

## **The Reddish, Iron-Rust Color of the Native Americans Immanuel Kant's Racism in Context**

*El color óxido rojizo de los nativos americanos*  
*El racismo de Immanuel Kant en contexto*

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### **Abstract**

In this essay, I discuss Kant's views on the "American race." Robert Bernasconi has pointed out that more research on the sources of Kant's ideas on non-white races is needed in order to have a better understanding of his racism. This essay responds to that call in order to show how Kant contributed to on-going discussions on the causes and meaning of human differences. However, I will also focus on his influence on his contemporaries. The reason for doing so is two-fold. Firstly, I will question Irene Tucker's recent attempt to show that skin color was considered a racial sign because of its supposed self-evidence and immediate legibility. By way of a presentation of Kant's views on the "American race," I will show that race mixing formed the core of Kant's racial theory and not the alleged immediacy of racial sight. Secondly, I will focus on his influence in order to question the popular idea that Kant had in his late work developed second thoughts on his racial hierarchy. His appraisal of the work of one of his contemporaries (Christoph Girtanner) clearly shows that the matter is far more complicated than suggested in these interpretations of Kant's racial work.

### **Keywords**

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### Resumen

En este ensayo, discuto los puntos de vista de Kant sobre la “raza Americana”. Robert Bernasconi ha señalado que se necesita más investigación sobre las fuentes de las ideas de Kant sobre las razas no blancas para tener una mejor comprensión de su racismo. Este ensayo responde a ese llamado para mostrar cómo Kant contribuyó a las discusiones en curso sobre las causas y el significado de las diferencias humanas. Sin embargo, también me centraré en su influencia en sus contemporáneos. La razón para hacerlo es doble. En primer lugar, cuestionaré el reciente intento de Irene Tucker de mostrar que el color de la piel se consideraba un signo racial debido a su supuesta evidencia y legibilidad inmediata. A modo de presentación de los puntos de vista de Kant sobre la “raza americana”, mostraré que la mezcla racial formaba el núcleo de la teoría racial de Kant y no la supuesta inmediatez de la visión racial. En segundo lugar, me centraré en su influencia para cuestionar la idea popular que Kant tuvo en su último trabajo de desarrollar segundos pensamientos sobre su jerarquía racial. Su valoración de la obra de uno de sus contemporáneos (Christoph Girtanner) muestra claramente que el asunto es mucho más complicado de lo que se sugiere en estas interpretaciones de la obra racial de Kant.

### Palabras clave

Immanuel Kant, raza, racismo, indígenas americanos, color de la piel

In *The Moment of Racial Sight: A History*, Irene Tucker wants to show how the concept of race works in organizing our ways of understanding differences between people. Her analysis of the history of “the moment of racial sight” attempts to demonstrate the relation between a racial sign that one can immediately recognize and the meaning that this sign is made to bear. She realizes very well that an analysis of this history cannot work without a reading of the work of Immanuel Kant, for he presented the first scientific definition of the concept of race and wanted to show that skin color was the racial characteristic par excellence. As Tucker correctly states: “Immanuel Kant has long been identified as the first prominent European thinker to single out skin color in this way.” In her attempt to position Kant in this history, she argues that the concept of race was meant to account for the immediacy and the self-evidence of the legibility of skin color as a racial sign: “Kant’s racial skin [...] turns likeness from an idea that must be discovered over time to something legible instantly; the mutually constitutive relation between Kantian race and the nascent discourse of modern anatomical medicine makes apparent how such instantaneousness might be useful in organizing the ways in which subjects see other people’s bodies and their own” (Tucker 2012, p. 7).

In this essay, I will discuss Tucker’s view by way of an exposition of Kant’s views on the “American race.” She correctly notes that, in Kant’s view, nature had wisely arranged the possibility of developing racial traits, so that humans were able to live in all climates. Kant wanted to remind his contemporaries of the methodological necessity of clearly defining concepts that guide the inquiry of nature. This conceptual analysis was needed before the empirical data was gathered and analyzed. Kant introduced the concept of race as an *a priori* conceptual tool for the understanding of human differences: organic nature first of all had to be perceived with regard to the laws of heredity. He attempted to make his concept of race more plausible to others, but this also implied that he had to combine mechanical laws of nature with teleology. Much effort has already been put underscoring Kant’s essays on race for his teleology (McFarland 1970, 56-68; Zammito 1992, p. 199-213). The natural history of mankind should aim to provide a systematic view of the diversity observed in nature. However, I will limit myself primarily to Kant’s views on Native Americans, as his wavering ideas on their position in his scheme of racial types show how skin color was not associated with immediacy. Contrary to Tucker, I want to show that Kant’s main concern in his discussion on race was not the instantaneous legibility of skin color but race mixing.

I will also use this opportunity to respond to the call of Robert Bernasconi when he pointed out that the “sources from which Kant drew his portraits of Native American and Blacks need to be studied more rigorously” (Bernasconi 2002, p. 148). Kant’s ideas on the different skin colors were meant to explain the inferiority of non-white races. I will show which sources he used to ground his racism. Kant’s interest in different scientific domains is well known, but his work on races gives us the opportunity to uncover influences on Kant that have often been ignored. However, I will not limit myself to these sources but also pay attention to Kant’s own influence on some of his contemporaries. This reveals much about the reasons for the growing interest in race and natural history in the final decade of the eighteenth century. This allows us not only to again question Tucker’s history of racial sight but also an interpretation of Kant’s racial thinking that is becoming increasingly popular: Kant allegedly had in his late work second thoughts regarding his own views on non-white races (Kleingeld 2007; Kleingeld 2014; Cavallar 2015, p. 130; Flikschuh 2017, pp. 155-158). One recurring argument revolves around Kant’s appraisal of Girtanner in his *Anthropologie in pragmatischer Hinsicht*: “*In Ansehung dieser kann ich mich auf das beziehen, was der Herr Geh. H. R. Girtanner davon in seinem Werk (meinen Grundsätzen gemäß) zur Erläuterung und Erweiterung schön und gründlich vorgetragen hat [...]*” [With regard to this subject I can refer to what Herr Privy Councilor Girtanner has presented so beautifully and thoroughly in explanation and further development in his work (in accordance with my principles)] (AA VII, p. 320; Kant 2007c, p. 415). Contemporary interpretations of Kant’s racial theory primarily limit themselves to Girtanner’s appropriation of the Kantian concepts of race and the underlying theory of inheritance (Sloan 1979, pp. 137-141; Lenoir 1980, pp. 96-99; Querner 1990; Zammito 2003, pp. 75-80; Bernasconi 2014, pp. 245-247). But those who argue that Kant had

second thoughts in his late work often claim that Girtanner had not adopted Kant's racial hierarchy. I will show that this misrepresents Girtanner's interest in Kant.

I will begin this essay with Kant's answer to the question of the origins of the American people. I will discuss the themes related to the Native Americans and see how Kant changed their status from an incipient degenerated race to an independent racial type. This will uncover the importance of race mixing to his racial ideas. Subsequently, we will focus on the scientific research that Kant used to support his wild speculations on the skin color of Native Americans. Thirdly, we will see that Kant's discussion about the physiological aspects of the Native Americans is linked to his explanation of their inferiority. In conclusion, I want to pay attention to the ways in which Kant influenced the work of Christoph Girtanner and Ludwig Emil Cichorius in order to question Tucker's main hypothesis and the idea that Kant had second thoughts on his racial hierarchy in his late work.

### **From the Hunnish to the American Race**

Before Kant started to work on his newly invented definition of race, some thinkers had presented Native Americans as evidence of multiple divine creations. Isaac la Peyrère suggested that they already existed before the creation of Adam (La Peyrère 1655, p. 19). Also Henry Home, Lord Kames, did not believe that a migration could explain the populating of the New World, as the appearance of the aboriginal Americans differed from all other known peoples. He supposed, contrary to La Peyrère, that Native Americans were "planted in America by the hand of God later than the days of Moses," so that "Adam and Eve might have been the first parents of mankind, *i.e.* of all who at that time existed, without being the first parents of the Americans" (Home 1774, p. 75). However, Kant refused to accept polygenesis. Instead, he followed Georges-Louis Leclerc Buffon's suggestion that two organisms belong to the same species when they can have fertile offspring with one another (Huneman 2005). Buffon had indeed stated that "*l'Asiatique, l'Européen, le Nègre produisent également avec l'Américain*" [the Asiatic, the European, and the Negro also reproduce with the American] (Buffon 1766, pp. 312-313). Buffon suggested that this proved the origination of all human beings from the same stock. However, he also thought that climate influenced the colorization of the skin, thus accepting the possibility that black people turned white when they moved to Europe. Buffon's defense of monogenesis implied that he had to explain their presence on the American continent: the "savages" from Canada to the Gulf of Mexico descended from Tatars (Buffon 1749, p. 515). Since Kant would later state that the Native Americans were of *Mongolian* origin, I note that Johann Eberhard Fischer had previously pointed out that the name of the Tatars was often erroneously used for Mongolians (Fischer 1768, p. 28).

However, Kant suggested in response to Buffon that the climate was not a *productive* cause of racial differences but merely an *occasioning* cause for the development of permanently inheritable racial traits. In order to comprehend the possibility of

ineradicable traits, Kant stipulated that the original human stock possessed germs and predispositions before becoming an enduring race. These germs and predispositions were preformed, that is, these were given by nature. Environmental conditions had subsequently triggered the development of one of these germs. Once a germ for a specific racial constitution had been unfolded, the others were held back. This explained in Kant's view the permanence and inheritability of racial characteristics. More importantly, he believed not only that race mixing proved the unity of a species but also which characteristics were in fact racial. The mixture of races inevitably results in characteristics that were midway between those of the parents.

In his 1775 essay on race, Kant distinguished four races: the white race, the "Negro", the Hunnish (Mongolish or Kalmuckish), and the Hindustani race. However, this left him with the problem of the Native Americans. Kant concluded from their features – a beardless chin, black hair, thin lips, red-brown skin color, smaller build, short legs, and half-closed eyes – that they were a derivation of the Hunnish race. These features made them suitable for the cold climate of the northern parts of the New World: the blood needed less time to circulate when parts of the body were smaller, resulting in warmer blood. He subsequently noted that the inhabitants of Northwest America are "*den Kalmucken ganz ähnlich*" [quite similar to the Kalmucks] and "*nach einigen neuen Nachrichten [...] wie wahre Kalmucken aussehen*" [according to some recent reports [...] look like true Kalmucks] (Kant 1775, p. 433, 437; Kant 2013a, p. 48, 52).

Others had indeed observed similarities between Native Americans and Kalmucks. The German missionary David Cranz mentioned similarities between the Greenlanders and the "Kalmucks, Yakuts, Tungusi and Kamchadals" (Cranz 1765, p. 333). The theologian and geologist Anton Friedrich Büsching soon added that this observation would have gained credibility when Cranz had also pointed out that Kalmucks were originally the same people as the Mongolians, as the latter lived as far as the eastern seas, opposite of the North American coast (Büsching 1773, p. 72). Explorers who took part in the Second Kamchatka Expedition (1731-1742) had made similar observations. Gerhard Friedrich Müller reported that some inhabitants in Northwest America had "*platte Nasen, wie die Calmucken*" [flat noses like the Kalmucks] (Müller 1758, p. 219). Georg Wilhelm Steller suggested that Native Americans resembled the Itelmens and the Koryaks who originated from the Mongolians (Steller 1774, p. 246, 297; Gmelin 1748, p. 21). However, not everybody was convinced of this ancestry. The Dutch philosopher and geographer Cornelius de Pauw did not doubt Buffon's suggestion that these inhabitants descended from Tatars. Yet, he demanded a more precise characterization. He immediately added that (despite many reports) the Native Americans were with regard to their ugliness incomparable to the Kalmucks. He suggested that differences between their hands, eyes, noses, and teeth made it impossible to conclude that the Native Americans originated from the latter. Instead, he followed the lead of the Scottish traveler John Bell who argued that they descended from the Tungusi (Bell 1763, p. 231; Pauw 1768, pp. 135-136).

Since Kant was not willing to add more races to his list of four racial types, he had to show how the Kalmuckian origins accounted for the traits of the Native Americans. Consequently, Kant characterized the Native Americans as an *incipient* (*angehende*) race: they had “*in dem Clima noch nicht lange gnug gewohnt [...] um den Charakter der Race desselben völlig anzunehmen*” [not yet lived long enough in a specific climate to take on fully the character of the race]. Their ancestors allegedly migrated from Southwest or Central Asia to the cold regions of Northeast Asia and Northwest America. They had not yet been completely raced when their migration forced the germinal development to come to a standstill. Those who subsequently moved from northern parts of America to the south became a *degenerated* (*ausgehende*) race: they slowly lost some of the traits of the original Hunnish race. Thus, the Native Americans were actually “*eine noch nicht völlig eingearbeitete oder halb ausgeartete hunnische Race*” [a Hunnish race that is still not fully acclimated or half degenerated] (Kant 1775, p. 5; Kant 2013a, p. 48).

This was a clear reminder of Buffon’s theory of degeneration. The latter had argued that species diversify through the effects of food, climate, and heat. Susanne Zantop erroneously writes that “Buffon’s theory of degeneracy had related to the flora and fauna exclusively” (Zantop 1997, p. 227n). He, in fact, also discussed this in relation to the aboriginal Americans. Recent inquiries on the Bering Strait had revealed evidence of a possible route from the Old World to the American continent. Degenerative changes resulted in forms that were smaller, weaker, and less stable in their species as they moved to the New World.<sup>1</sup> Buffon’s ideas on the degeneration of the Native Americans presupposed a deviation from an original line that was stronger and healthier. Additionally, he argued that their character consisted merely of animal instincts. As a result of their cold temperament, they were weak, stupid, and lazy. However, Kant adjusted this view in an important way. According to Buffon (and de Pauw), degeneration could be reversed. Kant argued, on the contrary, that the described characteristics of the Native Americans were part of their race. These traits were permanently inheritable.

However, Kant did not need the theory of degeneration after an alteration of his list of four races: as of 1777, when he published a revised version of his first essay on race, the Native Americans took the place of the Mongolians as an independent racial type. Native Americans were still considered an incipient race, but he deleted all mention of a degenerated race. Later, we will see that Kant still held on to the idea of the American race as an incipient race in order to account for their inferiority. Consequently, the American people were no longer the result of degeneration (*Ausartung*) but a direct deviation (*Abartung*) of the original phylum. More importantly, he structured his new scheme of racial types on the basis of skin color: white, black, copper-red, olive-yellow. Kant had already mentioned in 1775 that the mixture of the Native American with the white yielded

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<sup>1</sup> De Pauw adopted these ideas in his description of the weakness, impotency, and inferiority of the Native Americans. The influence of de Pauw on Kant is discussed in: Gerbi 1973, p. 330; Zantop 1997, pp. 69-70; Zammito 2006, p. 52n.

“the red mestizo” and that of a “Negro” with a Native American was called “the Kabugl (the Black Caribs).” He underscored that this proved “*ihre Abkunft von ächten Racen*” [their origin from genuine races] (Kant 1775, p. 11; Kant 2013a, pp. 53-54). However, in the 1777 version of his first essay on race, he relocated this passage from the section “Of the Immediate Causes of the Origin of these Different Races” to that on the “Division of the Human Species into its Different Races” (Kant 1777, p. 138; Kant 2013b, p. 63). This reveals the importance of race mixing for Kant. The mestizo and caboclo (*Kabugl*) no longer merely *exemplified* the results of race mixing but *justified* his new scheme of four racial types based on skin color. Thus, I cannot underwrite Tucker’s claim about the self-evidence and immediacy of skin color for Kant’s concept of race. Essential to Kant’s exposition on this concept is not this supposed immediacy but the possibility to observe the mixture of ineradicable traits in the offspring.

To understand the importance of race mixing, I want to return to the question why Kant changed his chart of racial types between 1775 and 1777. Erich Adickes suggested that Kant read in Peter Simon Pallas’s *Sammlungen historischer Nachrichten über die mongolischen Völkerschaften* (1776) that the mixture of Russians or Tatars with Kalmucks or Mongolians resulted in children with very beautiful faces (Pallas 1776, p. 99; Adickes 1925, p. 414). Many had emphasized the extraordinary ugliness of Kalmucks (Tavernier 1676, p. 330; Buffon 1749, p. 381; Winckelmann 1764, p. 146). This made an explanation of these beautiful faces problematic since Kant presupposed that children showed racial characteristics that were midway between those of the parents. However, more recently, Bernasconi indicated that the case was not settled for Kant, since the latter pointed out in his 1785 essay on race that Pallas had failed to mention possible Kalmuckish features that might have been inherited (Bernasconi 2012, p. 197). He immediately added: “*Allein die mongolische Eigenthümlichkeit betrifft eigentlich die Gestalt, nicht die Farbe, von welcher allein die bisherige Erfahrung eine unausbleibliche Anartung als den Charakter einer Race gelehrt hat.*” [But the Mongolian particularity actually concerns the shape and not the color; and only with respect to the latter has hitherto existing experience taught us the unfailing heredity as the character of race.] (AA VIII, p. 101; Kant 2007a, p. 154) Pallas gave him at least no reason to doubt the Kalmuckish origin of the Native Americans, since he also mentioned the resemblance of the Kalmuckish facial formation of the Buryats with the indigenous people of North America (Pallas 1776, p. 171). More importantly, Kant felt the need in his 1785 essay to focus more on skin color and less on facial formations. Thus, he returned to his division of races (*Stammracen*) that he presented in his courses on physical geography from 1770: “*In dem warmen Clima ist der Europäer weiß, der Asiater Olivenfarbe, der Africaner schwarz, und der Americaner kupferroth.*” [In the warm climate, the European is white, the Asian olive-colored, the African black, and the American copper-red.]<sup>2</sup> By the time he revised his first essay on race, Kant concluded that there was

<sup>2</sup> Werner Stark has made the transcript available at [http://kant.bbaw.de/base.htm/geo\\_hes.htm](http://kant.bbaw.de/base.htm/geo_hes.htm) (accessed May 2019).

enough empirical evidence linking his concept of race to skin color. But the underlying reason was not the self-evidence of skin color but the claim that only race mixing could reveal which traits were racial.

Subsequently, in 1785, Kant rejected the idea that the plucking of the beards by American Indians could bring about alterations in the generative powers. This was nothing more than a “ghost story or case of magic” (AA VIII, p. 96; Kant 2007a, pp. 150-151). In his first essay, he had written that their beardlessness was a racial trait, but the geographer Eberhard August Wilhelm Zimmermann had soon afterwards confronted him on this matter, because others had clearly pointed out that this feature was a result of the plucking of the hair (Zimmermann 1778, pp. 71-72). But Kant rejected the suggestion that racial characteristics could have been artificially generated. Nature preserved itself so that these modifications did not affect the species or races as such. Considering the vagueness regarding causes of characteristics that he had previously considered racial traits, Kant felt the need to limit his exposition on the concept of race to the trait about which there seemed to be consensus: skin color. Surprisingly, Tucker denies the importance of Kant’s first two essays on race by stating that these were written “during Kant’s pre-critical period.” This is obviously a misconception. But she is also mistaken when she claims that these essays do not “analyze skin as a particularly salient sign of racial difference” (Tucker 2012, p. 255n). As of 1777, skin color became the primary marker for his scheme of racial types.

The renewal of his scheme of racial types with the Americans as an independent race was, thus, a result of his greater emphasis on skin color. Also, Kant seemed to have had difficulties categorizing the skin color of the Mongolian race. He initially mentioned a “red-brown” skin color of the Kalmuckish race, but this color was commonly ascribed to the Native Americans (Blumenbach 1776, p. 79). More importantly, Pallas had written in 1771 that the Kalmickish skin color was “relatively white” (Pallas 1771, p. 308). The yellow-brown coloring of the skin of the children and men was, according to him, effectuated by the sun, since they were (partially) naked and often outside. The women were in contrast often very white. There is enough evidence that Kant read Pallas’s 1771 report: both noted that the Torguts and the Dzungarians were a mixture of Kalmucks with Tataric blood (Pallas 1771, p. 309). Thus, considering his fascination for skin color, Kant must also have noticed that Pallas reported about the white skin color of Kalmucks. This explains why we find in student notes of Kant’s course on physical geography that the Kalmucks actually belonged to the white race (Starke 1833, p. 353). We read in the student notes from the mid-1770s that he relinquished the idea of a Mongolian race when he remarked that Mongolians were in fact a variety of the white race.<sup>3</sup>

### **Fixed Air and a Reddish, Iron-Rust Skin Color**

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<sup>3</sup> Werner Stark has made the transcript available at [http://kant.bbaw.de/base.htm/geo\\_mes.htm](http://kant.bbaw.de/base.htm/geo_mes.htm) (accessed May 2019).



Kant also wanted to show what caused the specific skin color in order to demonstrate the possibility of combining the mechanical laws of nature with teleology. All non-white races were, according to Kant, confronted with a large amount of toxic gasses. Their lungs needed additional help with the removal of these gasses from the body. The skin color was for Kant a clear testimony that the skin was contributing to this process. The abilities of these races to remove certain kinds of air resulted from the development of a specific germ that was already present (albeit undeveloped) in the first human stock. It was, thus, a smart move of nature to give the original human beings all germs that were needed to survive in different climates. Before presenting his wild speculations on the causes of the different skin colors, Kant noted: “*Das Zweckmäßige in einer Organisation ist doch der allgemeine Grund, woraus wir auf ursprünglich in die Natur eines Geschöpfs in dieser Absicht gelegte Zurüstung und, wenn dieser Zweck nur späterhin zu erreichen war, auf anerschaffene Keime schließen.*” [The purposive character in an organization is surely the general reason for inferring a preparation that is originally placed in the nature of a creature with this intent, if this end could only be obtained later on.] (AA VIII, pp. 102-103; Kant 2007a, 156) Providence was wise enough to produce racial differences. With regard to the Native Americans, Kant argued that the “*Luftsäure*” [acidic air] in the cold regions effectuated their “*röthliche Eisenrostfarbe*” [reddish, iron-rust color]. Although Kant seemed to hesitate between 1775 and 1777 whether this skin color was a result of acidic air (*Luftsäure*) or saline acid (*Salzsäure*) (Adickes 1925, p. 421n), in 1785 he settled for his earliest hypothesis of acidic air.

In 1777, Kant wrote: “*Man schreibt jetzt mit gutem Grunde die veschiedenen Farben der Gewächse dem durch unterschiedliche Säfte gefällten Eisen zu. Da alles Thierblut Eisen enthält, so hindert uns nichts die verschiedene Farbe dieser Menschenracen eben derselben Ursache beizumessen.*” [We now, with good reason, ascribe the different colors of plants to the iron precipitated through different juices. There is also nothing to prevent us from attributing the different colors of the human races to exactly the same cause, since the blood of all animals contains iron.] (Kant 1777, p. 156; Kant 2013b, p. 63) Others had indeed discovered iron particles in plants when they managed to separate these with a magnet from the ashes. Consequently, the French physician and chemist Étienne François Geoffroy wanted to know whether these iron particles were already present in fresh and unburnt plants or a result of the combustion. Although Geoffroy concluded that iron was not detectable in the original plant, Louis Lemery maintained that all earth contained iron and that the roots of plants absorbed this. Iron would subsequently disseminate through them (Lemery 1706). The English natural philosopher Edward Delaval conjectured much later that “the colour of the *intire* (sic) *vegetables* arises also from the iron, so universally diffused throughout their substance in their growth” (Delaval 1765, p. 27).<sup>4</sup> The analogy between animal blood and plants seemed

<sup>4</sup> A German translation of Delaval’s book was available as of 1788 (Delaval 1788), but German extracts of Delaval’s findings had already circulated much earlier (Delaval 1766).

legitimate to Kant because Nicolas Lemery had already discovered iron particles in animal blood (Lemery 1713). Kant's natural history of mankind was, thus, still in need of its own Delaval who would be able to show that skin color was directly related to the effects of air on the iron particles in blood.

Kant thought that the copper-red skin color of the Native Americans was a result of the effects of great amounts of fixed air (carbon dioxide) on these iron particles. The Scottish physician Joseph Black had discovered in 1754 that animal respiration produced fixed air: exhaled air that went through limewater (a diluted solution of calcium hydroxide) resulted in a white precipitate of calcium carbonate. This discharge from the lungs must, therefore, be a cause of rendering common air unfit for respiration. However, one is still far from explaining a copper-red skin color. In the mid-1780s, Kant found another clue for his hypothesis in the work of the Italian chemist Felice Fontana: "*Wenn der Abt Fontana in dem, was er gegen den Ritter Landriani behauptet, nämlich: daß die fixe Luft, die bei jedem Ausathmen aus der Lunge gestoßen wird, nicht aus der Atmosphäre niedergeschlagen, sondern aus dem Blute selbst gekommen ist, recht hat: so könnte wohl eine Menschenrace ein mit dieser Luftsäure überladenes Blut haben, welche die Lungen allein nicht fortschaffen könnten, und wozu die Hautgefäße noch die ihrige beitragen müßten (freilich nicht in Luftgestalt, sondern mit anderem ausgedünstem Stoffe verbunden).*" [If Abbot Fontana is right about what he maintains against the cavalier Landriani, namely that the fixed air which is discharged from the lungs in every exhaling did not precipitate from the atmosphere but rather comes out of the blood itself, then a human race could well have blood that is overloaded with this aerial acid, which the lungs alone could not remove and to which removal the vessels of the skin would still have to contribute their share (to be sure, not in the shape of air but combined with some other perspired material.)] (AA VIII, pp. 103-104; Kant 2007a, p. 157)

The discussion between Felice Fontana and Marsilio Landriani to which Kant alluded was initiated when the Dutch botanist Jan Ingenhousz wrote in his celebrated *Experiments on Vegetables*: "Abbé Fontana found that an animal breathing-in either common or dephlogisticated air renders it unfit for respiration by communicating to it a considerable portion of fixed air, which is generated in our body, and thrown out by the lungs as excrementitious" (Ingenhousz 1779, p. xlvi). However, Landriani soon questioned Fontana's claim about the ability of an organic body to generate fixed air (Landriani 1781, p. 77),<sup>5</sup> as Antoine Laurent Lavoisier had shown earlier that common air turned into fixed air when it was combined with phlogiston (Lavoisier 1775). Thus, Landriani insisted that fixed air was created as soon as respired (phlogisticated) air came into contact with common (atmospheric) air. If fixed air was added by the body to the phlogisticated air in the lungs, then one would also expect an increase in the exhaled air. In his reply to Landriani, Fontana claimed that he did not recall having "*detto, o scritto che l'aria fissa,*

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<sup>5</sup> A partial, German translation of the text was published in: von Crell, 1783.

*che sorte dai polmoni, sia generata dentro del corpo, potendo essa trovarsi benissimo nei cibi, e nel chilo*” [said, or written that the fixed air, which arises from the lungs, is generated inside the body, since it can very well be found in food and in the chyle] (Fontana 1782, p. 662).<sup>6</sup> Animals exhaled a mixture of phlogisticated and fixed air. During his experiments with fixed air that came into contact with blood, Fontana not only noticed that blood (without being agitated) polluted the air but also that the quantity of fixed air had increased. Fontana speculated that food and chyle released the fixed air that these products could not maintain. Something similar was to be expected when blood reached the lungs: it would impart the fixed air into the lungs since the blood was not able to maintain it.

Kant suggested that this might support a theory on the causes of the specific skin color of the Americans. But he still had to show that those who moved to North America were in fact confronted with large quantities of fixed air. The ancestors of Native Americans allegedly lived in a climate that occasioned the development of the physiological ability to remove great quantities of this air from the blood. The descendants of the original humans who migrated from North Asia to the American continent crossed cold regions and this forced the development of germs that gave rise to their specific skin color. The American race needed a specific bodily constitution, because they had arrived “*aus dem Nordosten von Asien, mithin nur an den Küsten und vielleicht gar nur über das Eis des Eismeereres in ihre jetzigen Wohnsitze [...]. Das Wasser dieser Meere aber muß in seinem continuirlichen Gefrieren auch continuirlich eine ungeheure Menge fixer Luft fahren lassen, mit welcher also die Atmosphäre dort vermuthlich mehr überladen sein wird, als irgend anderswärts*” [in their present habitats from northeast Asia, hence only along the coasts and perhaps even across the ice of the polar sea. But the water in these oceans must continuously expel an enormous amount of fixed air in its continuous freezing, with which the atmosphere there is presumably more overloaded than anywhere else] (AA VIII, p. 104; Kant 2007a, p. 157). Thus, Kant found in the coldness a clue that fixed air might have played an essential role. The English chemist Joseph Priestley had already noticed that water easily absorbs fixed air, which led to the discovery of the artificial production of carbonated water. He expected that coldness would promote this absorption, but when he “put several pieces of ice into a quantity of fixed air, confined by quicksilver, [...] no part of the air was absorbed in two days and two nights; but upon bringing it into a place where the ice melted, the air was absorbed as usual” (Priestley 1772, pp. 10-11).

But, then, how did Kant relate the observations on the iron particles in blood to those on fixed air? One important clue for his speculations was offered by “*einer der neuern Seereisenden, dessen Namen ich jetzt nicht mit Sicherheit nennen kann*” [one of the

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<sup>6</sup> An extract was published in German in 1785, although this did not explicitly mention the quarrel with Landriani (Fontana 1785).

more recent seafarers, whose name I cannot give with certainty right now]: this seafarer had described the skin color as “Eisenrost, mit Öl vermischt” [iron rust mixed with oil] (AA VIII, p. 175; Kant 2007b, p. 211). This was, in fact, reported in John Hawkesworth’s edited version of the papers of James Cook and the botanist Joseph Banks. The ascribed color is mentioned when the explorers encountered inhabitants of Tierra del Fuego (Hawkesworth 1773, p. 55).<sup>7</sup> The Spanish explorer Antonio de Ulloa (whose work Kant had read) had already written: “Visto un Indio de qualquier Region, se puede decir que se han visto todos en quanto al color y contexture.” [If one has seen one Indian of any region, it may be said that they have all been seen in terms of color and build.] (Ulloa 1772, 308) This gave Kant reason to believe that all Native Americans had an iron-rust skin color. This characterization supposedly proved that fixed air would give “den Eisentheilchen im Blute die röthliche Rostfarbe [...], welche die Haut der Amerikaner unterscheidet” [the iron particles in the blood the red rust color which distinguishes the skin of the Americans] (AA VIII, p. 104; Kant 2007a, p. 157). Priestley had namely observed that iron-rust “gave a great deal of air, two-thirds of which was fixed air, and the rest was not affected by nitrous air, and extinguished a candle; so that the whole produce seemed to be fixed air, only with a larger residuum of that part which is not miscible with water than usual. At another time, however, I got from the rust of iron fixed air that was very pure, there being little of it that was not miscible with water” (Priestley 1775, pp. 111-112). Since the rust of iron mostly contained fixed air, Kant expected iron particles in blood to rust when these were exposed to large amounts of fixed air. Since he also presupposed that the vessels of the skin contributed to the removal of fixed air from the blood, this iron-rust color shone through the upper layer of the skin. Also Blumenbach adopted the characterization of the skin color as “iron rust mixed with oil,” but he did not link the color to iron particles in blood (Blumenbach 1797, p. 62). Kant took the description more literally than was probably intended.

Kant did not hesitate to link his explanation of skin color of the Native Americans to their supposed inferiority. For instance, in 1777, Kant stated with regard to the white race that “dieses in den Säften aufgelösete Eisen gar nicht niedergeschlagen [würde], und dadurch zugleich die vollkommene Mischung der Säfte und Stärke dieses Menschenschlags vor den übrigen bewiesen” [the iron dissolved in these juices might have been not at all precipitated, thereby demonstrating both the perfect mixing of juices and the strength of this human stock in comparison to others] (Kant 1777, pp. 174-175; Kant 2013b, p. 68). The connection between the “perfect mixing of juices and the strength of this human stock” tells us that the inferiority of the so-called American race was for Kant linked to the understanding of its constitution. Instead of questioning the assumed inferiority of the Native Americans, he perceived it as a fact that still needed an explanation.

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<sup>7</sup> A German translation appeared in 1774 (Hawkesworth 1774, p. 55).

It is known that Kant showed little interest in opposing slavery (Bernasconi 2002, pp. 148-152). In 1777, he even claimed that “*man sich in Surinam der rothen Sklaven (Amerikaner) nur allein zu häußlichen Arbeiten [bedient], weil sie zur Feldarbeit zu schwach sind, wozu man Neger braucht*” [red slaves (Americans) are used in Surinam only for domestic work, because they are too weak for fieldwork – for which Negroes are needed] (Kant 1777, p. 150n; Kant 2013b, p. 333n). The passage was amended to his suggestion that the reddish, iron-rust skin color and the “*halb erloschene Lebenskraft*” [half-extinguished life power] of Native Americans were a direct result of the cold region. The notion of “red slaves” first appeared in the *Journal politique ou gazette des gazettes* (1773): “*Outre les Negres de Guinée, il y a encore quelques Indiens des rivieres [sic] de l’Orenoque & des Amazones, connus sous le nom d’esclaves rouges; ceux-ci, moins robustes que les autres, sont, pour cette raison, presque tous employés à des occupations domestiques.*” [Besides the Negroes of Guinea there are also some Indians from the rivers of the Oronoque and the Amazon which are known under the name of the *red slaves* and because of their lesser strength are used almost solely for work in the house.] (Anonymous 1773, p. 67) A German translation was published soon afterwards in the *Encyclopädisches Journal* (Anonymous 1774, pp. 202-203) and, subsequently, reappeared in the German translation of Philippe Fermin’s *Description générale, historique, géographique et physique de la colonie de Surinam* (Fermin 1775, p. 114).<sup>8</sup> The translator of Fermin’s book felt the need to amend this text after Fermin had suggested that slaves escaped either because of a refusal to work or a fear for well-deserved punishments. The translator wanted to point out that, as the article in the *Journal politique ou gazette des gazettes* explicitly remarked, a cruel treatment might just as well have been the reason for their escape. Contrary to Fermin’s defense of slavery, the author of the amended text refused to take a stance regarding the legitimacy of slavery; he was more concerned about the treatment of slaves. However, Kant’s mention of the red slaves indicates that, in his view, the lack of ability and durability of Native Americans justified the transportation of “Negroes” to the colonies. He even felt the need to add that not even coercive measures succeeded in making them do the hard labor in the fields.

In his third essay on race (1788), Kant put greater emphasis on the supposed fact that the American race was an *incipient* race. He concluded that the indolence of these Native Americans was a direct result of being unfit for any climate: “*Daß aber ihr Naturell zu keiner völligen Angemessenheit mit irgend einem Klima gelangt ist, läßt sich auch daraus abnehmen, daß schwerlich ein anderer Grund angegeben werden kann, warum diese Race, zu schwach für schwere Arbeit, zu gleichgültig für emsige und unfähig zu aller Cultur, wozu sich doch in der Naheit Beispiel und Aufmunterung genug findet, noch tief unter dem Neger selbst steht, welcher doch die niedrigste unter allen übrigen Stufen einnimmt die wir als Racenverscheidenheiten genannt haben.*” [That their natural

<sup>8</sup> In 1770, Fermin expanded on his defense of slavery (Fermin 1770).

disposition did not achieve a *perfect* suitability for any climate, can be seen from the circumstance that hardly another reason can be given for why this race, which is too weak for hard labor, too indifferent for industry and incapable of any culture – although there is enough of it as example and encouragement nearby – ranks still far below even the Negro, who stands on the lowest of all the other steps that we have named as differences of the races.] (AA VIII, pp. 175-176; Kant 2007b, p. 211) Many had already mentioned the insensibility and indolence of American Indians (Venegas 1757, p. 74; Pauw p. 1769, 71-72, p. 169, 221). De Ulloa reported that even “Negroes” showed contempt for their laziness (Ulloa 1772, pp. 322-323). So Kant had no difficulties finding support for his views that Native Americans ranked lowest. But his racism implied that their laziness was a result of their unfailingly inheritable predisposition. Their laziness was in his view a permanent feature.

However, Adickes pointed out that Kant’s view on the inferiority of the Native Americans was not commonly accepted (Adickes 1925, p. 415). He could have read extracts of Francisco Javier Clavigero’s criticism of Buffon and de Pauw, which appeared in 1786 in *Der Teutsche Merkur*. For present purposes it is also important to note that, as Bernasconi has observed in response to Pauline Kleingeld’s claim about Kant’s supposed second thoughts on his racial hierarchy, “there is no evidence that he did renounce his views either about the scientific character of race as such or about the hierarchy of the races, although he did appear to modify his views on the slave trade” (Bernasconi 2011, p. 292). If Kant indeed had had second thoughts, then one could reasonably expect to find it unambiguously expressed in his work. In this regard, I would like to briefly refer to Johann Gottlieb Stoll’s *Philosophische Unterhaltungen, einige Wahrheiten gegen Zweifel und Ungewißheit in besseres Licht zu setzen, auf Veranlassung Herrn Kants Kritik der reinen Vernunft* from 1788 in which the author explicitly criticized the denial of the right of mankind (*das Recht der Menschheit*) of the Native Americans by the Spaniards and the Portuguese. Not much later Stoll even concluded: “*Und jetzt unterdrückt die Geldbegierde der handelnden Nationen das Gefühl der Ehrfurcht, das man der Menschheit schuldig ist; und damit man wenigstens eine Entschuldigung habe, gegen die schrecklichste aller Unmenschlichkeiten, seine Mitbrüder wie das Vieh zu einer ewigen und schaudervollen Sklaverey zu verkaufen, hält man sich an die Farbe, an die Wolle auf dem Kopfe, an die dicken Lippen und an die gequetschten Nasen, und macht sie deshalb zum Vieh.*” [And now the lust for money of the trading nations suppresses the feeling of reverence owed to mankind; and so that one may at least have an excuse against the most terrible of all inhumanities to sell one’s brothers like cattle to an eternal and horrible slavery, one sticks to the color, to the wool on the head, to the thick lips, and to the flattened noses, and therefore makes them into cattle.] (Stoll 1788, pp. 70-71) We do not find such a clear condemnation of slavery in Kant’s work, although contemporaries were explicitly seeking ways *in response to his work*, as is the case with Stoll, to condemn slavery and the treatment of non-white races.

### Kant’s Influence

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We have tried to offer some insights into the development of Kant's racism. This expressed itself not simply by way of an explanation of the inferiority of non-white races. Essential to his racism was the *permanence* of racial characteristics. We have tried to show how Kant attempted to ground this belief and what sources he used to support these views. But in order to understand Kant's role within the history of racial thinking, it is also important to take into account what his contemporaries were writing about with regard to these topics. I will focus here on two aspects. Firstly, in response to Tucker's account on the history of racial sight, I want to briefly discuss the appropriation of Kant's concept of race by the German anatomist Ludwig Emil Cichorius. Secondly, I will briefly focus on Christoph Girtanner's work as a way to evaluate the claim that Kant had in his late work second thoughts on a racial hierarchy.

Contrary to Tucker's account on the association of the apprehension of skin color with immediacy and self-evidence, I want to point out that the reception of Kant's racial theory reveals the centrality of race mixing. For instance, in 1801, Cichorius published two articles on the importance of Kant's concept of race. Following Kant and Girtanner, he believed that a racial division should primarily be based on the different skin colors: "*Diese Verschiedenheiten erhalten nicht bloss ihr Characteristisches unter jedem Himmelsstriche, sie arten auch bey jeder Vermischung unausbleiblich an. Und darum kann man auch nur auf sie eine Eintheilung der Menschen in Racen gründen.*" [These differences do not only merely keep their characteristics in all climates, but they also inevitably propagate with every mixing. And this is also why one can only base a division of human in *races* on this.] (Cichorius 1801a, p. 143) Race mixing allegedly proved inevitable inheritance: the mulatto showed a skin color that was midway between those of the parents. Although Cichorius realized that skin color could not ground racial differences among animals, he still relied heavily on the importance of their mixtures: "*Nie wird dem Jungen, das durch Individuen derselben Race entsteht, das Charakteristische mangeln, das die Gestalt seiner Ältern bezeichnet. Und immer wird hier der Bastard das Besondere der Formen jener Racen besitzen, durch deren Vermischung er entsprang.*" [Never will the offspring, created by individuals of the same race, lack the characteristic that characterizes the shape of his ancestors. And here, the hybrid will always have the particularity of the forms of those races that gave rise to him through their mixing.] (Cichorius 1801b, p. 180)

Tucker is thus incorrect when she emphasizes the immediacy of skin color for the interest in the link between the concept of race and skin color. Cichorius knew that it was not the immediacy of this color but race mixing that formed the core of Kant's racial theory. Girtanner already said as much when he formulated "the Kantian principle," i.e., "*das große Naturgesetz, welches der tiefe Denker Kant entdeckt hat, nämlich das Gesetz der halbschlächtigen Zeugung und des unausbleiblichen Anerbens alles dessen, was wirkliche Rassen unterscheidet*" [the great natural law discovered by the deep thinker Kant, namely the law of half-breed procreation and the inevitable inheritance of all that distinguishes real races]. (Girtanner 1796, p. 55) However, the neglect of the importance of race mixing to

Kant's ideas is not new. After briefly discussing Kant's introduction of his concept of race in 1859, the French zoologist Isidore Geoffroy Saint-Hilaire complained that race mixing "a été depuis longtemps effacé de la définition de la race" [has since long been removed from the definition of race] (Geoffroy Saint-Hilaire 1859, p. 312n). The relevance of Geoffroy Saint-Hilaire's remark cannot be stressed enough. As his colleague Armand de Quatrefages wrote soon afterwards in his *Unité de l'espèce humaine* in a section on race mixing: "On doit à M. Isidore Geoffroy d'avoir rappelé l'attention des naturalistes et des anthropologistes sur le travail où Kant a exprimé ses idées sur cette question." [We owe it to Mr. Isidore Geoffroy for reminding naturalists and anthropologists of the work in which Kant has expressed his ideas on this issue.] (Quatrefages 1861, p. 252n)

Lastly, I want to focus on Kant's influence on Girtanner, for – as I mentioned above – recent interpretations of Kant's racial thinking argue that he radically changed his views on racial hierarchy in his late work. One recurring argument relies on Girtanner's appraisal of Kant's work on races. Interpreters who state that Kant had second thoughts often also claim that Girtanner limited his exposition on natural history to physiological traits. The first to do so was Pauline Kleingeld when she concluded that "Girtanner's Kantianism does not imply his endorsement of Kant's earlier race-related hierarchy of natural incentives and talents" (Kleingeld 2007, p. 590n). Also Allen Wood states that Girtanner's book "proposed to expound Kantian views on natural history but whose treatment of race was devoted mainly to the argument that racial differences are entirely matters of anatomy and physiology and provide no 'moral characterization'" (Wood 2008, p. 10). Alexey Zhavoronkov and Alexey Salinov come to the same conclusion: "Since Girtanner does provide his reader with a neutral description of physical differences between races without touching the subject of morals, we can conclude that the late Kant has abandoned his previous anthropological attempts to establish a connection between the description of natural features of each race and a racial hierarchy based on moral criteria." (Zhavoronkov and Salinov 2018, p. 289). However, these views misrepresent Girtanner's interest in Kant's racial theory.

Before he learned about Kant's ideas of natural history, Girtanner published on a variety of themes from chemistry and medicine, one of them being venereal diseases (Wegelin 1957). He thought that these diseases had reached Europe after the discovery of America. To support this hypothesis, Girtanner mentioned reports about the extremely weak business of procreation (*Zeugungsgeschäft*) of the Native American men. Their lack of a beard was considered a sign of their weak lustfulness. However, their women were supposedly very voluptuous, because of which they threw themselves in the arms of the Europeans who had reached the continent. Girtanner even believed that the New World would not have been conquered if it was not for the voluptuousness of these women. They were willing to sacrifice everything for their desires. In order to attain their goals, they would put "small, venomous insects" on the male genitals that consequently swelled up, which, subsequently, created an insatiable sexual drive. The importance of this lies in the fact that, at this time, Girtanner's degrading view of the Native Americans relied mainly on



de Pauw who had already reported about these venomous insects, the beardless (and thus weak) American men, and their weak sexual drives (Girtanner 1788, pp. 56-57; Pauw 1768, pp. 63-65).

A few years later, Girtanner discovered Kant's work on races. As one of the leading figures for the introduction of Lavoisier's reforms of chemical nomenclature in the German-speaking world, Girtanner obviously showed little interest in Kant's explanations of the causes of different skin colors. But then again, Kant had already realized that most of what he had stated in his exposition on these causes was very speculative: "*Sie sind indessen dazu gut, um allenfalls einem Gegner, der, wenn er gegen den Hauptsatz nichts Tüchtiges einzuwenden weiß, darüber frohlockt, daß das angenommene Princip nicht einmal die Möglichkeit der Phänomene begreiflich machen könne, - sein Hypothesenspiel mit einem gleichen, wenigstens eben so scheinbaren zu vergelten.*" [But they are at least good for addressing an opponent who has no sound objection against the main proposition but triumphs over the fact that the assumed principle cannot even render the phenomena comprehensible – and for repaying *his* play with hypotheses with one that is at least equally plausible.] (AA VIII, p. 104; Kant 2007a, p. 158) His views on these causes were primarily meant to demonstrate the possibility of using teleological principles in the study of nature. Racial differences showed purposiveness in the organic world. Girtanner was especially intrigued by this aspect.

However, we also observed that Kant's view on the Native Americans as an incipient race was related to his understanding of the inferiority of Native Americans. Girtanner did not adopt Kant's wild speculations on fixed air, but he showed little originality when he took over other aspects of Kant's exposition. Many passages from his *Ueber das Kantische Prinzip für die Naturgeschichte* in fact contradict the claim that Girtanner did not endorse Kant's so-called moral characterizations. Especially his views on the American Indians are in this regard relevant. He not only took over Kant's ideas on the Mongolian origin of Native Americans and their migration to the New World but also stated that this race (with regard to their capacities and talents) "*sogar noch tiefer unter dem Neger steht*" [ranks still far below even the Negro] (Girtanner 1796, p. 139). De Pauw shaped Girtanner's earlier views of the Native Americans, but Kant deepened Girtanner's disquieting understanding of the inferiority of the Native Americans. His mention of their inferiority was a clear reminder of Kant's racial hierarchy. This observation is especially relevant because Kant praised Girtanner's work on races in his *Anthropologie in pragmatischer Hinsicht*. Thus, Zhavoronkov and Salinov raise the wrong question when they rhetorically ask "why Kant refers to Girtanner instead of other sources which do not exclude the moral aspect from the description of different races." Girtanner's appropriation of his so-called moral characterizations of non-white races did not stop Kant from praising Girtanner's work. There is, therefore, also no ground to conclude – as Kleingeld does – that "Girtanner's Kantianism does not imply his endorsement of Kant's earlier race-related hierarchy of natural incentives and talents; so neither does Kant's endorsement of

Girtanner” (Kleingeld 2007, p. 590n). With his recommendation in 1798, Kant also gave his approval of Girtanner’s appropriation of his own racial hierarchy.

## Bibliography

- Adickes, E. (1925), *Kant als Naturforscher*, vol. 2, W. de Gruyter, Berlin.
- Anonymous, (1773), “Hollande,” *Supplément pour les Journal politique, ou gazette des gazettes*, no. 42, pp. 57-79.
- Anonymous, (1774), “Nachricht von den Empörungen der Slaven in den holländischen Kolonien, besonders von der letzten, die im Jahr 1772 vorgefallen ist, und der glücklichen Eroberung des Dorfes Misalasi, wo die gefährlichsten Aufrührer ihren Aufenthalt hatten,” *Encyclopädisches Journal*, no. 3, pp. 202-217.
- Bell, J. (1763), *Travels from St. Petersburg in Russia, to Diverse Parts of Asia*, Robert and Andrew Foulis, Glasgow.
- Bernasconi, R. (2002), “Kant as an Unfamiliar Source of Racism,” in J. K. Ward and T. L. Lott (eds.), *Philosophers on Race. Critical Essays*, Blackwell Publishers, Oxford, pp. 145-166.
- Bernasconi, R. (2011), “Kant’s Third Thoughts on Race,” in S. Elden and E. Mendieta (eds.), *Reading Kant’s Geography*, SUNY Press, New York, pp. 291-318.
- Bernasconi, R. (2012), “True Colors: Kant’s Distinction Between Nature and Artifice in Context,” in R. Godel and G. Stiening (eds.), *Klopffechterein-Missverständnisse-Widersprüche? Methodische und Methodologische Perspektiven auf die Kant-Forster Kontroverse*, Wilhelm Fink, Paderborn, pp. 191-207.
- Bernasconi, R. (2014), “Heredity and Hybridity in the Natural History of Kant, Girtanner, and Schelling during the 1790s,” in S. Lettow (ed.), *Reproduction, Race, and Gender in Philosophy and the Early Life Sciences*, SUNY Press, New York, pp. 237-258.
- Blumenbach, J. F. (1776), “Verschiedenheit im Menschen-Geschlecht,” *Göttinger Taschen Calender für das Jahr 1776*, no. 1, pp. 72-82.
- Blumenbach, J. F. (1797), *Handbuch der Naturgeschichte*, Johann Christian Dieterich, Göttingen.
- Buffon, G. (1749), *Histoire naturelle générale et particulière, avec la description du Cabinet du Roi*, vol. 3, De l’imprimerie royale, Paris.
- Buffon, G. (1766), *Histoire naturelle générale et particulière, avec la description du Cabinet du Roi*, vol. 14, De l’imprimerie royale, Paris.

- Büsching, A. F. (1773), "Neuigkeiten," *Wöchentliche Nachrichten von neuen Landcharten, geographischen, statistischen und historischen Büchern und Schriften*, no. 1 (9) , pp. 71-72.
- Cavallar, G. (2015), *Kant's Embedded Cosmopolitanism: History, Philosophy and Education for World Citizens*, De Gruyter, Berlin.
- Cichorius, L. E. (1801a), "Ueber die physischen Verschiedenheiten der Menschen und besonders über die in der Gattung dieser existirenden Racen," *Paradoxien: eine Zeitschrift für die Kritik wichtiger Meinungen und Lehrsätze aus allen Fächern der theoretischen und practischen Medicin*, no. 1 (2), pp. 131-174.
- Cichorius, L. E. (1801b), "Einige Bemerkungen über die Racen unter den Thieren," *Paradoxien: eine Zeitschrift für die Kritik wichtiger Meinungen und Lehrsätze aus allen Fächern der theoretischen und practischen Medicin*, no. 1 (2), pp. 175-180.
- Cranz, D. (1765), *Historie von Grönland: enthaltend die Beschreibung des Landes und der Einwohner, insbesondere die Geschichte der dortigen Mission der Evangelischen Brüder zu Neu-Herrnhut und Lichtenfels*, Heinrich Detlev Ebers, Barby.
- Crell, L. F. von (1783), "Ueber den Ursprung der verschiedenen Säuren, aus einem Grundwesen," *Die Neuesten Entdeckungen in der Chemie*, no. 11, pp. 258-262.
- Delaval, E. H. (1765), *A Letter to the Right Honourable the Earl of Morton, President of the Royal Society, Containing Experiments and Observations on the Agreement Between the Specific Gravities of the Several Metals, and Their Colours When United to Glass, as well as Those of Their Other Preparations*, n.p., London.
- Delaval, E. H. (1766), "Versuche und Beobachtungen über die Uebereinstimmung zwischen den specifischen Schwere der verschiedenen Metalle und der derselben Farben, wenn sie mit Glas vereinigt sind," *Neues Bremisches Magazin zur Ausbreitung der Wissenschaften, Kunste und Tugend*, no. 1 (1), pp. 614-616.
- Delaval, E. H. (1788), *Versuche und Bemerkungen über die Ursache der dauerhaften Farben undurchsichtiger Körper*, Friedrich Nicolai, Berlin.
- Fermin, Ph. (1770), *Dissertation sur la question s'il est permis d'avoir en sa possession des esclaves, et de s'en servir comme tels, dans les colonies de l'Amérique*, Jacques Lekens, Maastricht.
- Fermin, Ph. (1775), *Ausführliche historisch-physikalische Beschreibung der Kolonie Surinam*, vol. 1, Joachim Pauli, Berlin.
- Fischer, J. E. (1768), *Sibirische Geschichte von der Entdeckung Sibiriens bis auf die Eroberung dieses Lands durch die Russische Waffen*, vol. 1, Kaiserliche Akademie der Wissenschaften, St. Petersburg.

- Flikschuh, K. (2017), *What is Orientation in Global Thinking? A Kantian Inquiry*, Cambridge University Press, Cambridge.
- Fontana, F. (1782), “Lettera al Sig. Adolfo Murray,” *Memorie di matematica e fisica della Società italiana*, no. 1 (2), pp. 655-659.
- Fontana, F. (1785), “Brief an Hrn. Prof. Ad. Murray in Upsala,” *Chemische Annalen; für die Freunde der Naturlehre, Arzneygelahrtheit, Haushaltungskunst und Manufakturen*, no. 8, pp. 145-172.
- Geoffroy Saint-Hilaire, I. (1859), *Histoire naturelle générale des règnes organiques, principalement étudiée chez l'homme et les animaux*, vol. 2, Victor Masson, Paris.
- Gerbi, A. (1973), *The Dispute of the New World. The History of a Polemic, 1750-1900*, University of Pittsburgh Press, London.
- Girtanner, Ch. (1788), *Abhandlung über die venerische Krankheit*, Johann Christian Dieterich, Göttingen.
- Girtanner, Ch. (1796), *Ueber das Kantische Prinzip für die Naturgeschichte: ein Versuch, diese Wissenschaft philosophisch zu behandeln*, Vandenhoeck und Ruprecht, Göttingen.
- Gmelin, J. G. (1748), *Leben Georg Wilhelm Stellers, gewesnen Adiuncti der Kayserl. Academie der Wissenschaften zu St. Petersburg: worinnen Nachrichten von deselben Reisen, Entdeckungen, und Tode*, n.p., Frankfurt.
- Hawkesworth, J. (1773). *An Account of the Voyages Undertaken by the Order of His Present Majesty for Making Discoveries in the Southern Hemisphere, and Successively Performed by Commodore Byron, Captain Wallis, Captain Carteret, and Captain Cook, in the Dolphin, the Swallow, and the Endeavour*; vol. 2, W. Strahan and T. Cadell, London.
- Hawkesworth, J. (1774). *Geschichte der See-Reisen und Entdeckungen im Süd- Meer welche auf Befehl Sr. Großbritannischen Majestät unternommen, und von Commodore Byron, Capitain Carteret, Capitain Wallis und Capitain Cooock in Dolphin, der Swallow, und der Endeavour nach einander ausgeführet worden sind*, vol. 2, A. Haude and J.C. Spener, Berlin.
- Home, H. (1774), *Sketches of the History of Man*, vol. 2, W. Creech, W. Strahan, and T. Cadell, Edinburgh.
- Huneman, Ph. (2005), “Espèce et adaption chez Kant et Buffon,” in J. Ferrari, M. Ruffing, R. Theis, M. Vollet (eds.) *Kant et la France – Kant und Frankreich*, Georg Olms, Mildesheim, pp. 107-120.

- Ingenhousz, J. (1779), *Experiments upon Vegetables: Discovering their Great Power of Purifying the Common Air in the Sun-Shine, and of Injuring It in the Shade and at Night*, P. Elmsly and H. Payne, London.
- Kant, I. (1775), *Von den verschiedenen Racen der Menschen, zur Ankündigung der Vorlesung der physischen Geographie in Sommerhalbenjahre 1775*, G.L. Hartung, Königsberg.
- Kant, I. (1777), “Von den verschiedenen Racen der Menschen,” in J. J. Engel (ed.), *Der Philosoph für die Welt*, vol. 2, Dyckische Buchhandlung, Leipzig, pp. 125-164.
- Kant, I. (2007a), “Determination of the Concept of a Human Race,” in G. Zöllner and R. B. Loudon (eds.), *Anthropology, History, and Education*, trans. H. Wilson and G. Zöllner, Cambridge University Press, Cambridge, pp. 145-159.
- Kant, I. (2007b), “On the Use of Teleological Principles in Philosophy,” in G. Zöllner and R. B. Loudon (eds.), *Anthropology, History, and Education*, trans. G. Zöllner, Cambridge University Press, Cambridge, pp. 195-218.
- Kant, I. (2007c), “Anthropology from a Pragmatic Point of View,” in G. Zöllner and R. B. Loudon (eds.), *Anthropology, History, and Education*, trans. R. B. Loudon, Cambridge University Press, Cambridge, pp. 231-429.
- Kant, I. (2013a), “Of the Different Human Races. An Announcement of Lectures in Physical Geography in the Summer Semester 1775,” in J. M. Mikkelsen (ed.), *Kant and the Concept of Race*, trans. J. M. Mikkelsen, SUNY Press, New York, pp. 41-54.
- Kant, I. (2013b), “Of the Different Human Races (1777),” in J. M. Mikkelsen (ed.), *Kant and the Concept of Race*, trans. J. M. Mikkelsen, SUNY Press, New York, pp. 55-7.
- Kleingeld, P. (2007), “Kant’s Second Thoughts on Race,” *The Philosophical Quarterly*, no. 57(229), pp. 573-592.
- Kleingeld, P. (2014), “Kant’s Second Thoughts on Colonialism,” in K. Flikschuh and L. Ypi (eds.), *Kant and Colonialism: Historical and Contemporary Perspectives*, Oxford University Press, New York, pp. 43-67.
- Landriani, M. (1781), *Opuscoli fisico-chimici*, G. Pirola, Milan.
- La Peyrère, I. (1655). *Praeadamitae, sive Exercitatio super Versibus duodecimo, decimotertio et decimoquarto, capituli quinti Epistolae D. Pauli ad Romanos, quibus inducuntur primi homines ante Adamum conditi*, n.p., Amsterdam.
- Lavoisier, A. L. (1775), “Sur la nature du principe qui se combine avec les Métaux pendant leur calcination, & qui en augmente le poids,” *Observations sur la physique sur*

- l'histoire naturelle et sur les arts, avec des planches en taille-douce*, no. 5, pp. 429-433.
- Lemery, L. (1706), "Que les plantes contiennent réellement du fer, & que ce métal entre nécessairement dans leur composition naturelle," *Mémoires de l'Académie royale des sciences*, pp. 411-417.
- Lemery, N. (1713), "Examen de la manière dont le Fer opère sur les liqueurs de notre corps, et dont il doit être préparé pour servir utilement dans la Pratique de la Médecine," *Mémoires de l'Académie royale des sciences*, pp. 31-44.
- Lenoir, T. (1980), "Kant, Blumenbach, and Vital Materialism in German Biology," *Isis*, no. 71 (256), pp. 77-108.
- McFarland, J. D. (1970), *Kant's Concept of Teleology*, University of Edinburgh Press, Edinburgh.
- Müller, G. F. (1758), *Sammlung Rußischer Geschichte*, vol. 3, Kayserliche Academie der Wissenschaften, St. Petersburg.
- Pallas, P. S. (1771), *Reise durch verschiedene Provinzen des Rußischen Reichs*, vol. 1, Kayserliche Academi der Wissenschaften, St. Petersburg.
- Pallas, P. S. (1776), *Sammlungen historischer Nachrichten über die mongolischen Völkerschaften*, vol. 1, Kayserliche Akademie der Wissenschaften, St. Petersburg.
- Pauw, C. de (1768), *Recherches philosophiques sur les Américains, ou Mémoires intéressants pour servir à l'Histoire de l'Espèce Humaine*, vol. 1, George Jacques Decker, Berlin.
- Priestley, J. (1772), *Observations on Different Kinds of Air*, W. Bowyer and J. Nichols, London.
- Priestley, J. (1775), *Experiments and Observations on Different Kinds of Air*, vol. 2, J. Johnson, London.
- Sloan, Ph. (1979), "Buffon, German Biology, and the Historical Interpretation of Biological Species," *The British Journal for the History of Science*, no. 12 (41), pp. 109-153.
- Starke, F. Ch. (1833), *Immanuel Kant's vorzügliche kleine Schriften und Aufsätze*, vol. 2, Die Expedition des europäischen Aufsehers, Leipzig.
- Steller, G. W. (1774), *Beschreibung von dem Lande Kamtschatka: dessen Einwohnern, deren Sitten, Nahmen, Lebensart und verschiedenen Gewohnheiten*, Johann Georg Fleischer, Frankfurt.

- Stoll, J. G. (1788), *Philosophische Unterhaltungen, einige Wahrheiten gegen Zweifel und Ungewißheit in besseres Licht zu setzen, auf Veranlassung Herrn Kants Kritik der reinen Vernunft*, Johann Gottlob Sommer, Leipzig.
- Tavernier, J.-B. (1676), *Les Six Voyages de Jean Baptiste Tavernier, écuyer baron d'Aubonne, qu'il a fait en Turquie, en Perse, et aux Indes*, vol. 1, Gervais Clouzier and Claude Barbin, Paris.
- Tucker, I. (2012), *The Moment of Racial Sight: A History*, The University of Chicago Press, Chicago.
- Quatrefages, A. de (1861), *Unité de l'espèce humaine*, L. Hachette et Cie, Paris.
- Querner, H. (1990), "Christoph Girtanner und die Anwendung des Kantischen Prinzips in der Bestimmung des Menschen," in G. Mann and F. Dumont (eds.). *Die Natur des Menschen: Probleme der Physischen Anthropologie und Rassenkunde (1750-1850)*, G. Fischer, Stuttgart, pp. 123-136.
- Ulloa, A. de (1772), *Noticias americanas: entretenimientos phisico-historicos sobre la América meridional, y la septentrional oriental*, Don Francisco Manuel de Mena, Madrid.
- Venegas, M. (1757), *Noticia de la California, y de su conquista temporal, y espiritual hasta el tiempo presente*, Viuda de M. Fernández, Madrid.
- Wegelin, C. (1957), 'Dr. med. Christoph Girtanner (1760-1800),' *Gesnerus: Swiss Journal of the History of Medicine and Sciences*, no. 14 (3-4), pp. 141-168
- Winckelmann, J. J. (1764), *Geschichte der Kunst des Altherthums*, vol. 1, Waltherische Hof-Buchhandlung, Dresden.
- Wood, A. W. (2008), *Kantian Ethics*. Cambridge University Press, Cambridge.
- Zammito, J. H. (1992), *The Genesis of Kant's Critique of Judgment*, The University of Chicago Press, Chicago.
- Zammito, J. H. (2003), "The Inscrutable *Principle* of an Original *Organization*': Epigenesis and 'Looseness of Fit' in Kant's Philosophy of Science," *Studies in History and Philosophy of Science*, no. 34, pp. 73-109.
- Zammito, J. H. (2006), "Policing Polygeneticism in Germany, 1775: (Kames,) Kant, and Blumenbach," in S. Eigen and M. Larrimore (eds.), *The German Invention of Race*, SUNY Press, New York, pp. 35-54.
- Zantop, S. (1997), *Colonial Fantasies: Conquest, Family, and Nation in Precolonial Germany (1770-1870)*, Duke University Press, Durham.

Zhavoronkov, A. and A. Salinov. (2018), “The Concept of Race in Kant’s Lectures on Anthropology,” *Con-Textos Kantianos. International Journal of Philosophy*, no. 7, pp. 275-292.

Zimmermann, E. A. W. (1778), *Geographische Geschichte des Menschen und der allgemein verbreiteten vierfüssigen Thiere*, vol. 1, Weygandsche Buchhandlung, Leipzig.

