# Imagination and Originality: Kant on Science and Cognition

# Thursday 27<sup>th</sup> June 2019

9.30-10.00: Coffee and welcome

10.00-11.00: Rachel Robertson (Cambridge) Kant on Aesthetic Disinterestedness and Embodied Cognition

11.15-12.15: Senthuran Bhuvanendra (Cambridge) Aesthetic Imagination, Reflective Judgement and the Order of Nature

12.15-13.30: Lunch

13.30-14.30: Thomas Oehl (LMU) A Creative Scientist's Belief in a Creator?

14.30-15.30 Ansgar Lyssy (LMU) Conceiving the Unknown - Kant and the Emergence of Scientific Questions

15.30-16.00: Coffee

16.00-17.00: Angela Breitenbach (Cambridge) Imagination in Aesthetic Experience and Scientific Understanding

# Friday 28<sup>th</sup> June 2019

9.30-10.30: David-Benjamin Berger (LMU) Original, Imitation & Sources of Originality

10.30-11.00 Coffee

11.00-12.00: James Hutton (Cambridge) Kant, Animal Intuition and Conceptualism

12.00-13.15 Lunch

13.15-14.15: Manja Kisner (LMU) The Relevance of Analogies for Establishing the Originality in the Sciences

14.30-15.30: Jann Paul Engler (LMU) Merely Original or the Work of a Genius? The Kantian Distinction Applied to the Debate on the Foundations of Mathematics

15.30-16.00 Coffee

16.00-17.00: Axel Hutter (LMU) Discovery – Invention – Originality

#### **Abstracts:**

# Rachel Robertson (Cambridge) Kant on Aesthetic Disinterestedness and Embodied Cognition

I argue that Kant's account of aesthetic disinterestedness provides a notion of embodied cognition that is central to his account of natural science and moral life. This challenges the usual criticism that Kantian disinterestedness entails disembodiment, placing aesthetics in the mental realm of an individual, austere contemplator. In response, I show that the conditions for disinterestedness are the conditions for cognition which expands beyond the limits of sensations and concepts, yet not beyond embodied contact with a shared, physical world. Far from being disembodied, Kant's account of disinterestedness explains how embodiment contributes to the contextual and interpersonal dimensions of aesthetic consciousness. Aesthetic disinterestedness is not about mentalizing the physical, but rather about materializing what is usually thought to be mental – including those ideas which make scientific and moral endeavours possible.

#### Senthuran Bhuvanendra (Cambridge) Aesthetic imagination, reflective judgement and the order of nature

In the Third *Critique*, Kant develops a new kind of *a priori* principle, which grounds aesthetic judgements *a priori*, but does not give such judgements *a priori* grounds of proof. Commentators disagree about how this account of aesthetic judgement relates to his more general discussion, in the Introductions to the *Critique*, of judgement and its *a priori* principle. In particular, how can the critique of aesthetic judgement "contain" the principle that judgement uses when reflecting on nature (5:193), that is, when we use judgement to form new empirical concepts?

I will argue that, in his discussion of the cognitive use of reflective judgement in the opening paragraphs of §VI of the Published Introduction, Kant poses a *puzzle of cognitive pleasure*. This puzzle suggests to the reader that the Third *Critique* will offer a new way of connecting *a priori* representations, aims and pleasure. I then argue that the opening paragraphs of §VII show us that it is aesthetic representations – in particular, *a priori*, imaginative representations of aesthetic form – which will solve the puzzle. If my interpretative argument is correct, then aesthetic experience should turn out to be very closely linked to the cognitive use of reflective judgement. Indeed, my argument suggests that the operation of imagination in the experience of beauty *is* the operation of the *a priori* principle for reflective judgement.

# Thomas Oehl (LMU) A Creative Scientist's Belief in a Creator?

Science aims at integrating bits of knowledge into more encompassing theories. Kant claims that, in doing so, we have to be guided by an "idea" that "postulates complete unity of the understanding's cognition" (CPR A 645/B 673). Actually, there are two versions of this thought: one in the Critique of Pure Reason, one in the Critique of Judgment. In my paper, I shall try to argue that these two versions differ in a way that can be spelt out by reference to the notion of "(scientific) creativity". In the COJ, Kant says that "particular empirical laws must be regarded [...] according to a unity such as they would have if an understanding (though it be not ours) had supplied them for the benefit of our cognitive faculties" (V:180). This changes the way we have to conceive of this "understanding": in the CPR, Kant says

that we need to "regard all combination in the world as if it arose from an all-sufficient necessary cause" (CPR A 619/B 647). The idea of "God" here is spelt out as the idea of an "all-sufficient necessary cause". In the COJ, we rather need to conceive of "God" as a "Creator" in the sense of a "final purpose" and an "understanding" who "supplied" the laws "for the benefit of our cognitive faculties". Whereas, I think, the fiction of an "all-sufficient necessary cause" may well be an obstacle to our creativity demanded for representing empirical laws and integrating them into more encompassing theories, Kantian belief in the "God" or "understanding" of the COJ is not. On the contrary, it even amounts to the belief that scientific creativity is necessary and not senseless: this belief makes us certain that, although there may well be different possibilities of scientific integration, this integration is neither arbitrary, unguided or purposeless, nor is it of lesser value than it would be if there were only one possibility. Thus conceived, Kantian belief in "God" is belief in the unconditioned value of scientific creativity. A scientist who wants to take herself seriously as a scientist needs to have this belief. Given that, I think it can also be shown that this kind of belief in "God" is closely related to moral belief in "God".

#### Ansgar Lyssy (LMU) Conceiving the unknown - Kant and the emergence of scientific questions

Just as it is the case with philosophy, the great breakthroughs in science do not always consist in a new answer to an old problem, but rather in a new question that motivates and guides its subsequent inquiries or that might even reframe our established knowledge. If knowledge could simply be deduced from higher axioms and principles, as the rationalists had argued, scientific problems could be understood as the result of the fact that the relevant deductions are simply unfinished. In this perspective, new questions of inquiry could hardly arise. With Kant, however, we can argue that scientific problems and questions arise under the idea of a system, a structure that governs our inquiries and organizes our knowledge. This is the context in which we come up with new concepts and hypotheses, and in which we evaluate their coherence, plausibility and their relevance; such a conceptual system also guides us to look for relevant experiences that can match the concepts we derive from their systematic context. By determining the structure of possible knowledge, Kant implicitly provides us an account of how we frame and anticipate even that what we do not yet know. While these Kantian ideas have already proven to be highly influential, it warrants some discussion to see whether such an approach can still be relevant within the context of post-Kuhnian philosophy of science.

### Angela Breitenbach (Cambridge) Imagination in Aesthetic Experience and Scientific Understanding

Aestheticians and philosophers of mind have stressed the fundamental heterogeneity of the mental activities of the imagination. I argue for unity of the imagination in two apparently diverse contexts: the same imaginative activities are involved in aesthetic experience and the advancement of scientific understanding. This explains two interesting phenomena. While artworks can advance understanding, science can be the object of aesthetic appreciation.

### David-Benjamin Berger (LMU) Original, Imitation & Sources of Originality

According to Kant there are two realms in which originality is the measure of all things: i) creation of fine art; ii) moral action. In none of these realms imitation is a legitimate option.

In the first case the originality of fine art constitutes [begründet] an original, in the second case the moral originality is founded by [gründet in] the original (IX 489) that can be identified as idea of mankind (supreme moral law) or, more general, as source of reason. If philosophy is understood not only as a science which is mapping the human reason but as the science of the final ends of human reason, it should be clear that in the latter case imitation cannot be a legitimate option, either. Based on this sketchy presentation I would outline how we can better understand the activity of a very intelligent scientist [großer Kopf] in the light of (and maybe in contrast to) the concepts of originality, original and imitation. In short: the very intelligent scientist neither constitutes an original nor is founded by the original in the above mentioned way but is >seeing< the well-known in a new light.

# James Hutton (Cambridge) Kant, Animal Intuitions and Conceptualism

Kant holds that some non-human animals "are acquainted with" objects, despite lacking conceptual capacities (i.e. "understanding"). What does this tell us about his theory of human cognition, particularly the relation between sensibility and understanding? Numerous authors have argued that this is a significant point in favour of Nonconceptualism (the claim that, for Kant, sensible representations of objects do not depend on the understanding). Against this, I argue that Kant's remarks about animal minds can be readily accommodated by a Conceptualist reading of a suitably nuanced kind. Conceptualists have good reason to accept that, for Kant, (i) the sensible representations of humans necessarily have thinkable contents and (ii) representations with thinkable contents depend on the understanding. This allows Conceptualists to maintain that *humans* ' sensible representations do depend on the understanding, while admitting that sensible representations of a different kind are possible in the absence of the understanding: a restricted form of Conceptualism is consistent with Kant's remarks about animal minds. We must therefore reassess both of the warrant for Nonconceptualism and of the bounds within which Conceptualism ought to operate.

# Manja Kisner (LMU) The relevance of analogies for establishing the originality in the sciences

In the third Critique, Kant recognizes 'originality' as a crucial attribute of a genius and considers beautiful arts as arts of genius (KU, 5: 310). As I want to argue, however, originality is not limited to arts, but also plays an important role in empirical sciences, in particular in biology. Moreover, in those areas of sciences, in which originality is emphasized, Kant also refers to the analogical procedure in order to explain how these sciences develop and gain knowledge. Therefore, there must be a close connection between analogical thinking and Kant's conception of originality. I will analyze this connection first by looking at Kant's definition of the analogy in Prolegomena (Prol, 4: 357) and then by showing how this definition can help us to understand the connection between originality and analogy in Kant's third Critique.

#### Jann Paul Engler (LMU) Merely original or the work of a genius? The Kantian distinction applied to the debate on the foundations of mathematics.

It seems like a commonplace that in mathematics we do not usually read original works. Mathematical practice does not center around the interpretation of central works (like it is the case in art discourse and also in philosophy), instead research rather takes up on what has been established and "carries on". The necessity for discourse to focus directly (and exclusively) on the original, however, seems to be an essential aspect of the kantian characterization of the work of a genius.

But one might ask if this impression of mathematical practice is thoroughly accurate, if there are ways in which a necessary connection to originals can still said to be present. For example, introductory texts to set theory usually quote Cantors first and naive definition of a set (and subsequently mention that a set as a primitive concept cannot really be defined). Is this just a curious thing, or the manifestation of an undistinguishable trace back to the original? If the answer to a question like this turns out to be affirmative, this could lead to surprising view upon mathematics. Therefore, under consideration of further examples like the one above I would present and suggest to investigate the following question: Can the kantian concept of genius be applied to mathematics in such a way that it (i) retains its distinguished kantian conception and at the same time (ii) adequately fits current mathematical practice?

# Axel Hutter (LMU) Discovery – Invention – Originality

"The Mathematician is an inventor, not a discoverer." (Wittgenstein) The empirical sciences discover facts by observation or experimenting; the non-empirical sciences (logic, mathematics) invent facts by construction or proofing. Is this distinction sound? If yes: How come that mathematics applies to empirical sciences (but not the other way round)? Is there a further distinction between invention and originality? If yes: Has it any consequences for science, for philosophy?