007, pp. 122–123); he also accepted polygenist arguments, but not the idea of a multiple origin, in the discussion on the origin(s) of humankind. Just one year

after d'Omalius's death, and despite earlier collaborations, Broca referred to d'Omalius's 'excellent small treaty' as 'purely ethnological', only dealing with a limited part of anthropology. In the introduction to Paul Topinard's *L'Anthropologie* (1876), Broca stated that a fast developing science required a 'didactic resume', but the *Sur les races humaines* sic responded in no way to this need (Topinard, 1876, p. XI). For the polygenist members of the Société d'Anthropologie de Bruxelles, created in 1882, d'Omalius belonged to a distinct ethnological past (Couttenier, 2005, pp. 36–46). When Emile Houzé discussed the history of racial diversity in Europe for example, he rather followed Topinard. His compatriot remained unmentioned. Inverting the argument of the Bavarian Pruner-Bey, the Walloon Houzé distinguished between autochthonous dolichocephalic races and the conquering brachycephalic Celts, coming from the east (Houzé, 1883, p. 83). Although he already questioned the unity of the 'Indo-European race', it was only in 1906 that Houzé finally agreed with d'Omalius when he wrote: 'Without any reservation, THERE IS NO ARYAN QUESTION' (Houzé, 1906, p. 32).

d'Omalius claimed to be a monogenist, but the latter group members were troubled by his anti-environmentalism, the idea of permanent types and the Germanic origin of humankind, as most monogenists still looked eastwards. After their aforementioned disagreement, d'Omalius and de Quatrefages met again at the first Geographical Congress in Antwerp in 1871. Although the latter now kindly referred to the 'venerable and illustrious' d'Omalius as an ally to defend monogenism, he kept using acclimatization as an argument and finally located the origin of humankind north of the Himalaya (de Quatrefages, 1872; Vandersmissen, 2009, p. 54). Likewise, in a French translation of the *Outlines of Physical Geography*, d'Omalius was called in to complete the 'poorly developed' original manuscript, but in the chapter on human races, the 'Indo-European' Caucasian race was situated in Europe, Africa and Asia, following Blumenbach's racial classification (Houzeau de Lehaie, 1872, pp. iii-iv, 146–149; Vandersmissen, 2009, p. 149). In colonial discourse, d'Omalius's name remained remarkably absent as well, despite shared ideas on European racial superiority and abolitionism. However, during the Geographical Conference in Brussels, convened by king Leopold II and assisted by de Quatrefages in 1876, early advocates of Belgian colonialism used 'Arab slavery' as an alibi for the need to conquer the Congo basin and to 'free' local populations, although the 'Arab slavery' was only to be replaced with a modern form of slavery. From this viewpoint Africans were represented as inferior to European 'civilization', but the Congolese races were not permanently trapped in a state of 'Barbary'. With the help of Europeans to guide the way, they could be civilized. Hence, king Leopold's rhetoric on a 'modern crusade' opening Africa to 'civilization', was rather served by environmentalist arguments and seemed incongruous with d'Omalius's ideas concerning permanent races. Emile Banning, secretary of the Geographical Conference, did not refer to the recently deceased d'Omalius, but found more suitable arguments in Carl Ritter's work (Banning, 1877, p. 55). Sharing the latter's belief in Aryanism, the Caucasian myth and the large impact of milieu on human development, Banning stated that the 'Negro' had an inferior degree of civilization, but was keen to learn. It was sufficient to

organize professional education by Europeans to elevate his moral and social development (Banning, 1877, pp. 66–70; De Bont, 2008, pp. 184–185).

d’Omalius’s complex combination of monogenism and polygenistic arguments not only resulted in isolation, but also in misunderstandings. Ironically, the only place where d’Omalius’s ideas were still welcomed was among members of the ‘Nordic School’ within Aryanism. Omitting the fact that d’Omalius had always attacked this myth, authors like Theodor Poesche and Karl Penka used his ideas concerning the single Teutonic origin of humankind in the 1870s and 1880s, to ‘prove’ that the Aryan *Heimat* was located in Lithuania or Scandinavia, respectively (McMahon, 2007, p. 253). Due to this selective reading, d’Omalius later on became mistakenly seen as a member of the Nordic School himself. Joseph Deniker and similar widely read authors wrongly accredited d’Omalius and Robert G. Latham for having ‘located the habitat of the primitive Aryans in the south or south-east of Russia’, and no longer in Asia (Deniker, 1900, p. 320). According to Daniel Brinton, ‘the eminent Belgian naturalist’ even was the first to have defended the European origin of Aryans, not Latham as was often assumed. ‘Nothing is more erroneous’ (Brinton, 1890, p. 146). As a result, even in more recent publications, following Deniker and Brinton, d’Omalius is remembered as someone he never was: an Aryan myth believer, like Arthur de Gobineau (Day, 1997, p. 110; Bryant, 2001, p. 30; McMahon, 2007, pp. 249–253). However, when the latter published his *Essai sur l’inégalité des races humaines* (1853–1855), in which he stated that white people had an Asian origin and originally had a yellow skin color, d’Omalius saw ‘nothing to prove that opinion. [...] The author shows proof of a brilliant imagination, but I think he abused it. This book contains barely any real scientific research’.⁴² Following this theme, this article hopes to have corrected, or at least highlighted, some of the false interpretations of the opinions and theories of the first Belgian geologist-anthropologist - Jean-Baptiste d’Omalius d’Halloy.

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Appendix

ARB: Académie royale belge.

OHA: d’Omalius d’Halloy Archives.

ULGA: University of Liège Archives.

HCA: Halloy Castle Archives.

NOTES

1. In a recent historical overview of physical anthropology, d'Omalius was only mentioned a few times, but a separate lemma was missing (Day, 1997)
2. Lacépède, 1801, p. 1; Dupont, 1876, p. 183; Copans and Jamin, 1978, p. 33; Blanckaert, 1992 and Chappey, 2002, pp. 218–220
3. A small town close to Halloy where the family of his mother Sophie de Thier de Skeuvre originated from
4. ULGA, HCA, 21
5. d'Omalius's seven anthropological 'notes' were published here (d'Omalius d'Halloy, 1839, 1844, 1845b, 1848, 1856, 1857, 1858a)
6. Diplôme de la Société ethnologique de Paris, ARB, OHA, 18568
7. Thanks to the exceptional rich archives kept in the Belgian Royal Academy, we know that d'Omalius bought Edwards's *Des caractères physiologiques des races humaines* in the year of publication. De l'arrangement de ma bibliothèque, ARB, OHA, 8877. In fact, the title of d'Omalius's major work *Des races humaines* in itself was already a reference to Edwards's [...] *Races humaines*
8. J.-B. d'Omalius to G. A. Brullé, 26 December 1864, ARB, OHA, 8867
9. Broca, 683–684, ULGA, HCA, 21. d'Omalius bought the French translation of Prichard's *Researches into the Physical History of Mankind* (2nd ed.) in 1843. De l'arrangement de ma Bibliothèque, ARB, OHA, 8877
10. In this case, it is even known on which day d'Omalius bought the French translation of Blumenbach's book: 22 floréal of the republican year 13 (12 May 1805). De l'arrangement de ma bibliothèque, ARB, OHA, 8877
11. *Bulletin de la Société ethnologie de Paris*, 1844, p. lvii
12. ULGA, HCA, 21, Broca, 553
13. ARB, OHA, 8867, J.-B. d'Omalius to A. de Quatrefages, 1861(?)
14. ARB, OHA, 8867, J.-B. d'Omalius to A. de Quatrefages, 1861(?)
15. ULGA, HCA, 21, Broca, 683–684
16. d'Omalius did not use the word 'monad' by accident and again referred to Leibniz and his *Monadologie* (1714)
17. Lacépède, 1801, p. 2; Prichard, 1843, vol. 1, pp. 122 and 178; Blanckaert, 1992, pp. 133–138 and Baum, 2006, p. 76
18. d'Omalius owned a French edition of 1749 (printed in Genève by Barillot & Fils), which he bought in March 1805 and an Italian translation: *Lo spirito delle leggi del signore di Montesquieu* (Venezia: Antonio Graziosi, 1773), purchased in 1810. De l'arrangement de ma bibliothèque, ARB, OHA, 8877
19. d'Omalius of course knew the work of his British fellow geologist and owned French translations of *Eléments de géologie* (1839) and *Principes de géologie* (1843–1848), but Lyell's Aryanism might be one explanation for the lack of influence on d'Omalius's anthropological insights
20. Blanckaert, 1988; Renneville, 2000; Staum, 2003 and Sibeud, 2008.
21. *Bulletin de la Société ethnologie de Paris*, 1847, p. 285
22. The same idea inspired Thor Heyerdahl and his crew to sail from Peru to the Polynesian islands on the *Kontiki* (1947) trying to prove Amerindian ancestry of Polynesians. The debate is still ongoing
23. P. Broca to J.-B. d'Omalius, 23 August 1859, ULGA, HCA, 21
24. In his personal notes, d'Omalius also praised Broca for his talent, erudition, clarity and elevation of his scientific insights. Broca, 553, ULGA, HCA, 21
25. Broca, 683–684, ULGA, HCA, 21
26. *Anthropologique (Société)*, 533, ULGA, HCA, 21
27. Broca, 683–684, ULGA, HCA, 21. d'Omalius was referring to Broca (1860b)
28. The exact formulation by d'Omalius is unknown, because Broca lost the notes of the February meeting. After having falsely accused the editor of losing the notes, he relocated the meeting report among his own papers. P. Broca to J.-B. d'Omalius, 16 May 1864, ARB, OHA, 8866

29. P. Broca to J.-B. d'Omalius, 16 May 1864, ARB, OHA, 8866
30. d'Omalius d'Halloy, 1850, p. 98, 1865, p. 248; Broca, 1863, p. 44 and Blanckaert, 1989, p. 180. Ethnographic classifications, Retzius, ULGA, HCA, 25
31. Anthropologique (Société), 533, ULGA, HCA, 21
32. E. Dupont to J.-B. d'Omalius, 8 October 1871, ARB, OHA, 8866. G. de Mortillet to J.-B. d'Omalius, 30 October 1871, ARB, OHA, 8866
33. J.-B. d'Omalius to G. de Mortillet, undated; J.-B. d'Omalius to E. Dupont, 14 October 1871, ARB, OHA, 8866
34. G. de Mortillet to J.-B. d'Omalius, 24 November 1871, ARB, OHA, 8866
35. The bust is now kept in the Royal Museums of Fine Arts of Belgium, Brussels, Inventory number 3112
36. Vanderkindere, 1873; Wils, 1998 and Couttenier, 2005, pp. 29–36, 2015, pp. 6–7
37. J.-B. d'Omalius to R. Virchow, 31 August 1873, ARB, OHA, 8867
38. J.-B. d'Omalius to E. Hamy, 2 October 1874, Musée national d'histoire naturelle (Paris), Hamy Archives, 2254
39. J.-B. d'Omalius to R. Virchow, 17 April 1873, ARB, OHA, 8867
40. J.-B. d'Omalius to R. Virchow, 17 April 1873 and 31 August 1873, ARB, OHA, 8867
41. J.-B. d'Omalius to G. Lagneau, 5 March 1873, ARB, OHA, 8867
42. de Gobineau, ULGA, HCA, 21

REFERENCES

- Anonymous (1822) *Staatsalmanak voor den jare 1822* (Amsterdam and 's Gravenhage: Gebroeders van Cleef).
- Arvidsson, S. (2006) *Aryan idols: indo-European mythology as ideology and science* (Chicago: Chicago University Press).
- Augstein, H. F. (1999) *James Cowles Prichard's anthropology. Remaking the science of man in early nineteenth century Britain* (Amsterdam: Rodopi).
- Banning, E. (1877) *L'Afrique et la conférence géographique de Bruxelles* (Bruxelles: Muquardt).
- Baum, B. (2006) *The rise and fall of the Caucasian race. A political history of racial identity* (New York: New York University Press).
- Bindman, D. (2002) *Ape to Apollo: aesthetics and the idea of race in the 18th century* (Ithaca: Cornell University Press).
- Blanckaert, C. (1988) On the origin of French ethnology. William Edwards and the doctrine of race, in: G. W. Stocking (ed.) *Bones, bodies, behavior essays on biological anthropology* (Madison: University of Wisconsin Press), pp. 18–55.
- Blanckaert, C. (1989) L'indice céphalique et l'ethnogenie européenne: A. Retzius, P. Broca, F. Pruner-Bey (1840–1870), *Bulletin et Mémoires de la Société d'Anthropologie de Paris*, 1(3), 165–202.
- Blanckaert, C. (1992) Une anthropologie de transition. L'acepède et l'histoire naturelle de l'homme (1795–1830), *Annales Benjamin Constant*, 13, 95–111.
- Blanckaert, C. (2003a) Les conditions d'émergence de la science des races au début du XIXe siècle, in: S. Moussa (ed.) *L'idée de « race » dans les sciences humaines et la littérature (XVIIIe et XIXe siècles)* (Paris: L'Harmattan), pp. 133–149.
- Blanckaert, C. (2003b) Of monstrous Métis? Hybridity, fear of miscegenation, and patriotism from Buffon to Paul Broca, in: S. Peabody and T. Stovall (eds.) *The color of liberty histories of race in France* (Durham and London: Duke University Press), pp. 42–70.
- Blumenbach, J. F. (1804) *De l'unité du genre humain et de ses variétés* (Paris: Allut).
- Bonté, A. (1864) Sur les Celtes, *Bulletin de la Société d'Anthropologie de Paris*, 5, 624–633.
- Bonté, A. (1865) Sur la classification des races ariennes, *Bulletin de la Société d'Anthropologie de Paris*, 6, 34–38.
- Brialmont, A. (1875) Discours prononcé aux funérailles de Jean-Baptiste d'Omalius d'Halloy, *Bulletin de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique*, 39, 56–63.

- Brinton, D. (1890) *Races and peoples: lectures on the science of ethnography* (New York: Hodges).
- Broca, P. (1860a) Reprise de la discussion sur le croisement des races humaines, *Bulletin de la Société d'Anthropologie de Paris*, 1, 249–268.
- Broca, P. (1860b) *Recherche sur l'hybridité animale en général et sur l'hybridité humaine en particulier considérées dans leurs rapports avec la question de la pluralité des espèces humaines* (Paris: Claye).
- Broca, P. (1862) La linguistique et l'anthropologie, *Bulletin de la Société d'Anthropologie de Paris*, 3, 264–319.
- Broca, P. (1863) Sur les crânes basques, *Bulletin de la Société d'Anthropologie de Paris*, 4, 38–62.
- Broca, P. (1864) Qu'est-ce que les Celtes ? *Bulletin de la Société d'Anthropologie de Paris*, 5, 457–464.
- Broca, P. (1873) La race celtique ancienne et moderne: Arvernes et Armoricaains, Auvergnats et Bas-Bretons, *Revue d'Anthropologie*, 2, 577–628.
- Broca, P. (1874) Suite à la discussion sur les Celtes; le nom des Celtes, *Bulletin de la Société d'Anthropologie de Paris*, 9, 658–663.
- Brown, R. B. (2016) *Until Darwin, science, human variety and the origins of race* (London: Routledge).
- Bryant, E. (2001) *The quest for the origins of vedic culture: the Indo-Aryan migration debate* (Oxford: Oxford University Press).
- Chappey, J.-L. (2002) *La société des observateurs de l'homme (1799–1804). Des anthropologues au temps de Bonaparte* (Paris: Société des Études Robespierriistes).
- Copans, J. and Jamin, J. (1978) *Aux origines de l'anthropologie française. Les mémoires de la société des observateurs de l'homme en l'an VIII* (Paris: Le sycamore).
- Corsi, P. (2005) Before Darwin: transformist concepts in European natural history, *Journal of the History of Biology*, 38(1), 67–83.
- Couttenier, M. (2005) *Congo tentoongesteld. Een geschiedenis van de Belgische antropologie en het museum van Tervuren (1882–1925)* (Leuven: Acco).
- Couttenier, M. (2015) “One speaks softly, like in a sacred place”. Collecting, studying and exhibiting Congolese artefacts as African art in Belgium, *Journal of Art Historiography*, 12, 1–40.
- Cuvier, G. (1817) *Le règne animal distribué d'après son organisation pour servir de base à l'histoire naturelle des animaux et d'introduction à l'anatomie comparée* (Paris: Fortin, Masson et Cie).
- Dally, E. (1864) Origines européennes, *Bulletin de la Société d'Anthropologie de Paris*, 5, 187.
- Darwin, C. (1861) *On the origin of species by means of natural selection, or the preservation of favoured races in the struggle for life* (London: John Murray).
- Day, J. (1997) Aryanism, in: F. Spencer (ed.) *History of physical anthropology. An encyclopedia* (New York: Garland), pp. 109–112.
- De Bont, R. (2007) A serpent without teeth. The conservative transformism of Jean-Baptiste d'Omalius d'Halloy (1783–1875), *Centaurus*, 49, 114–137.
- De Bont, R. (2008) *Darwin's kleinkinderen. De evolutietheorie in België 1865–1945* (Nijmegen: Vantilt).
- Delisle, R. G. (2007) *Debating humankind's place in nature 1860–2000: the nature of paleoanthropology* (Upper Saddle River: Pearson/Prentice Hall).
- Deniker, J. (1900) *The races of man: an outline of anthropology and ethnography* (London: Walter Scott).
- Dennell, R. W. (2001) From Sangiran to Olduvai, 1937–1960: the quest for ‘centres’ of hominid origins in Asia and Africa, in: R. Corbey and W. Roebroeks (eds.) *Studying human origins: disciplinary history and epistemology* (Amsterdam: Amsterdam University Press), pp. 45–66.
- Desmet, P. (2001) Abel Hovelacque et l'école de linguistique naturaliste: de l'inégalité des langues à l'inégalité des races, in: C. Blanckaert (ed.) *Les politiques de l'anthropologie: discours et pratiques en France (1860–1940)* (Paris: L'Harmattan), pp. 55–93.
- d'Omalius d'Halloy, J.-B. (1822) *Essai d'une Carte géologique de la France, des Pays-Bas et de quelques contrées voisines* (Paris: Berthe).
- d'Omalius d'Halloy, J.-B. (1831) *Eléments de géologie* (Paris: Levrault).
- d'Omalius d'Halloy, J.-B. (1834) *De la classifications des connaissances humaines* (Bruxelles: Hayez).
- d'Omalius d'Halloy, J.-B. (1839) Note sur la classification des races humaines, *Bulletin de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique*, 6(1), 279–293.
- d'Omalius d'Halloy, J.-B. (1840) *Notions élémentaires de statistique* (Bruxelles: Périchon).
- d'Omalius d'Halloy, J.-B. (1844) Deuxième note sur la classification des races humaines, *Bulletin de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique*, 11(1), 97–120.

- d'Omalius d'Halloy, J.-B. (1845a) *Des races humaines ou éléments d'ethnographie* (Paris/Strasbourg: Bertrand/Levrault).
- d'Omalius d'Halloy, J.-B. (1845b) Notes sur les caractères naturels de quelques anciens peuples de l'Europe occidentale, *Bulletin de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique*, 12, 230–241.
- d'Omalius d'Halloy, J.-B. (1848) Observation sur la distribution ancienne des peuples de la race blanche, *Bulletin de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique*, 15, 549–565.
- d'Omalius d'Halloy, J.-B. s.d. [1850] *Des races humaines ou éléments d'ethnographie* (Bruxelles: Jamar).
- d'Omalius d'Halloy, J.-B. (1853a) Introduction ethnographique. Des races humaines, ou éléments d'ethnographie, in: *Dictionnaire d'ethnographie moderne, ou recueil de notions sur les mœurs, usages et caractères des peuples existants sur la terre, d'après les observations et les voyages les plus récents, Nouvelle encyclopédie théologique*, Vol. 37 (Paris: J.-P. Migne), pp. 11–100.
- d'Omalius d'Halloy, J.-B. (1853b) *Géologie de la Belgique* (Bruxelles: Jamar).
- d'Omalius d'Halloy, J.-B. (1856) Sur la classification des races humaines, *Bulletin de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique*, 23, 799–820.
- d'Omalius d'Halloy, J.-B. (1857) Sixième note sur la classification des races humaines, *Bulletin de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique*, 3, 129–137.
- d'Omalius d'Halloy, J.-B. (1858a) Note supplémentaire sur les caractères naturels des anciens Celtes, *Bulletin de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique*, 4, 303–312.
- d'Omalius d'Halloy, J.-B. (1858b) Discours d'ouverture de la classe des sciences, *Bulletin de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique*, 5, 555–565.
- d'Omalius d'Halloy, J.-B. (1859) *Des races humaines ou éléments d'ethnographie* (Paris: Lacroix et Baudry).
- d'Omalius d'Halloy, J.-B. (1860a) *Minéralogie* (Bruxelles: Jamar).
- d'Omalius d'Halloy, J.-B. (1860b) Sur le continent polynésien, *Bulletin de la Société d'Anthropologie de Paris*, 1, 218–219.
- d'Omalius d'Halloy, J.-B. (1864a) *Manuel pratique d'ethnographie ou Description des races humaines: les différentes peuples, leurs caractères naturels, leurs caractères sociaux, divisions et subdivisions des différentes races humaines* (Paris: Lacroix).
- d'Omalius d'Halloy, J.-B. (1864b) Sur les origines indo-européennes, *Bulletin de la Société d'Anthropologie de Paris*, 5, 188–204, 220–223, 260–269.
- d'Omalius d'Halloy, J.-B. (1865) Sur la prétendue origine asiatique des Européens, *Bulletin de la Société d'Anthropologie de Paris*, 6, 237–250.
- d'Omalius d'Halloy, J.-B. (1866) Discours de M. d'Omalius d'Halloy, *Bulletin de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique*, 35, 555–563.
- d'Omalius d'Halloy, J.-B. (1869) *Des races humaines ou éléments d'ethnographie* (Bruxelles/Paris: Muquart/Savy).
- d'Omalius d'Halloy, J.-B. (1872) Discours sur les races humaines, *Bulletin de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique*, 34, 607–623.
- d'Omalius d'Halloy, J.-B. (1874) Sur la question celtique, *Bulletin de la Société d'Anthropologie de Paris*, 9, 44–53.
- de Quatrefages, A. (1860) Discussion sur les croisements des races humaines, *Bulletin de la Société d'Anthropologie de Paris*, 1(1), 190–217.b.
- de Quatrefages, A. (1861) *Unité de l'espèce humaine* (Paris: Hachette).
- de Quatrefages, A. (1872) De l'unité de la race humaine, in: *Compte-rendu du congrès des sciences géographiques, cosmographiques et commerciales tenu à Anvers du 14 au 22 août 1871* (Anvers: Gerrits & Van Merlen), pp. 366–384.
- Duchet, M. (1971) *Anthropologie et histoire au siècle des lumières* (Paris: Maspero).
- Dupont, E. (1876) Notice sur la vie et les travaux des J.-B.-J. d'Omalius d'Halloy, *Annuaire de l'Académie Royale*, 42, 181–296.
- Edwards, W. F. (1829) *Des caractères physiologiques des races humaines considérés dans leurs rapports avec l'histoire. Lettre à M. Amédée Thierry, auteur de l'Histoire des Gaulois* (Paris: Compère Jeune).
- Edwards, W. F. (1841) Esquisse de l'état actuel de l'anthropologie ou de l'histoire naturelle de l'homme, *Mémoires de la Société Ethnologique de Paris*, 1, 109–128.

- Groessens, E. and Van Dyck, M.-C. (2007) Two hundred years of geological mapping in Belgium, From d'Omalius d'Hallo to the Belgian Federal State, *Earth Science History*, 26(1), 75–84.
- Hamy, E. (1872) *Edouard Lartet, sa vie, ses travaux* (Bruxelles: Weissenbruch).
- Harvey, J. (1997) *Almost a man of genius: Clémence Royer, feminism and nineteenth-century science* (New Brunswick: Rutgers University Press).
- Hasquin, H. and Strauven, F. (2010) *Aedes academiaram. The academies and their palace* (Tielt: Lannoo).
- Houzé, E. (1883) Les caractères physiques des races européennes, *Bulletin de la Société d'Anthropologie de Bruxelles*, 2, 80–100.
- Houzé, E. (1906) *L'Aryen et l'anthroposociologie. Etude critique* (Bruxelles: Misch et Thron).
- Houzeau de Lehaie, A. (1872) *Manuel élémentaire de géographie physique* (Mons: Manceaux).
- Hunt, J. (1865) The President's address, *Journal of the Anthropological Society of London*, 3, lxxxv–cxiii.
- Hyland, K. (1999) Academic attribution: citation and the construction of disciplinary knowledge, *Applied Linguistics*, 20(3), 341–367.
- Jeanblanc, H. (2004) Rudolf Virchow et la «race prussienne»: anthropologie et idéologie, in: C. Trautmann-Waller (ed.) *Quand Berlin pensait les peuples. Anthropologie, ethnologie et psychologie (1850–1890)* (Paris: CNRS), pp. 77–92.
- Kaesser, M.-A. (2001) L'internationalisation de la préhistoire, une manœuvre tactique? Les conséquences épistémologiques de la fondation des Congrès internationaux d'anthropologie et d'archéologie préhistoriques, in: C. Blanckaert (ed.) *Les politiques de l'anthropologie: discours et pratiques en France (1860–1940)* (Paris: L'Harmattan), pp. 201–230.
- Kipper, R. (2002) *Der Germanenmythos im deutschen Kaiserreich* (Göttingen: Vandenhoeck & Ruprecht).
- Krebs, C. (2011) *A most dangerous book: Tacitus's Germania From the Roman Empire to the Third Reich* (New York: W. W. Norton & Company).
- Lacépède, B. (1801) *Discours d'ouverture du cours de zoologie de l'an IX. Sur l'histoire des races ou principales variétés de l'espèce humaine* (Paris: Plassan).
- Lacépède, B. (1830) *Les âges de la nature et histoire de l'espèce humaine* (Paris: Levrault).
- Lagneau, G. (1873) Sur les crânes de Furfooz, in: *Congrès international d'anthropologie et d'archéologie préhistoire compte rendu de la 6^e session, Bruxelles 1872* (Bruxelles: Muquardt), pp. 549–566.
- Lavalleye, J. (1973) *L'Académie royale des sciences, des lettres et des beaux-arts de Belgique. 1772–1972. Esquisse historique* (Bruxelles: Palais des Académies).
- Liétard, G. (1864a) Sur les migrations ariennes, *Bulletin de la Société d'Anthropologie de Paris*, 5, 269–277.
- Liétard, G. (1864b) La philologie comparée et les migrations ariennes, *Bulletin de la Société d'Anthropologie de Paris*, 5, 334–349.
- Manias, C. (2009) The *Race prussienne* controversy. Scientific internationalism and the nation, *Isis*, 100(4), 733–757.
- McMahon, R. (2007) *The races of Europe: anthropological race classification of Europeans (1839–1939)* (Florence: European University Institute).
- Montesquieu, C. (1749) *De l'esprit des lois* (Genève: Barillot & Fils).
- Olender, M. (1992) *The languages of paradise: race, religion, and philology in the nineteenth century* (Cambridge: Harvard University Press).
- Périer, J. (1860) Sur les croisements ethniques, *Bulletin de la Société d'Anthropologie de Paris*, 1, 187–189, 190–218.
- Périer, J. (1864) Que les vrais Celtes sont les vrais Gaulois, *Bulletin de la Société d'Anthropologie de Paris*, 5, 590–624.
- Poliakov, L. (1974) *The Aryan myth. A history of racist and nationalist ideas in Europe* (New York: Basic Books).
- Prichard, J. C. (1843) *Histoire naturelle de l'homme comprenant des recherches sur l'influence des agents physiques et moraux considérés comme cause des variétés qui distinguent entre elles les différentes races humaines* (Paris: J. B. Baillière).
- Pruner-Bey, F. (1864a) Questions relatives à l'anthropologie générale, *Bulletin de la Société d'Anthropologie de Paris*, 5, 64–135.
- Pruner-Bey, F. (1864b) Sur l'origine asiatique des Européens, *Bulletin de la Société d'Anthropologie de Paris*, 5, 223–242, 331–334.

- Renneville, M. (2000) *Le langage des crânes. Une histoire de la phrénologie* (Paris: Institut d'édition sanofi – Synthelabo).
- Rochette, M. (2003) Dumont d'Urville's phrenologist: Dumoutier and the aesthetics of races, *The Journal of Pacific History*, 38(2), 251–268.
- Royer, C. (1873) Sur les populations européennes, in: *Congrès International d'Anthropologie et d'Archéologie Préhistoire Compte rendu de la 6^e session, Bruxelles 1872* (Bruxelles: Muquardt), pp. 574–579.
- Sibeud, E. (2008) The metamorphosis of ethnology in France, 1839–1930, in: H. Kuklick (ed.) *A new history of anthropology* (Malden: Blackwell), pp. 96–110.
- Staum, M. (2003) *Labeling people: French scholars on society, race and empire, 1815–1848* (Montreal: McGill-Queen's University Press).
- Stocking, G. W. (1987) *Victorian anthropology* (New York: Free Press).
- Tollebeek, J. (1998) Historical representation and the nation-state in Romantic Belgium (1830–1850), *Journal of the History of Ideas*, 59(2), 329–353.
- Topinard, P. (1876) *L'Anthropologie* (Paris: Reinwald).
- Tylor, E. B. (1872) Quetelet's contribution to the science of man, *Nature*, 5(123), 358–363.
- van Berkel, K. (2008) *De stem van de wetenschap: geschiedenis van de Koninklijke Nederlandse akademie van wetenschappen* (Amsterdam: Bakker).
- van Lennep, J. (1993) *Les bustes de l'Académie royal de Belgique* (Bruxelles: Académie royale de Belgique).
- Vanderkindere, L. (1868) *De la race et de sa part d'influence dans les divers manifestations de l'activité des peuples* (Bruxelles/Paris: Claassen/Hachette).
- Vanderkindere, L. (1872) *Recherches sur l'ethnologie de la Belgique* (Bruxelles: Muquardt).
- Vanderkindere, L. (1873) Sur l'ethnologie de la Belgique, in: *Congrès International d'Anthropologie et d'Archéologie Préhistoire Compte rendu de la 6^e session, Bruxelles 1872* (Bruxelles: Muquardt), pp. 569–574.
- Vandersmissen, J. (2009) *Koningen van de wereld: Leopold II en de aardrijkskundige beweging* (Leuven: Acco).
- Vanpaemel, G. (2001) De darwinistische revolutie, in: R. Halleux (ed.) *Geschiedenis van de wetenschappen in België 1815–2000*, Vol. 1 (Brussel: Dexia), pp. 257–268.
- Vanpaemel, G. (2002) Het getal regeert de wereld: Adolphe Quetelet en de wetten van de samenleving, in: F. van Lunteren (ed.) *De opmars van deskundigen: souffleurs van de samenleving* (Amsterdam: University Press), pp. 45–58.
- Vanpaemel, G. and van Tiggelen, B. (2009) Science for the people. The Belgian Encyclopédie populaire and the constitution of a national science movement, in: F. Papanelopoulou, A. Nieto-Galan and E. Perdiguero (eds.) *Popularising science and technology in the European periphery, 1800–2000* (London: Ashgate), pp. 65–88.
- Virchow, R. (1873a) Sur les crânes des cavernes de Chavaux, de Sclaigneaux, etc, in: *Congrès International d'Anthropologie et d'Archéologie Préhistoire Compte rendu de la 6^e session, Bruxelles 1872* (Bruxelles: Muquardt), pp. 567–568.
- Virchow, R. (1873b) Ueber alt- und neubelgische Schädel, *Archiv für anthropologie. Zeitschrift für naturgeschichte und urgeschichte des menschen*, 6, 85–118.
- Wils, K. (1998) Tussen metafysica en antropometrie. Het rasbegrip bij Léon Vanderkindere, in: G. Vanpaemel and M. Beyen (eds.) *Rasechte wetenschap? Het rasbegrip tussen wetenschap en politiek voor de Tweede Wereldoorlog* (Leuven: Acco), pp. 81–99.
- Witte, E. (2014) *Het verloren koninkrijk: het harde verzet van de Belgische orangisten tegen de revolutie, 1828–1850* (Antwerpen: De Bezige Bij).