

Robert R. Clewis*

Kant's Natural Teleology? The Case of Physical Geography

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Abstract: The article comprehensively examines Kant's conceptions of organisms, animals, nature's agency, and apparent design in essays and physical geography *Nachschriften* from the 1750s to 1790s: manuscripts "Holstein", "Kaehler", "Dönhoff", and "Dohna". The methodological distinctions between empirical science and pure, transcendental philosophy, and between popular, worldly philosophy and scholastic philosophy, are crucial for understanding his use of teleological principles in the geography course. Kant applies teleological principles to nature in a rather 'direct' fashion in these lectures, although this should not be taken to mean that he considers the teleological judging of organisms to be incompatible with judging them mechanistically.

Keywords: purposiveness, geography, organism, teleology

Introduction¹

As a university professor and lecturer, Kant typically commented on the texts of other scholars. He read or defended his own views, albeit indirectly, by taking a certain license while interpreting the text and by expounding it as he saw fit. For instance, he used (partly because the government required him to do so) the textbooks and compendia of Baumgarten's *Metaphysica* and *Initia Philosophiae*

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***Kontakt:** Robert R. Clewis, Gwynedd Mercy University, Dept. of Philosophy, P. O. Box 901, Gwynedd Valley, PA 19137, U. S. A., e-mail: clewis.r@gmercyu.edu

Practicae, Meier's *Auszug aus der Vernunftlehre*, and Eberhard's *Vorbereitung zur natürlichen Theologie*, to name just a few. However, in the case of physical geography this was not the case: for that course Kant authored, and spoke from, his own lecture notes. Did Kant ever use this opportunity to elaborate his views on the *status* of teleological claims, or did he simply present those claims (and what would that imply about his conception of the science in question)? The answer may not be as obvious as it appears. Should the early (1757) lecture announcement's characterization of his discussion as proceeding in not just a "historical" but also a "philosophical"² way be taken to mean that Kant's geography somehow expresses his philosophical views, or did philosophy and empirical science always remain distinct, even as Kant's notion of philosophy developed, and especially *after* the publication of *Kritik der Urtheilskraft* in 1790?³ In the process of answering this question, we will also ask, concretely: What were his conceptions of animals and organisms in the geography lectures? Did these transcriptions attribute agency to nature? How did the course handle arguments about providence and design?⁴

Given over the course of four decades starting in 1756, the geography lectures discuss living and organized beings, in addition to many other topics such as seas and landmasses. Hence, the lectures offer us a chance to discern whether their characterizations of animals, organisms, design, and natural agency reflect Kant's criticisms of natural teleology or whether he continues to make the same kinds of teleological claims as those of the pre-Critical period. Referring to some passages that are relatively unknown or overlooked, I discuss the relation between the lectures on physical geography and the development and expression of the Critical philosophy, though my focus is mainly on the lectures. This issue is of greater historical and philosophical significance than has generally been recognized, offering us insight into how Kant conducted a course in a natural

2 EACG, AA 02: 09.16: "philosophische Art".

3 Compare the (like geography, worldly and pragmatic) *anthropology* lecture (1798), published after KU. Anth, AA 07: 246.17: "Geschmack ist ein bloßes regulatives Beurtheilungsvermögen [...]". Anth, AA 07: 331.27: pursuing lasting peace is "[...] nur ein regulatives Princip [...]".

4 Translations of Kant's geography transcriptions are by Robert Clewis. All translations of Kant's published works are, unless otherwise indicated, from The Cambridge Edition of the Works of Immanuel Kant in Translation. Cambridge: 1992-. Translations used are: Eric Watkins, ed.: *Natural Science*. Cambridge 2012. Robert Loudon and Allen Wood, eds.: *Lectures on Anthropology*. Cambridge 2012. Robert Loudon and Günter Zöllner, eds.: *Anthropology, History, Education*. Cambridge 2007. Paul Guyer and Eric Matthews, eds.: *Critique of the Power of Judgment*. Cambridge 2000. David Walford, ed.: *Theoretical Philosophy 1755–1770*. Cambridge 1992. My translations typically adopt The Cambridge Edition's glosses.

science (perhaps even to an extent ‘engaged’ in the science itself), including how he actually employed teleological principles.⁵

Whereas since the 1990s, transcriptions in other areas of his teaching – logic, natural theology, metaphysics, ethics, and anthropology – have been translated into several languages and/or increasingly examined by Kant scholars, physical geography has until recently been far less studied. Why? Perhaps it is due to geography’s empirical status. Yet the anthropology, likewise an empirical discipline, has been studied far more, so one cannot attribute the relative oversight of geography to this alone. Surely it is in part on account of the well-known shortcomings of F. T. Rink’s edition. Thankfully, publication of the lectures in AA volume 26 is remedying this. In addition, Robert Loudon points out that Kant’s geography has simply not been viewed as being as important as his ethics, logic, metaphysics, theology, or anthropology; Loudon suggests that such oversight is unwarranted and gives four reasons for taking Kant’s *Geography* seriously.⁶ Indeed, with the 2012 translation of the (however flawed) Rink edition in The Cambridge Edition and recent articles and books on the topic,⁷ there is a recent increase in interest in Kant’s physical geography. With the digitization and publication of Kant’s lectures on geography made possible by Werner Stark,⁸ we are in a position to pose new questions about Kant’s intellectual development in this area.

Although the span of years here covered is quite large, the aim of this developmental-historical article can be expressed simply: to characterize Kant’s teleology in the transcriptions and writings on physical geography, focusing on the claims about organisms and animals, apparent design, and nature’s agency. For instance, I will look for the application of teleological principles such as ‘nothing in an organized being is in vain’,⁹ or related maxims of reason,¹⁰ as well as refer-

⁵ Mark Fisher claims, plausibly, that the lectures on physical geography are “an especially valuable source” for understanding Kant’s “natural scientific and natural historical contexts”. In: *Understanding Purpose: Kant and the Philosophy of Biology*, ed. Philippe Huneman. Rochester 2007, 115, n.15.

⁶ R. Loudon: “The Last Frontier: Exploring Kant’s Geography”. In: *Society and Space* 2014, 32 (3), 450–465.

⁷ Notable is Stuart Elden and Eduardo Mendieta (eds.) *Reading Kant’s Geography*. Albany 2011.

⁸ The student transcriptions of Kant’s physical geography lectures have been available at the Kant-Arbeitsstelle of the BBAW since 2007: http://kant.bbaw.de/base.htm/geo_base.htm. [Accessed 11 November 2014.] Access requires username and password, granted upon making an inquiry to the Arbeitsstelle.

⁹ KU, AA 05: 376.28.

¹⁰ KrV, A 666/B 694.

ences to providence's intentions and natural purposiveness in Kant's geographical descriptions of outer nature, at or near the surface of the earth.

A clarification of terms is in order. 'Nature' is here understood not as the sum total of all appearances,¹¹ but as the part of the world that includes the mineral, plant, and animal kingdoms. A 'purpose' (*Zweck*) is an end or aim, in the tradition of an Aristotelian final cause ('that for the sake of which' an action is done or a being exists). Kant defines *Zweck* as the concept of an object insofar as it at the same time contains the ground of the reality of that object.¹² Kant distinguishes a 'purpose' from 'purposiveness of form', or the correspondence of a thing with that constitution of things that is possible only in accordance with ends or purposes.¹³ In *Kritik der reinen Vernunft*, 'purposiveness of nature' is treated as part of reason's 'regulative' use of the idea of God or a supreme intelligence, which is seen as producing nature according to its wise intentions.¹⁴ In *Kritik der Urteilskraft*, the search for purposes is assigned not to reason but to the 'power of reflective judgment', the capacity to find an appropriate universal concept to fit a given particular.¹⁵ A 'teleological' consideration of nature is one that sees nature as having ends or, less strongly, at least as purposive. An 'intention' (*Absicht*) of nature is an aim that it appears to have – or as Kant puts it, has only by analogy – to design or fit an organic being or beings in a certain way. A natural 'organized being' or 'organized product' is one in which everything is an end and reciprocally also a means;¹⁶ every part is there for every other one, and ultimately for the sake of the whole organism itself. (Although there may be key differences between 'organisms' and 'organic' or 'organized' beings, I cannot explore that here.) Organisms have inner ends; an 'inner end' is a purpose that an organism has within itself or that it gives itself, as when it grows or regenerates. In the "Critique of the Teleological Power of Judgment" (hereafter "CTJ"), the second Part of the third *Critique*, Kant discusses, in addition to inner ends, the *relative* ends of nature, which, however, do not require teleological judging since they are not found in one organism, species, or system, but are relations between two organisms or systems.

To my knowledge, despite growing attention to Kant's theory of race and philosophy of biology, the present article's question about teleology has not yet been

11 KrV, B 163.

12 KU, AA 05: 180.32: "Zweck".

13 KU, AA 05: 180.34: "Zweckmäßigkeit der Form". I shall not here take into account the undeniable importance of "der Form".

14 E.g., KrV, A 619 f./B 647 f.; A 664/B 692; A 671/B 699, A 685 f./B 712 f.

15 KU, AA 05:179.26. See Allen Wood: *Kant's Ethical Thought*. Cambridge 1999, 216–218.

16 KU, AA 05: 376.12; cf. ÜGTP, AA 08: 179.08–10. See even NTH, AA 01: 230.14–26.

addressed with regard to Kant's geography.¹⁷ This issue is discussed neither by the classical studies by Adickes¹⁸ nor by contemporary scholars, who nevertheless have certainly examined and criticized Kant's theory of race in *Von den verschiedenen Racen der Menschen* (1775)¹⁹, *Bestimmung des Begriffs einer Menschenrasse* (1785), and *Über den Gebrauch teleologischer Principien in der Philosophie* (1788).²⁰ Although any discussion of the teleological judgment about the human being will probably refer to Kant's conception of race, my focus is not on his troubling concept of race *per se*, but how the geography reflects the development of Kant's thinking about beings with purposes. After all, in the 1788 essay he claimed to derive the "organization of organic beings" from "laws" of the gradual development of "original predispositions", to be found in the organization of its "phylum".²¹ The human animal, alongside plants and other animals, counts as one organism among many to be studied in this way; my discussion should be understood in this context.

The date in which a transcription was composed often differs from the (more important) year (or semester) Kant gave the course. I analyze representative manuscripts (all extant) from each of the four distinct periods²²; the date ranges for each *group* are given in parentheses.

¹⁷ With respect to anthropology, however, cf. Wood: *Kant's Ethical Thought*, 215 ff.

¹⁸ Adickes carried out extensive philological and philosophical analyses that are still useful today. Erich Adickes: *Untersuchungen zu Kants Physischer Geographie*. Tübingen 1911. Erich Adickes: *Ein neu aufgefundenes Kollegheft nach Kants Vorlesung über physische Geographie*. Tübingen 1913. See also Erich Adickes: *Kant als Naturforscher*. Berlin 1924–25.

¹⁹ Following the *Akademie-Ausgabe*, from which I cite (VvRM, AA 02: 429–443), I do not here distinguish between the 1775 course announcement and the 1777 published version. Mikkelsen translates both texts. In: Jon M. Mikkelsen, ed. and trans.: *Kant and the Concept of Race*. Albany 2013. Cf. his comment at Mikkelsen, 45.

²⁰ See Adickes: *Kant als Naturforscher*, 406–459. More recent studies include the following. Emmanuel Chukwudi Eze, in E. Ch. Eze (ed.): *Postcolonial African Philosophy*. Oxford 1997, 103–140. Mark Larrimore: "Sublime Waste: Kant on the Destiny of the Races". In: *Canadian Journal of Philosophy* 25 1999, 99–125. *The German Invention of Race*, eds. Sara Eigen and Mark Larrimore. Albany 2006. Bernard R. Boxill and Thomas Hill, Jr.: "Kant and Race". In: *Race and Racism*, ed. B. R. Boxill 2001, 448–471. Pauline Kleingeld: *Kant and Cosmopolitanism: The Philosophical Ideal of World Citizenship*. Cambridge 2011, 92–123. Robert Bernasconi: "Kant's Third Thought on Race". In: *Reading Kant's Geography*, 291–318. For a useful overview of the debate, see Introduction, in J. M. Mikkelsen, *Kant [...]*, 1–32.

²¹ ÜGTP, AA 08: 179.18–22: "Organisation von organischen Wesen"; "Gesetzen"; "ursprünglichen Anlagen"; "Organisation ihres Stammes".

²² On the periods and types, see http://kant.bbaw.de/base.htm/geo_typ.htm and Werner Stark, in: *Reading Kant's Geography*, 73–75. Although it does not concern us here, the latter differentiates A_0 , A_1 , and A_2 (within type A); B_0 and B_1 (within type B); and also within type X (standing for "mixtures"), X_1 and X_2 .

- “Ms Holstein”. From Group A²³ (based on courses from 1757–1772)
- “Ms Kaehler”.²⁴ From Group B (1774–1779)
- “Ms Dönhoff”. From Group C (1780s)
- “Ms Dohna”. From Group D (1790s)

Since *Kritik of Urteilkraft* was composed shortly before 1790 and published in that year, it should be noted that several geography transcriptions were based on courses given after 1790. However, only one manuscript is extant: “Ms Dohna” (from circa 1792). Johann Adam Bergk (1769–1834), under the pseudonym Friedrich Christian Starke, edited *Immanuel Kant's vorzügliche kleine Schriften und Aufsätze*.²⁵ Its second volume contains a 21-page excerpt (pages 262–283) of a lost student transcript from summer semester 1791 (“anonymous-Starke 4”). Since its content and date of composition are relevant to this article, I discuss Bergk's excerpt; I also briefly mention a manuscript called “Ms 1729” or “anonymous-Königsberg 3” (circa 1791/1792),²⁶ which is related²⁷ to “Ms Dohna”. To provide some context, I examine the published announcements referring to Kant's geography lectures and the three essays on teleology (1775, 1785, 1788). In examining the representative transcriptions, I proceed chronologically; this seems to be the most straightforward way to discern how the lectures evolved with respect to our question.

My first section examines “Ms Holstein”; section 2 examines the 1775 essay on race and “Ms Kaehler”. Section 3 analyzes “Ms Dönhoff”; the fourth section first fills in some gaps by looking at the essays from the 1780s and then turns to the manuscripts from the 1790s, namely, “Ms Dohna”, “anonymous-Starke 4”, and “Ms 1729”.

²³ “Ms Hesse” (1770), named after Georg Hesse and of Stark's type A₂, is sufficiently reliable and lengthy (at 71,000 words) to merit examination. However, since “Ms Hesse” comes from the A period, discussing it would not have contributed much to answering the present question, even if the Ms is a noteworthy source of Kant's views on geography toward the end of period A.

²⁴ “Ms Kaehler” is located at the University of Pennsylvania's Rare Book and Manuscript Library (Philadelphia, USA), listed as Ms. Codex 1120 and (formerly) Ms. German 36; the author is grateful to John Pollack for his assistance and for granting access. Mss Holstein, Dönhoff, and Dohna are privately owned (see AA 26.1: LXI).

²⁵ *Immanuel Kant's vorzügliche kleine Schriften und Aufsätze* [...], ed. Friedrich Christian Starke. Leipzig 1833. 2 vols. See 26.1: LXII.

²⁶ http://kant.bbaw.de/base.htm/texte.htm/frg_1729.htm [accessed 11 November 2014]. Adickes labeled it “S.”

²⁷ http://kant.bbaw.de/base.htm/geo_doh.htm [accessed 11 November 2014]: “verwandt mit Ms 1729”.

We do not know beforehand, *a priori* as it were, that Kant employed his own strict demarcation of the empirical and pure disciplines and that he systematically kept them apart in his lecturing practice: that this was the case must be shown by close examination and citation of the relevant texts. If so, a demonstration that Kant hardly reflected – at least not in any sustained way – on the nature of teleology in his course would appear noteworthy after all. It would allow us to see how Kant conceived of one natural science, geography, namely, as an empirical, pragmatic, worldly, scientific investigation rather than a scholastic discipline. By answering the present question, we can thus better understand how Kant conceived of the boundaries between the transcendental and empirical disciplines, his understanding of natural science, and his lecturing activity and pedagogical practice.

1 Animals and Nature’s Agency in the 1750s

Before we turn to “Ms Holstein”, some background is needed.²⁸ A few years before the lecture associated with “Ms Holstein” was given, Kant published two German essays that, given their topics and themes, can be seen as contributions to physical geography. The first, *Untersuchung der Frage* [...], published on 8 and 15 June 1754, responds to a prize question posed in 1752 by the Prussian Royal Academy of Sciences. The second treatise, *Die Frage, ob die Erde veralte* [...], published in 1754, is connected to a dispute that raged throughout Königsberg concerning the earth’s aging. Although reading the texts of biblical Christian revelation as directly relevant for claims in natural science was common in Königsberg at the time, as Michael Church²⁹ has pointed out, Kant deliberately chooses not to do so. Kant discusses four theories of the earth, three of which are mechanical and the fourth biological, and, since it introduces the notion of a world spirit or soul, even metaphysical. Moreover, in response to the 1755 Lisbon earthquake, Kant published three brief essays on earthquakes the following year. Although Kant also touched on and defended optimism, the tracts were mostly scientific and, indeed, concerned physical geography. He also published two short meteorologi-

²⁸ On Kant’s intellectual environment, the Collegium Fridericianum, and Albertina University, see Werner Stark, “Naturforschung in Königsberg, – ein kritischer Rückblick aus den Präliminarien einer Untersuchung über die Entstehungsbedingungen von Kant’s Vorlesung über Physische Geographie”. In: *Estudos Kantianos* 2 (2), July/December 2014, 29–60.

²⁹ See M. Church: “Immanuel Kant and the Emergence of Modern Geography.” In: *Reading Kant’s Geography*, 19–46; 26.

cal essays in 1756 and 1757. *Entwurf und Ankündigung eines Collegii der physischen Geographie*, to which an essay on wind was appended, appeared in 1757. Thus, notwithstanding some exceptions – e.g., the Latin writings, *Gedanken von der wahren Schätzung der lebendigen Kräfte*, and *Neuer Lehrbegriff der Bewegung und Ruhe* – the works from 1754 to 1758, including *Allgemeine Naturgeschichte* (1755), can be considered to be texts pertaining to physical geography. In turn, Kant's course began with some remarks on mathematical geography, on which he also had published. These writings are not solely works in natural science or physics, even if the more Newtonian writings are certainly closer to physics. Hence, at the beginning of his academic career, the *Privatdozent* worked intensely on the themes relevant to or addressed by physical geography.

In a page in *Entwurf und Ankündigung*, Kant advertises of what would become Parts II and III of the course, or the Parts devoted to the three kingdoms (animal, plant, mineral) and to a geographical exposition of peoples around the globe, respectively. Kant introduces his notion that animals, including human beings, have a natural shape and colour that are conditioned by what region they occupy.³⁰ He claims that certain tendencies or inclinations of human beings are derived from the zones in which they live.³¹

“Ms Holstein”³² was written by a group of anonymous transcribers³³ on the basis of Kant's own outline for his course. “Ms Holstein” contains no references to or mention of organisms, organized beings, or an end (*Zweck*), even as it devotes a section³⁴ to human beings. In addition, “Ms Holstein” never explicitly refers to a germ (*Keim*) or predisposition (*Anlage, Prädisposition*). Hence, it seems that these core elements of Kant's theory appear only *after* 1757/59 and before 1775.³⁵

³⁰ Kant, *Natural Science*, 393; EACG, AA 02: 09.05–07.

³¹ Kant, *Natural Science*, 393; EACG, AA 02: 09.19–20: “die Neigungen der Menschen, die aus dem Himmelsstriche, darin sie leben, herfließen”.

³² References to the Holstein are to AA volume 26.1 (2009). Adickes (*Untersuchungen*, 4) refers to “Ms Holstein” as “B” (see also AA 26.1: LXI) and, on 31f., conjectures that “B” is the so-called *Diktat-Text* since it was based on Kant's own lecture notes.

³³ Stark, *Reading Kant's Geography*, 72: “a copy made by several people”.

³⁴ Holstein, V-PG, AA 26.1: 85–102: “Erster Abschnitt”. Cf. PG, AA 09: 311–320. I also cite from Rink's *Physische Geographie* when relevant. Starting with § 53 (PG, AA 09: 273.22) and up to the end (AA 09: 436.37), PG was based on “Ms Holstein” (the “*Konzept-Text*” of 1757/59). PG's *preceding* part (AA 09: 156–273.21) was based on a text from the mid 1770s, very similar to “Ms Kaehler”. Rink occasionally but significantly altered these texts for his hurried edition.

³⁵ “Anlage” in the relevant sense appears by 1763, in the essay, BDG, AA 02: 126.22–23: “Denn selbst im Baue eines Thieres ist zu vermuthen: daß eine einzige Anlage eine fruchtbare Tauglichkeit zu viel vortheilhaften Folgen haben werde, [...]”. “Keim” in the relevant sense appears to

To clarify this, it will first be useful to present Kant's theory in *Von den verschiedenen Racen der Menschen* (1775). One of the key ideas in 1775 is the principle that an animal's natural capacities and *Keime* are developed according to the climatic, hence external, conditions associated with a particular region on the earth – in particular the amount of sun and heat and the air's moisture level. By appealing to both natural, internal 'mechanisms' and to circumstantial and climatic conditions, Kant's theory of variation and differentiation conceives of humans as animals whose characteristics are shaped by naturally given germs and predispositions, in interaction with regional conditions. According to the *autochthonous* principle (from the Greek: 'sons of the soil'),³⁶ a people adapts to the place where it originally resides, thereby developing its *Keime* and *Anlagen* although it can in principle later migrate to a different region.

"Ms Holstein" reveals that Kant had a climatically determined conception of racial difference *before* he developed the more technical "germs-and-endowments" theory, as Mikkelsen calls it.³⁷ Kant starts out with a mainly climatological race theory and gradually adopts a predominantly hereditary one, even though the latter still retains some climatological features. "Ms Holstein" uses the notion of a natural aptitude (*Naturell*) twice,³⁸ so even here inherent 'factors' may play a role, yet it comes in a single passage, and the latter ultimately suggests that climate has a very strong influence on the form and behavior of animals, including humans. The passage links the temper of the climate with the temperament of the people. (The Cambridge Edition translates the two italicized instances of *Naturell* as "temperament" and "temper", respectively.)

Wenn man nach den Ursachen der mancherley in einem Volk eingearbeteten Bildungen und *Naturellen* fragt, so darf man nur auf die Ausartungen³⁹ der Thiere so wohl in ihrer Gestalt als ihren Sitten Acht haben, so bald sie in ein ander Clima überbracht werden da andere Luft, Speise pp ihre Nachkommenschaft ihnen unähnlich macht.⁴⁰ [...] Die Nordische Völker, die nach Spanien übergegangen, haben nicht alle eine Nachkommenschaft von Körpern

emerge later. Cf. (1764) VKK, AA 02: 270.34: "der Keim der Krankheit sich unvermerkt entwickelt". Cf. (1771) RezMoscati, AA 02: 425.06: "Keim von Vernunft".

36 Kant, *Anthropology, History, Education*, 87; VvRM, AA 02: 432.13.

37 J. M. Mikkelsen: *Kant* [...], 44.

38 Holstein, V-PG, AA 26.1: 96.06 and 97.05. Cf. PG, AA 09: 317.23 and 318.04.

39 Cf. Kant on "degeneration" with Buffon's complex use of the term. See Jennifer Mensch: *Kant's Organicism: Epigenesis and the Development of Critical Philosophy*, Chicago 2013; and Phillip Sloan, "The Idea of Racial Degeneracy in Buffon's *Histoire Naturelle*". In: *Studies in Eighteenth-Century Culture* 1973, 3, 293–321. "Buffon" is mentioned already at (1755) NTH, AA 01: 238.16, 277.20, 345.03; and in (1757) EACG, AA 02: 08.11, 02: 04.14.

40 Holstein, V-PG, AA 26.1: 96.05–10. Cf. PG, AA 09: 317.22–27.

die lange nicht so groß und stark als sie waren, hinterlassen; sondern sie sind auch in ein Temperament, was eines Norwegers oder Dänen seinem sehr unähnlich ist, ausgeartet.⁴¹ [...] Obgleich eine Nation nach langen Perioden in das *Naturell* desjenigen Climatis ausartet, wohin es gezogen ist, so ist doch bisweilen, in vielen Zeiten die Spuhr von ihrem vorigen Aufenthalte anzutreffen.⁴²

In the late 1750s and early 1760s, Kant's geography was known in Königsberg for its views on climate, as two letters from Sebastian Friedrich Trescho (dated 23 January and 5 March 1760) to Ludwig Ernst Borowski attest.⁴³

Turning to another theme: Kant writes as if nature were an agent, as if it could have had a part in the formation of objects like stones, though this may be only a manner of speaking or a largely stylistic use. In *The Mineral Kingdom*, Kant claims that one often digs up stones that were not shaped by nature but by human beings.⁴⁴ In making this contrast, nature is characterized, implicitly at least, as an agent who uses practical intelligence to pursue her own designs. "Ms Holstein" states that nature acts over long periods of preparation: nature works slowly and through the centuries, through a slow "accretion".⁴⁵

In short, the lecture does not yet employ the notion of a germ or predisposition; Kant seems to have defended a mostly climatically determined conception of racial difference that preceded his germs-and-predispositions theory. In the early version of his geography course, Kant imputed intention and purpose to natural processes, while at the same time evading explicit natural theology and physicotheology.

2 Organisms, Animals, and Agency in the mid 1770s

I must pass over some key publications from the 1760s. For instance, although the notable pre-Critical essay *Der einzig mögliche Beweisgrund zu einer Demonstration des Daseins Gottes* (1763) examines physicotheological arguments, explores

⁴¹ Holstein, V-PG, AA 26.1: 96.12–18. Cf. PG, AA 09: 317.29–33.

⁴² Holstein, V-PG, AA 26.1: 97.04–09. Cf. PG, AA 09: 318.04–07.

⁴³ Trescho writes (23 January 1760): "Ich glaube auch dass Hr. Kant in einigen Kapiteln der phys. Geographie den Einfluss und das Verhältniss des Klima zu der Gemüths- und Handlungsart der Völker anzeigt". Quoted at AA 26.1: LXII.

⁴⁴ Holstein, V-PG, AA 26.1: 192.23-24. Cf. PG, AA 09: 374.06–07.

⁴⁵ Holstein, V-PG, AA 26.1: 195.27: "Ansatz". Cf. PG, AA 09: 376.01–02.

apparent design and agency, and employs the notion of an *Anlage*, there is insufficient space to address it properly here; moreover, my focus is on the lectures and writings more plainly devoted to geography. Even if the popular (1764) *Beobachtungen über das Gefühl des Schönen und Erhabenen* appeals to an intentional plan of nature or providence⁴⁶ and some of the “Ms Holstein” material about human beings is placed into *Beobachtungen*,⁴⁷ for the sake of space I must instead focus on more explicitly geographical writings and lectures. The 1765 course announcement, *Nachricht von der Einrichtung* [...], while noteworthy, contains only two pages on the geography course, though Kant does promise to consider human beings in light of the variety of human “natural traits”⁴⁸ and moral characteristics, in order to provide a great map of the human species.

I turn to “Ms Kaehler”,⁴⁹ named after Johann Sigismund Kaehler, who writes the year 1775 at the beginning of his manuscript’s 530 pages (78,700 words), although the course seems to have taken place during summer semester 1774.⁵⁰ This transcription is particularly interesting in that it is the first one that is based on a geography course given *after* Kant began lecturing on anthropology. Indeed, “Ms Kaehler” explicitly refers to the kindred pragmatic discipline, anthropology.⁵¹ Another indication of a consequent change is that in “Ms Kaehler”, Europe is not described in Kant’s overview of the continents, whereas in “Ms Holstein”, a discussion of Europe comes after Asia and Africa and before America: it examines Bulgaria, Greece, Hungary, Italy, France, Spain, Portugal, Sweden, Norway and

46 GSE, AA 02: 218.14: “[...] so hat die Vorsehung in uns noch ein gewisses Gefühl gelegt, [...]”. Cf. 02: 217.28–29.

47 Robert Loudon asks whether “Ms Holstein” may have been a source of some of the anthropological material in *Beobachtungen*. See R. Loudon: *Kant’s Human Being*. Oxford 2011, 197. I agree that some of Ms Holstein’s claims made it into the *Beobachtungen*, which focuses mostly but not exclusively on European peoples. At the same time, Ms Holstein’s discussion of, e.g., the French, Italians, and Spanish is much shorter than the one in *Beobachtungen*, and there are many peoples in “Ms Holstein” that never make it into *Beobachtungen*.

48 Kant, *Theoretical Philosophy 1755–1770*, 299, NEV 02: 312.33–34: “nach der Mannigfaltigkeit seiner natürlichen Eigenschaften”.

49 For the brief announcement of the discovery of “Ms Kaehler” see Rudolf Malter: “Physische Geographie Kaehler”. In: *Kant-Studien* 78, 1987, 259.

50 Adickes did not mention “Ms Kaehler” – which is unsurprising since it was discovered only in the 1980s. Yet Adickes (*Untersuchungen*, 32, 182 ff.) reveals that he knew that one of the sources of Rink’s edition was material dating around 1775. See also Adickes, *Ein neu aufgefundenes Kollegheft* (1913), on manuscript anonymous-Werner [Ms “W”]. “W” is conjectured to be from around 1774 and, in Stark’s typology, is type B_o.

51 Kaehler: 04. Cf. PG, AA 09: 157.03 and 157.28. As with the geography transcriptions except for “Ms Holstein” (= AA 26.1), references to “Ms Kaehler” are to the Ms page number, also used in the digitized versions of the aforementioned Kant-Arbeitsstelle.

the Faroe Islands, and Russia.⁵² Presumably this change can be attributed to the fact that Kant mentioned nearly all of these countries in the anthropology course, which tended to focus on Europe more than the geography course.

In the contemporaneous course announcement, *Von den verschiedenen Racen der Menschen* (1775), Kant held that there are four fundamental races of human beings: whites (including Moors, Arabs, Turkish-Tatars, and Persians), the Negro race, the Hunish (Mongolian or Kalmuckian) race, and the Hindu or Hindustani race.⁵³ He subscribed to monogeneticism⁵⁴: the four races of human beings originated from a single “phylum”.⁵⁵ To explain racial differentiation, Kant maintained that there was an interaction of substantial germs and predispositions with circumstantial causes and environmental influences, as noted in the previous section. Kant distinguished four main types of climate (using the pairs humid/dry and cold/hot) and correlated each of the four human races with one of them. He also made an important distinction between natural history (*Naturgeschichte*) and natural description (*Naturbeschreibung*),⁵⁶ a distinction that was of considerable importance for the history of the life sciences and geography. The essay, at least stylistically, attributes intentions and aims to nature, which is portrayed as if it were as agent.⁵⁷ One finds a similar understanding of nature in “Ms Kaehler”. An analysis of “Ms Kaehler” is, moreover, worthwhile since many of the examined passages did not make it into Rink's *Physische Geographie* and are therefore relatively unknown.

“Ms Kaehler” reveals a developed philosophical awareness in comparison with “Ms Holstein”. In the 1770s, after the publication of the “Inaugural Dissertation” (1770), Kant was in the midst of the ‘silent decade’, as he was formulating the Critical philosophy even if not publishing these thoughts, so we might expect the Ms to reveal something resembling Critical reflection. And, indeed, the first

52 Holstein, V-PG, AA 26.1: 288.03–299.13. Cf. PG, AA 09: 421.01–427.25.

53 VvRM, AA 02: 432.05–07. This list changes in the 1777 version (noble blond from northern Europe, copper red from America, black from Senegambia, olive-yellow from Asian India), a list retained in anthropology “Reichel” (semester 1793/94, estimated); Reichel: 146 f. (white, black, yellow, copper red). This article's dating of the anthropology transcriptions follows the editors, in: AA 25.1: XCIV.

54 On monogeneticism, see John Zammito, in: *The German Invention of Race*, 45–48.

55 Kant: *Anthropology, History, Education*, 85; VvRM, AA 02: 430.30: “Stamme”.

56 VvRM, AA 02: 434n.

57 Kant: *Anthropology, History, Education*, 86–94; VvRM, AA 02: 31.32–33: “Natur ungestört [...] wirken kann”; AA 02: 431.28: “weisere Natur”; AA 02: 436.33–34: “Fürsorge der Natur”; AA 02: 439.19: “Selbsthülfe der Natur”.

three sections reflect the developing Critical philosophy.⁵⁸ Kant claims that for all of our knowledge, one must first direct attention to its sources or origins (§ 1). He then states that so far as the sources and origins of our knowledge are concerned, we derive it all either from pure reason or from experience, which in turn is instructed by reason, that reason gives us pure rational knowledge, whereas knowledge from experience is attained through our senses; since the senses cannot transcend the world, our knowledge from experience is limited to the present world (§ 2). He adds that we need to become acquainted with the objects of our experience as a whole, so that our knowledge is not an aggregate but a system, where the whole is prior to the parts. The next section begins with the claim that our cognitions originate⁵⁹ with the senses, which give us the material to which reason merely gives an appropriate form (§ 3). Hence, the transcription reflects certain elements of the emerging Critical philosophy.

In “Ms Kaehler”, Section II (§ 75), Kant refers to purposive products and distinguishes unorganized creatures from living, organized ones. Kant’s use of the distinction between organized and unorganized beings is quite ordinary in many places; for instance, he uses the conventional sense of ‘products’ to designate what grows in a region.⁶⁰ He understands organized beings in terms of purposiveness.

Nachdem wir die Elemente, aus welchen die Erde zusammengesetzt ist, erwogen haben, so ist es auch billig, daß wir zu ihren Einwohnern und Producten, mithin zu ihren Geschöpfen übergehen. Wir finden aber unter denselben, sowohl solche, bey denen wir etwas zweckmäßiges gewahr werden, als auch bey denen solches nicht entdecket werden kann. Unter jene rechnen wir die lebende Wesen und nennen solche organisirte, unter diese aber die Mineralien p [etc.] welche wir inorganisirte Geschöpfe heißen. Weil nun unter den lebenden die vernünftigen Geschöpfe die vornehmsten sind, so werden wir anfänglich von den Menschen, deren Körper, Gemüths Character betrachten, weil diese Ordnung die bequemeste für den Menschlichen Verstand ist.⁶¹

His claim that “rational creatures” – foremost human beings – are “the most notable” might reflect the emerging Critical ethics, yet Kant does not develop the point.

Just as Buffon influenced much of Kant’s conception of natural history, and is cited in “Ms Kaehler”,⁶² Buffon’s notion of “varieties” underlies a distinction

⁵⁸ Kaehler: 01–09. Cf. PG, AA 09: 156.01–159.27.

⁵⁹ Kaehler: 07: “fangen an”. Cf. PG, AA 09: 159.02.

⁶⁰ Kaehler: 513 f.

⁶¹ Kaehler: 354.

⁶² Buffon is mentioned at Kaehler: 109, 166, 356.

Kant makes between *race*, which is that subspecies the intermixing of which produces “half-breeds”, and *varieties* (within a race) such as blonds and brunettes.⁶³

Bey andern lebenden Wesen beobachtet man, daß wenn sie gleich verschieden sind, dennoch solche Producte hervorbringen die sich selbst fortpflantzen und entweder dem einen oder dem andern von den Zeugenden ganz vollkommen ähnlich sind, und diese werden von Buffon Varietaeten genannt, weil der Unterschied der Thiere keinen Einfluß auf die Zeugungskraft alsdenn hat.⁶⁴

The text elsewhere speaks of an arrangement according to the “maxims of nature”⁶⁵ yet does so with no suggestion that this is a merely regulative principle. It states that nature has its own feedback loops whereby it checks itself: since nature does not often create ‘harmful’ products like the crocodile, the ichneumon or Pharaoh’s mouse eats crocodile eggs.⁶⁶ Nature is depicted as having a kind of agency and a sense that harmful products should be regulated and controlled, but there is no reflection on the ends of nature or of nature as a system.

How did Kant’s 1770s lecture handle the notion of divine providence, an issue of obvious political, theological, and philosophical importance in Kant’s Königsberg? “Ms Kaehler” does not read the apparent order in the slopes of banks as evidence of divine design, but instead explains the geological formation in naturalistic terms. Such an arrangement is best explained by Dampier’s navigational rule that when the land slopes gently, the water is shallow, and when there are steep cliffs the water is deep; it would be seen as foolhardy, it reads, “if we tried to explain this arrangement as the most perfect one”.⁶⁷ In *Discours sur l’origine et les fondements de l’inégalité parmi les hommes* (1755), Rousseau, like several other writers, conjectured that humanity’s development into its present state required a long period of time, and in similar fashion Kant rejects a literal interpretation of Genesis on the creation of the earth.⁶⁸ Nature is described as if it were an agent with intelligence, for it can determine a place to be inhabited or uninhabited, even if humans can overcome this plan and choose to leave an otherwise suitable

⁶³ Cf. VvRM, AA 02: 430.26.

⁶⁴ Kaehler: 356.

⁶⁵ Kaehler: 245: “Maximen der Natur”.

⁶⁶ Kaehler: 412.

⁶⁷ Kaehler: 60 f.: “[...] wenn wir diese Einrichtung für die Vollkommensten erklären wollten [...]”.

⁶⁸ Kaehler: 201: “Moses giebt das Alter des Menschlichen Geschlechts an aber nicht der Erde, die Erde und der gantze SchöpfungsBau mag sich schon einge 1000 Jahr gebildet haben, dadurch darf man sich nicht einschnrenken lassen den physicalischen Gründen Raum zu geben. Für Gott ist eine Zeit wie der Tag zum Schaffen zu viel und zu Ausbildung formation der Erde zu wenig”. Cf. PG, AA 09: 267.04–09.

region. This underlies Kant's distinction between deserts, which nature rendered unfit for human inhabitation, and isolated regions or wildernesses.

Denn einige Gegenden wie die Americanischen um Peru herum, worinn nur dann und wann sehr selten Horden herum ziehen, und worin das Paradies von America befindlich ist, sind nur aus Willkühr der Menschen, ohne daß sie die Natur dazu bestimmt hat unbewohnt, und alsdenn heißen sie Einöden; [...] Die Wüsten sind eigentlich Oerter, welche von der Natur dazu bestimmt und eingerichtet sind, daß die Menschen nicht darauf wohnen können.⁶⁹

Shortly after this passage, Kant makes a point that resurfaces in his essays on history, namely, that the human being is made for the whole earth because his body is formed by nature, such that he can become habituated to any climate, which, Kant here adds, is partly the reason for the origin of differences in national character.⁷⁰ Nature determines both nonhuman and human animals,⁷¹ even if in different ways. With its long neck and padding, a camel seems to be quite suited for carrying loads.⁷² Likewise, the rhino has been well “equipped”⁷³ by nature.

The section “Von dem Nationalcharacter, Sitten und Gebräuchen verschiedener Völker” extends his remarks about mental character and national character⁷⁴ in what we might consider a mix of political and cultural geography.⁷⁵ Several of his claims place Kant in an unfavorable light. The Hottentots (today: Khoekhoen), Kant says, are “the most uncouth people in the world”,⁷⁶ a race of Negroes, inhabiting a land that nature has well supplied. He uses the existence of the Greenlanders (i.e., Greenlandic Inuit) to distinguish refined and wild conditions.⁷⁷ Despite his claim about natural capacities, Kant never explicitly mentions *Naturell*, as if the notion of a germ (*Keim*) were doing most of the work.⁷⁸ The Ms states that in certain products (organisms) in general there are germs developing,

⁶⁹ Kaehler: 141. Cf. PG, AA 09: 234.23–33. This passage reveals another significant instance of Rink's intrusions, for the Rink edition says that nature only *appears* to determine and arrange. PG, AA 09: 234.32–33: “Wüsten sind eigentlich Örter, die von der Natur dazu bestimmt und eingerichtet zu sein scheinen, daß die Menschen nicht darin wohnen können”.

⁷⁰ Kaehler: 145. Cf. PG, AA 09: 236.25–28.

⁷¹ Kaehler: 397 f. and 395 f.

⁷² Kaehler: 397 f.: “recht bestimmt zu seyn scheint”.

⁷³ Kaehler: 395: “verliehen”.

⁷⁴ On these see Felicitas Munzel: *Kant's Conception of Moral Character*. Chicago 1999; R. Louden: *Kant's Human Being*; P. Kleingeld: *Kant and Cosmopolitanism*, 117–123.

⁷⁵ Kaehler: 477 ff.

⁷⁶ Kaehler: 505: “das unschlachteste Volk in der Welt”.

⁷⁷ Kaehler: 529.

⁷⁸ Ms Kaehler also lacks any mention of *Anlage* or *Prädisposition*.

from a single phylum, according to a region's air and food products.⁷⁹ The example here is the dog, but, as we know, Kant thinks this applies to organic beings in general.

I conclude this section by citing an example of a passage that forms part of the empirical background of the CTJ,⁸⁰ for his physical geography is the source of many of the empirical claims found in CTJ.⁸¹ Nature, "Ms Kaehler" reads, provides the Greenlandic Inuit their wood, which they put to good use.⁸² Although "Ms Kaehler" shows that the geography is the source of some of the empirical claims scrutinized in CTJ, it contains no sustained analysis of these claims.

3 Manuscript Dönhoff

Although "Ms Dönhoff", which dates from 1781 or 1782 and hence belongs to the official Critical period, contains no references to *Bestimmung*, *Anlage*, or *Prädisposition*, it does make use of the concepts of natural aptitude⁸³ and germ,⁸⁴ providence,⁸⁵ and purpose.⁸⁶ It again asserts Kant's view that nature unites all its purposes in the human being.⁸⁷ It continues to characterize human and non-human animals in terms of teleological and purposive⁸⁸ notions.

⁷⁹ Kaehler: 401: "in gewissen Producten überhaupt solche Keime liegen."

⁸⁰ There are many examples. Consider: KU, AA 05: 377.31–378.11.

⁸¹ While my interest in this paper actually goes in the inverse direction and focuses mainly on the lectures, the Critical works in practical and theoretical philosophy undoubtedly employ concepts and metaphors taken from the geography lectures (e.g. *Keime*, *Anlage*). E.g., on the significance of the metaphors, see M. Larrimore in: *The German Invention of Race*, 362. On Kant's organic concepts in theoretical philosophy, see (*passim*) J. Mensch, *Kant's Organicism*; John Zammito, *The Genesis of Kant's Critique of Judgment*, Chicago 1992, 207; and P. Sloan, "Performing the Categories: Eighteenth-Century Generation Theory and the Biological Roots of Kant's *A Priori*". In: *Journal of the History of Philosophy* 2002, 40, 229–253. On organic concepts in the Critical ethics, see J. M. Mikkelsen, *Kant [...]*, 20 f. On geographic notions and the Critical philosophy, see Jeff Malpas and Karsten Thiel, in: *Reading Kant's Geography*, 195–214.

⁸² Kaehler: 530: "Ihr Holtz, welches sie aus dem Waßer bekommen." Cf. KU, AA 05: 369.11–12: [...] dem Holze, welches ihnen das Meer zu Wohnungen gleichsam hinflößt [...].

⁸³ Dönhoff: 94: "Naturell".

⁸⁴ Dönhoff: 85–91: "Keim".

⁸⁵ Dönhoff: 86, 127: "Vorsehung".

⁸⁶ Dönhoff: 79–79', 93: "Zwek".

⁸⁷ Dönhoff: 79'.

⁸⁸ Mikkelsen rightly discerns, in Kant's theory, a connection between natural purposiveness and black skin color as a purposive adaptation of nature. In: J. M. Mikkelsen, *Kant [...]*, 21, 27.

A noteworthy passage on the origin of human beings reveals sensitivity to the limits of reason. Its suggestion that one has warrant to assume a postulated notion after, or if, one has established its possibility, seems to be written in a Critical vein:

Es fragt sich zuerst, ob das menschliche Geschlecht gleich anfänglich unter einerley Titel begriffen worden, und ob alle Menschen von einerley Art sind, oder ob es verschiedene Menschen enthält, die nicht aus einem Stamm haben entspringen können, sondern verschiedene Stämme gehabt haben müssen? Ob sie wirklich alle aus einerley Stamme entsprungen sind, kan die Vernunft nicht ausmachen, sie kann nur die Möglichkeit davon fragen, und zeigt sich diese, so hat sie schon einen Grund es anzunehmen.⁸⁹

Kant would express similar views on the matter in the 1785 and 1788 essays on race (next section). In its Prolegomena, “Ms Dönhoff” distinguishes “geographic description” from a “system of nature”:

Diese ist entweder ein System der Natur, wo die Dinge nach Begriffe geordnet sind, und macht das erste Stük aus, oder eine Geographische Beschreibung. Hier wird Weltkenniße von Schulkenntniße unterschieden, wo nur auf gehörige Ordnung gesehen wird. Auch der bewirbt sich um Weltkenniße, der seine Populaire Kenntniße in aller Absicht zu nutzen sucht. Wir unterscheiden uns von Naturforschern dadurch, daß wir mit der Neubegierde eines Reisenden das Merkwürdige aufsuchen, und einem jeden Dinge die Stelle da anweisen, wo es die Natur hingesezt hat, nur in der That haben viele Naturforscher in ihrem System sicher viele unnatürliche Verbindungen gemacht.⁹⁰

This distinction between *worldly* cognition, to which anthropology and geography belong, and *scholastic* knowledge, will help explain (see Conclusion) why Kant does not offer much philosophical reflection on teleology in these popular lectures, but employs teleological principles directly or ‘naively’ (by which I only mean that he applied them without the Critical strictures about their purely regulative character).

The second Part of the course, which concerns the animal kingdom, opens with a noteworthy passage that shows what conception of organisms Kant employed circa 1782.

Wenn wir nur die drey Reiche der Erde durchgehn, so solte das Mineralreich wohl das erste seyn, denn die NaturGeschöpfe aus dem Mineralreich sind von der einfachsten Struction und <man> sieht an ihnen wenigstens keine innere Zwecke. Bei einer jeden Pflanze, ist ein Theil um des andern willen da, und zum Theil sogar durch den andern da. Der Halm kan

⁸⁹ Dönhoff: 79'.

⁹⁰ Dönhoff: 2'.

nicht ohne Wurtzel wachßen, und ohne Halm kan die Wurzel nicht existiren. So auch beim Menschen. Die Hand kan ohne Magen nicht da seyn und ist auch durch ihn da. Wegschneiden kan man einem die Hand, ohne das der Mensch davon sterben muß, davon ist die Ursache, die Natur hat ein Mittel sich selbst zu helfen und das zu ersetzen, was ihr weggenommen wird, so das wenn man etwas wegschneidet, doch noch neben andere da sind, durch welche das Blut umcirculiren kann. Ein Stük Stein aber ist nicht um das andere Stük da.⁹¹

Kant then proceeds to lecture on the animal (rather than mineral) kingdom since the former includes what he had called the “first purpose of nature”,⁹² the human being – perhaps further revealing the influence of the ethics on the geography. Kant here considers organic life to be an object of empirical knowledge and observation; he views the being as a natural product with “inner ends”. However, he gives no hint that making such an assertion about purposes consists in applying a ‘regulative’ principle of reason, to use the KrV language that was available to him at this time.⁹³ Largely in agreement with my interpretation, Reinhard Brandt comments on this passage that the Critical “restriction” that such claims about organic life would be only for the “reflective power of judgment” is still absent.⁹⁴ In a similar passage from the “Danziger Physik” (also called “Mrongovius”) from 1785, a year before the publication of *Metaphysische Anfangsgründe der Naturwissenschaft*, Kant claims that organic powers of nature are quite different from mechanical and chemical ones, yet he adds the reflective comment that the human being lacks insight into the principle of organic modification of matter.⁹⁵

When it comes to matters of physicotheology, the 1782 transcription defends a naturalistic archeology and paleontology.⁹⁶ It claims that there are two ways to propose and defend a theory of the earth, to determine the present form of the earth and the changes it has undergone. The first is the method of the “archive” or “archeology of nature” (*Archiologie Naturalis*) according to which one draws conclusions about earlier causes by looking at the visible effects on or in the earth. Secondly, there is “sacred archeology”, whereby one consults religious scriptures. It states that this is not useful since such history goes only as far back as

⁹¹ Dönhoff: 79.

⁹² Dönhoff: 19: “ersten Zweck der Natur”. Recall that “Ms Holstein” contains no reference to a purpose (*Zweck*), let alone first purpose.

⁹³ KrV, A 685–688/B 712–716. See A. Wood: *Kant's Ethical Thought*, 216 f.

⁹⁴ Reinhard Brandt: *Immanuel Kant – Was Bleibt?* Hamburg 2010, 163. Although, as scholars have noted, there is an important difference between the *Kritik der reinen Vernunft*'s “regulative/constitutive” distinction and the *Kritik der Urteilskraft*'s “reflective/determinant” distinction, I shall not take this into consideration here.

⁹⁵ Danziger Physik, AA 29.1,1: 118.10–11.

⁹⁶ Cf. KU, AA 05: 419.09, 428n.; Anth, AA 07: 193.24, 323n.

writing.⁹⁷ “Ms Dönhoff” holds that the creation of the earth took place according to natural laws. It notes that though the religious writings describe the process as one day’s work, the current form of the mountains and streams suggests that they developed over long periods. Even the biblical commentators, “Ms Dönhoff” continues, see that these expressions aim only to describe the divine’s work, not to make a claim about nature’s development. The physicist or natural philosopher must examine natural forces, to see how the earth gradually was formed.⁹⁸ An archeology of nature brings out evidence from the past of human history and is aimed at the history of the earth and its products – animals, plants, and minerals. For this reason, Werner Stark claims that the “theory of the earth”⁹⁹ that Kant proposed in his 1757 lecture announcement was eventually replaced by ‘geology’.¹⁰⁰

In short, while supporting a naturalistic archeology, “Ms Dönhoff” makes no explicit mention of the (by then published) *Critique of Pure Reason*’s distinction between regulative and constitutive principles, yet it does insist that human reason is limited, namely, that it does not have insight into whether organisms (humans) emerged from a single phylum – a question Kant would take up about six years later in a controversy with Georg Forster, as we shall see.

4 The 1790s: Ms Dohna, Anonymous-Starke 4, Ms 1729

Like the transcriptions in anthropology, logic, and metaphysics bearing the name, the anonymous geography manuscript “Dohna” belonged to the family of Heinrich Ludwig Adolph Graf zu Dohna-Wundlacken (1777–1834).¹⁰¹ The anthropology, logic, metaphysics, and geography “Dohna” transcriptions were each written by at least three different, unidentified hands. “Ms Dohna” is relevant to our theme because it was based on a course given about two years after the

⁹⁷ Dönhoff: 67’.

⁹⁸ Dönhoff: 68.

⁹⁹ EACG, AA 02: 08.21: “Theorie der Erde”.

¹⁰⁰ Werner Stark: “Das Manuskript Dönhoff – eine unverhoffte Quelle zu Kants Vorlesungen über Physische Geographie”. In: *Kant-Studien* 100, 107–109, on 109.

¹⁰¹ Adickes did not mention Dohna. The front page of the Ms indicates the beginning and closing dates of 28 April and 22 September 1792. Arnold Kowalewski’s “Aus Kants Vorlesungen über physische Geographie nach einem ungedruckten Kollegheft vom Sommersemester 1792” contains eight printed pages from “Ms Dohna”. In: *Philosophischer Kalender für 1925. Im Zeichen Immanuel Kants*. Eds. A. Kowalewski and E.-M. Kowalewski. Berlin 1925, 94–101.

publication of *Kritik der Urteilskraft*. The transcription emphasizes the notions of organism and reproduction, especially in the section On Human Beings, which concerns the cultural, biological, and physical aspects of human beings.¹⁰²

Between the years in which he taught the courses underlying “Ms Dönhoff” and “Ms Dohna”, Kant published several key essays, including *Idee zu einer allgemeinen Geschichte in weltbürgerlicher Absicht* (1784). In its Fourth Proposition, Kant identified “unsociable sociability”¹⁰³ as one of the features of humanity which *nature* used to scatter humans around the globe and populate the earth, a point he also made throughout his anthropology lectures.¹⁰⁴ The Introduction to the Cambridge Edition’s translation states, plausibly, that the 1784 essay “anticipates much of the theory of the use of *natural teleology* in the theoretical understanding of nature that Kant was to develop over five years later in the *Critique of the Power of Judgment*”.¹⁰⁵

Kant also published the second (1785) and third installments (1788) of his trilogy on teleology and race. In *Bestimmung des Begriffs einer Menschenrasse*, Kant’s principal aim is to determine the concept of race, which he describes as follows: the classificatory difference of the animals of one and the same phylum insofar as this difference is unfailingly hereditary.¹⁰⁶ The key point is that there is only one common phylum for the four races or subspecies, and that over generations the original germs of the subspecies develop according to the demands of their climates. After one of these predispositions (*Anlagen*) developed in a people, the other predispositions were extinguished – a familiar account.¹⁰⁷ Although the essay’s references to natural agency need not be taken literally, Kant continues to speak of nature as agent – “nature’s foresight”,¹⁰⁸ “nature has originally given”,¹⁰⁹ “nature must have organized this skin [...]”,¹¹⁰ “an arrangement very wisely made by Nature”¹¹¹ – while offering little to no philosophical reflection on such claims.

102 Dohna: 98–118.

103 IaG, AA 08: 20.30: “ungesellige Geselligkeit”.

104 E.g., V-Anth/Fried, AA 25: 586.32; V-Anth/Pillau, AA 25: 844.26; V-Anth/Mensch, AA 25: 1199.18–19; V-Anth/Mron, AA 25: 1416.17–23, 1422.06–19.

105 Kant, *Anthropology, History, Education*, 107. Emphasis added.

106 Kant: *Anthropology, History, Education*, 154; BBM, AA 08: 100.07–09.

107 BBM, AA 08: 105.27–28.

108 Kant: *Anthropology, History, Education*, 147; BBM, AA 08: 93.25: “Vorsorge der Natur”.

109 Kant: *Anthropology, History, Education*, 152; BBM, AA 08: 98.27–29: “Die Natur hat [...] ursprünglich [...] gegeben”.

110 Kant: *Anthropology, History, Education*, 156; BBM, AA 08: 103.11–12: “die Natur diese Haut so organisirt haben müsse, daß [...]”.

111 Kant: *Anthropology, History, Education*, 156; BBM, AA 08: 103.19: “eine von der Natur sehr weislich getroffene Anstalt”.

He does, however, warn against assuming different first human phyla as “poor advice for philosophy”;¹¹² he says there is little comfort for philosophy in artificially constructing hypotheses;¹¹³ and he concludes that it is impossible to guess the shape of the original first human phylum.¹¹⁴

Kant was called, as he himself paraphrased it in *Über den Gebrauch teleologischer Principien in der Philosophie* (1788), a naturalist “of his own kind”,¹¹⁵ i.e., a natural philosopher who used teleological rather than theological terms. In the 1788 essay, Kant endorsed the principle (*Grundsatz*) that “everything in natural science must be explained naturally.”¹¹⁶ A characterization of Kant as a naturalist is found in Büsching’s review of the 1785 essay. Göttingen professor Anton Friedrich Büsching (1724–93) was author of the eleven-volume geographical work, *Neue Erdbeschreibung* (1754), which appeared just two years before Kant’s first geography lectures. Kant’s (almost exact) contemporary used geography to draw physicotheological conclusions and support the idea of providence, but Kant did not adopt this strategy.

Über den Gebrauch teleologischer Principien in der Philosophie further develops Kant’s racial theory, and its introductory and concluding sections operate on “a much higher level of generality”¹¹⁷ than the previous essays on race and provide a level of philosophical sophistication arguably not found there. Kant replies to criticisms put forward by Georg Forster (1754–1794). Kant not only clarifies various misunderstandings allegedly made by Forster, but, more importantly, defends an account that takes up certain themes later found in CTJ,¹¹⁸ even if his view differs from that of 1790. Kant early on hints that he will discuss to what extent and how we are warranted in using the teleological principle where sources

112 BBM, AA 08: 102.08: “der Philosophie wenig gerathen sein”.

113 BBM, AA 08: 104.30–31: “Doch es ist wenig Trost für die Philosophie in Erkünstelung von Hypothesen”.

114 BBM, AA 08: 106.03: “unmöglich zu errathen”.

115 ÜGTP, AA 08: 178.17–18: “eigner Art”.

116 ÜGTP, AA 08: 178.12–13: “[...] alles in einer Naturwissenschaft natürlich müsse erklärt werden [...]”.

117 J. Zammito, *The Genesis of Kant’s Critique of Judgment*, 208.

118 I agree with the Editor’s Introduction that in the 1788 essay Kant defends the need and justification for introducing and applying a “principle of purposiveness in the investigation of nature in general and in that of living beings in particular”; Kant, *Anthropology, History, Education*, 193. See also J. M. Mikkelsen, *Kant* [...], 27, who claims that in the 1788 article the development of skin color serves as the primary example of *purposiveness*. Finally, Zammito, *The Genesis* [...], 209, claims that the essay argued that it was impossible to conceive of organisms and the process of generation and variation in heredity except in terms of purposiveness.

of theoretical cognition are not sufficient.¹¹⁹ Later, he defends the idea that the concept of purposiveness should play a role in natural science, even if empirically conditioned. He offers a definition of organized being as matter in which everything is mutually related to each other as end and means, and insists that as far as human reason is concerned, the possibility of an organized being leaves only the teleological mode of explanation:

Weil der Begriff eines organisirten Wesens es schon bei sich führt, daß es eine Materie sei, in der alles wechselseitig als Zweck und Mittel auf einander in Beziehung steht, und dies sogar nur als System von Endursachen gedacht werden kann, mithin die Möglichkeit desselben nur teleologische, keineswegs aber physisch-mechanische Erklärungsart wenigstens der menschlichen Vernunft übrig läßt: so kann in der Physik nicht nachgefragt werden, woher denn alle Organisation selbst ursprünglich herkomme.¹²⁰

He declares that no one can know *a priori* that there must be ends in nature,¹²¹ so this is not yet the position regarding purposiveness he would adopt in *Kritik der Urteilskraft*. Still, whatever his notions were at this stage, one might wonder whether, or to what extent, some of these ideas surfaced in the geography lectures given from the 1780s on.

In any case, “Ms Dohna” comes from a course given circa 1792, hence *after* both the 1788 essay and the first edition of *Kritik der Urteilskraft* (1790). What do we find? Although “Ms Dohna” contains no references to *Keim*, *Anlage*, or *Prädisposition*, I see little reason to think Kant gave up on these notions or that of some internal ‘factor’ or ‘structure’. “Ms Dohna” speaks of the natural aptitude (*Naturell*) of the southeast Asian Indian race.¹²² Kant quotes without criticism Hume’s troubling characterization of blacks, employing the notion of a *Naturell* in the section, On Human Beings. On the natural aptitude of blacks, Kant says we should attend to Hume’s remark.¹²³ Again, I shall not here enter into the important debate about Kant’s race theory; the point here is that Kant’s claim that the

119 ÜGTP, AA 08: 160.20–22: “[...] noch nicht genug ins Licht gestellten Befugniß, sich, wo theoretische Erkenntnißquellen nicht zulangen, des teleologischen Principis bedienen zu dürfen [...]”.

120 ÜGTP, AA 08: 179.08–15.

121 ÜGTP, AA 08: 182.17.

122 Dohna: 106.

123 Dohna: 105. Kant made a similar remark in (1764) *Beobachtungen* at GSE, AA 02: 253.02–10. For Kant’s source, see D. Hume: “Of National Characters”. In: *Essays on Moral, Political, and Literary*. Ed. E. Miller. Indianapolis 1985, 208, n.10. For the debate about Kant’s intentions and considered views, see P. Kleingeld: “Kant’s Second Thoughts on Race”. In: *The Philosophical Quarterly* 57, 2007, 573–592. R. Loudon, in: *Reading Kant’s Geography*, 153. R. Bernasconi in *Reading Kant’s Geography*, 306 f., and W. Stark, in: *Reading Kant’s Geography*, 93 ff.

different races have unique traits that express the purposes of nature reveals his own brand of teleology, the epistemic status of which he never discusses in the course when he could have, post-1790.

“Ms Dohna” attributes purposes to nature, which is characterized as an agent, desiring to preserve diversity among the world’s peoples.¹²⁴ It then gives the example of a man who lost his large, deformed nose, had it replaced by a more symmetrical, artificial one, only to realize that the first, natural one looked better – an account Kant told repeatedly.¹²⁵ Kant thought that one could not improve on nature viewed as a whole, that is, if one allowed the diversity of nature’s forms to shine through. Even if the individual nose looks asymmetrical in the singular case, it plays a role in the whole by counter-balancing the sizes and shapes of other human noses. These apparently disparate topics – race and facial figures – both illustrate that nature aims for and even requires diversity of external figures and of characters.¹²⁶

There are more examples. “Ms Dohna” reads that nature has the most to do with the “formation”¹²⁷ of those human beings whom it placed in the marshes. The Ms employs a structural distinction between a Doctrine of Elements and a Doctrine of Method, but the use differs from the one in the *Critiques* (and without the preceding word, “Transcendental”). The geography lecture’s *Elementarlehre* gives descriptions of the earth’s surfaces (seas, mountains, winds), while the *Methodenlehre* contains empirical observations about organized natural products, organisms, and animals, above all, human beings. Nature, it is reported, made the Greenlanders the most skilled and cultured among those nations toward which nature was ‘step-motherly’. As evidence for this claim, Kant describes how the Inuit put attractive, white, whalebone buttons on their sealskin clothing.¹²⁸

Kant continues to appeal to his racial theory and concept of half-breeds (mixed sub-species or races), which he applies to non-human and human animals alike.

Wollen wir die Produkte logisch eintheilen, so theilen wir sie in Gattungen und Arten, physisch in Gattungen und Racen. Da könnte man das Thierreich in Vögel und Säugethiere theilen. Es giebt verschiedene Racen unter den Menschen; Verschiedenheit der Gattungen

124 Dohna: 107 f.

125 Dohna: 108. For Kant’s story, cf. V-Anth/Fried, AA 25: 555.24-28, 25: 666.08-19; and V-Anth/Mron, AA 25: 1378.30–35.

126 Cf. the face / race analogy when discussing diversity at ÜGTP, AA 08: 166.14–21. On diversity see also Kleingeld: *Kant and Cosmopolitanism*, 120 ff.

127 Dohna:111: “Ausbildung”.

128 Dohna: 93.

würde seyn, zwischen Menschen und Affen. Physisch können wir die Gattungen von einem allgemeinen Stamm ableiten, z. B. Pudel und Windhunde pp [etc.] paaren sich mit allen andern Hunden. Das Wort Race bezeichnet nur eine Abart, aber nicht Stammesverschiedenheit. Der Begriff Race paßt auf das Pflanzen- und Thierreich, aber gar nicht auf das Mineralreich weil hier gar keine Erzeugung statt findet. So sind z. B. Wolf und Hund wahrscheinlich von einer Race denn sie begatten sich, so stammen vielleicht alle unsre jezigen Apfeligattungen von den Hölzken her.¹²⁹

Unlike a logical description or taxonomy into genus and species, modelled on Linnaeus's *systema naturae*, a natural history describes the generation and reproduction of living organisms, using the notions of species and races.¹³⁰

Like earlier transcriptions, "Ms Dohna" distinguishes between unorganized and organized products of nature.¹³¹ But "Ms Dohna" offers no philosophical analysis of its application of teleological notions and no conscious application of *Kritik der Urteilskraft's* distinction between a regulative principle for reflecting power of judgment and a constitutive principle for determining teleological judgment.¹³²

I now mention two texts based on courses given after 1790, since they could also appeal to or employ the Critical or *KU* understanding of teleological concepts. "Starke" (Bergk) gives the 6,400-word geography excerpt (from the lost Ms "Anonymous-Starke 4", which belongs to Group D) the heading *Betrachtungen über die Erde und den Menschen*. Starke thus offers considerations on the earth and human beings, probably reflecting either his own interests or Kant's increased attentiveness to human beings. The reference to *Menschen* is noteworthy since the notes were composed around 1791, about two decades after Kant started offering a university course on anthropology. In a footnote, Starke claims that he is excerpting only what he considers to be of "general interest".¹³³ Starke concludes his excerpt with a paragraph that is reminiscent of the anthropology lectures' typical conclusion: a reflection on humanity's propensity toward evil, inclination for war, three basic predispositions (animality, humanity, and personality), and vocation.¹³⁴

Betrachtungen makes use of the concepts of species and race rather than the taxonomical or logical terms, genus and species. A section on human beings be-

129 Dohna: 99.

130 Dohna: 2.

131 Dohna: 98.

132 See, e.g., First Introduction, EEKU, AA 20: 251; and KU, AA 05: 197.07, 361:01–06, 379.10–20, 416.24–27.

133 Starke, *Betrachtungen*, 262': "allgemeinem Interesse".

134 Starke, *Betrachtungen*, 283.

gins with this passage which reflects the *KU* understanding of organisms in terms of reproduction¹³⁵ as well as individual growth¹³⁶ and regeneration.

Abstammung kann durch Generation oder Fortpflanzung seiner Art geschehen und dies nennt man die organische Erzeugung. Organisirte Wesen unterscheiden sich durch das Wachsen von Innem, Mineralien aber wachsen bloß von außen, indem sich etwas daran setzt. Thiere dagegen wachsen nach allen Seiten und in allen Theilen. Das Wachsen und die Erzeugung seines Gleichen ist das Kennzeichen der organisirten Wesen, die man in Gattungen und Rassen theilen kann. Verschiedene Menschenarten giebt es nicht; denn sonst könnten sie nicht einen Stamm haben. Unter der Gattung von Wesen lassen sich wieder Rassen oder Abartungen und Spielrassen unterscheiden. Ausartung wäre eine solche Verschiedenheit der Arten, wozu der Keim im Stamme nicht anzutreffen ist.¹³⁷

This noteworthy passage overlaps nicely with the *KU* conception of organisms, but – after we find and read it – we see that it is not and does not pretend to be a discussion of its biological terminology or the epistemic status of its claims, even though a discussion of possible transcendental-philosophical justification of such terminology or claims would have been possible at this point.

Betrachtungen speaks of nature as an agent that gives and withholds certain capacities to peoples. Relying on the work of Peter Simon Pallas, it cites the Mongolians' lack of beards "by nature".¹³⁸

Finally, the 1,700-word, fragmentary text surviving from "Ms 1729",¹³⁹ whose composition dates from the summer of 1791 or 1792, contains none of the familiar concepts connected with Kant's teleology – e.g., organization, inner ends, natural aptitude, providence, natural design, the whole or system of nature – nor any philosophically oriented reflection on them. This is surely due to its brevity.¹⁴⁰

135 *KU*, AA 05: 371.07–12: "erzeugt".

136 *KU*, AA 05: 371.13–29: "Wachsthum".

137 Starke, *Betrachtungen*, 275 f.

138 Starke, *Betrachtungen*, 279: "von der Natur".

139 "Ms 1729", also called "anonymous-Königsberg 3", was from Staats- und Universitätsbibliothek zu Königsberg. Adickes (*Untersuchungen*, 4) refers to "Ms 1729" as "S". It was originally 183 pages.

140 Similarly, the remnants of the now lost "Ms Vigilantius", based on a summer 1793 course, are too brief to warrant discussion here; yet there is a section on the purposiveness (*Zweckmäßigkeit*) of mountains. Before WWII, "Ms Vigilantius" was apparently held at the Staats und Universitätsbibliothek zu Königsberg. Adickes (*Untersuchungen*, 4 and 276 ff.) referred to it as "T". Excerpts appear in later publications, e.g.: *Kant-Volksausgabe*. Eds. A. Kowalewski et al., Hamburg 2000; and Helmuth von Glasenapp: *Kant und die Religionen des Ostens*. Kitzingen-Main 1954.

Conclusion

A close examination of core teleological concepts – organisms and animals, design and nature's agency – found in Mss “Holstein”, “Kaehler”, “Doenhoff”, and “Dohna” has revealed that Kant developed a largely climatically based theory of racial differentiation before he developed a mostly hereditary (“germs-and-endowments”) one. Shedding light on Kant's conception of natural science, the passages examined show, moreover, that throughout the span of his geography course he continued to attribute agency to nature without, however, seeing nature as a product of divine design. Finally, I have also established that there is little trace of those regulative / constitutive distinctions (or related notions) presented in *Kritik der reinen Vernunft* and, in modified form, in *Kritik der Urteilskraft*: neither after the publication of these works, nor during the so-called silent decade. On the basis of the transcriptions that are now available to us, we can infer from these last two points that the empirical physical geography lectures and works of Critical philosophy had distinct aims and that Kant's goals in the two fields were different. Kant's pedagogical theory distinguished between his technically philosophical courses (in which he introduced discriminations from the Critical philosophy) and a pragmatic, worldly curriculum that included the courses on physical geography and anthropology.

Nonetheless, this result opens up the opportunity to explore more questions, such as to what extent empirical content is actually kept apart and distinct from the transcendental reflections and analyses informed by the Critical philosophy, as Kant arguably wanted it, and what assumptions¹⁴¹ about what counts as ‘empirical’ or ‘transcendental’ enable Kant's philosophical strategy.¹⁴² Kant did not remove all empirical or scientific “facts” (or assertions) from *Kritik der Urteilskraft*; he refers to data that he had presented in his geography courses. He cites claims about organisms, animals, humans, etc., in order to explain how we should think of such statements, how such teleological claims could be possible *a priori*. More importantly, the Critical philosophy makes use of concepts taken from his geography course, and we can better understand Kant's ethical-political,

141 E.g., for questions concerning the “blatant disjunction” between transcendental philosophy and anthropology (in connection with race), see J. Zammito, in *The German Invention of Race*, 39.

142 J. Mensch's *Kant's Organicism* draws attention to the “organicism” at work in Kant's publications and letters from the 1770s, just as the Critical philosophy was emerging. Mensch holds that Kant did *not* intend to ‘naturalize’ his account of reason, and she suggests that some commentators have not paid sufficient attention to the difference between empirical/natural and transcendental considerations.

historical, religious, aesthetic, and theoretical writings by paying closer attention to these notions and metaphors.¹⁴³ In contrast – to go in the inverse direction as I have done – the Critical philosophy did not leave a very heavy mark on Kant’s lectures in the empirical discipline of geography, which employed teleological principles without the mature Kantian strictures about teleology – although this should not be taken to mean that he thought that the teleological judging of organisms is incompatible with judging them mechanistically.¹⁴⁴

One could thus also ask why the Critical philosophy did not leave a more conspicuous print on the physical geography lectures. As a step toward answering this question, in addition to my more principled, theoretical point about the distinct aims of scholastic and worldly philosophy, here are two more reasons. First, Kant’s lectures were already firmly established and, as any university instructor knows, it takes a considerable effort to revise a course, assuming that one had permission to do so. And even if it were possible, it may have been pedagogically imprudent to adjust the geography course’s contents and claims to reflect the Critical writings.

Second, the lectures were delivered orally: even in the current, post-Darwinian world, scientists who know better speak and write as if nature were in control, guiding evolutionary processes. From this perspective, it is not surprising that the student transcriptions (even if not verbatim recordings) and the writings here examined read as if nature were a designing agent. Indeed, according to developmental psychologists Kelemen and Piaget,¹⁴⁵ children tend to think teleologically and although informed adults outgrow their belief in teleological explanations, sometimes they speak and write, as Kant probably did, as if the behaviors of non-human animals were intentional and purposeful, as these “agents” exercise their natural, biological functions in interactions with their environments. Indeed, even in a *logic* lecture (the “Vienna” logic), Kant is recorded to have said that providence placed in us the drive to test our judgments on the reason of others, and had arranged it that way.¹⁴⁶ Kant was after all speaking to students, and in addition to having pedagogical aims, he may have been speaking loosely.

But it is more surprising that, after 1790, this continued to be the case. It is indeed worthy of note – after thoroughly examining the texts rather than remain-

143 Of four compelling reasons to study Kant’s geography lectures, Loudon defends this one first; in: “The Last Frontier”, 450–465.

144 KU, AA 05: 379.16: “doch unbeschadet dem des Mechanisms ihrer Causalität zu erweitern”.

145 Kelemen, Deborah: “Why are rocks pointy? Children’s preference for teleological explanations of the natural world”. In: *Developmental Psychology* 35, 1999: 1440–1453. Jean Piaget: *The Child’s Conception of the World*. New York 1929.

146 V-Lo/Wiener AA 24: 874.

ing content with one's best educated guess (which could after all be wrong) – that Kant's geography employs teleological principles 'naively', not simply in the years Kant was formulating his central philosophical arguments concerning nature and his philosophy of nature, but after 1790 as well. Perhaps more than the geography lecture, the *anthropology* course – likewise a pragmatic, worldly lecture sharing the goal of educating students for world-citizenship¹⁴⁷ – reveals the influence of the Critical works, including *Kritik der Urteilkraft*.¹⁴⁸ The anthropology course covers ethical-political and religious issues concerning character, disposition, passions, evil, and forms of government; aesthetic topics involving beauty, taste, and imagination; and subjects relevant to theoretical philosophy such as sensibility, perception, and illusion; despite this intersection, even the post-1790 anthropology lecture notes – “Dohna-Wundlacken”,¹⁴⁹ “Matuszewski”,¹⁵⁰ and “Reichel”¹⁵¹ – typically attribute agency to nature and providence without the mature strictures. By contrast, the student transcriptions on *metaphysics*¹⁵² and *logic*¹⁵³ reveal that in the lectures in those disciplines he would

147 Anth, AA 07: 120.05.

148 Cf. Anth, AA 07: 246.17, 331.27 (cited in footnote 3). See also Anthropology Dohna-Wundlacken (from semester 1791/92), Ms. page 125: “Das Schöne* ist der Grund der Lust und Unlust durch die Reflection, (Geschmack). [*Footnote:] Es gefällt nur in der puren reflektirten Anschauung”. A nearly identical statement is found at (1791/92) anthropology Ms “Matuszewski”: 271. See also the discussions of “Reflexion” and “Geschmack” at anthropology Reichel: 72 f., 81.

149 E.g., anthropology “Dohna-Wundlacken”, Ms. page 246: “Die Natur, die immer den sichersten Weg wählt, zu ihrem Zwecke zu gelangen, hat Leidenschaften in uns gelegt [...]”. 293: “Doch hat die Vorsicht etwas in die Züge der Menschen gelegt [...]”. 317 even offers a maxim: “Alles was in der Natur liegt, ist gut indem es seinen gehörigen Zweck hat [...]”. These three anthropology transcriptions are available at: http://www.online.uni-marburg.de/kant_old/webseite/n/gt_ho304.htm#variant2 [accessed 12 December 2014].

150 “Ms Matuszewski” is from semester 1791/92, the same semester as “Dohna-Wundlacken” (yet both contain some passages that overlap with notes from semester 1772/73). Ms page 297: “Die Vorsehung hat daher sehr weise gesorgt, daß wir [...]”; 319: “Die Natur hat uns Triebe zur Fortpflanzung unseres Geschlechts [...] gegeben”; 377: “Die Kunst macht die Keime, die die Natur in die Dinge gelegt hat, erst sichtbar”; 404: “Die Vorsicht hat ihn so eingerichtet, daß er ohne andere nicht sein kann”; 407: “[...] aus weiser Absicht der Vorsehung”.

151 “Reichel”, Ms. page 101: “Die Natur hatt freylich Anlagen zu Affecten geschaffen, [...]”; 13: “Eine gewisse Eitelkeit ist uns schon von der Natur eingelegt [...]”; 131: “Da die Natur in den weiblichen Schooß die Erhaltung ihrer Art gelegt hatt [sic]; [...]”.

152 For constitutive vs. regulative, see V-Met/Mron, AA 29: 858, 861. On transcendental / critical philosophy or method, see, e.g., V-Met/Mron, AA 29: 752, 779, 928; and V-Met/Dohna, AA 28: 682.

153 On transcendental philosophy and concepts, see V-Lo/Blomberg, AA 24: 262; V-Lo/Wiener, AA 24: 833; V-Lo/Dohna, AA 24: 753. On constitutive / regulative: Log, AA 09: 92. On Critical philosophy, see Log, AA 09: 32, 84.

refer to his Critical philosophy or its key tenets. Moreover, the metaphysics lecture notes discuss, typically on a more philosophically nuanced level, several of the teleological concepts and principles we have examined.¹⁵⁴

Accordingly, operating within an empirically-realist framework, the geography lectures give indication of the development, or existence, of the Critical philosophy only in a limited way. The course had pragmatic goals that included being appealing to beginning students as a propaedeutic to future learning, even life. In an instance of pedagogical judiciousness, Kant may have considered it too difficult, or inappropriate, to introduce geography students to the core doctrines of the Critical philosophy. In conclusion, the foregoing characterization of ‘natural teleology’ in the physical geography, in addition to giving an account of core biological and teleological notions, can help us appreciate Kant’s conception of a natural science, pedagogical practice and aims, and actual application of the distinction between transcendental philosophy and empirical disciplines.

154 For Kant’s assessment of an argument for immortality based on the finality of organisms and teleological principles of nature, see V-Meta/Volckmann 28: 442; V-Met-K2/Heinze, AA 28: 765. For reflective comments on providence and finality, see V-Met-L2/Pöhlitz, AA 28: 574. On the systems of preformation and epigenesis, see e.g., V-Met/Dohna 28: 684; V-Met-K2/Heinze, AA 28: 760; V-Met-K3E/Arnoldt, AA 29: 1031.