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Bibliography

- Kant, Immanuel. 1902 ss. Kants gesammelte Schriften, von der Preussischen und der Deutschen Akademie der Wissenschaften, 29 vols. Berlin: Walter de Gruyter.
- Allgemeine Naturgeschichte und Theorie des Himmels.* AA I: 215-368.
- Der einzig mögliche Beweisgrund zu einer Demonstration des Daseins Gottes.* AA II: 63-204.
- Die Metaphysik der Sitten.* AA VI: 203-494.
- Die Religion innerhalb der Grenzen der blossen Vernunft.* AA VI: 1-202.
- Grundlegung zur Metaphysik der Sitten.* AA IV: 385-464.
- Kritik der praktischen Vernunft.* AA V: 1-164.
- Kritik der reinen Vernunft (B).* AA III: 1-552
- Kritik der Urteilskraft.* AA V: 165-486.
- Logik,* AA XVI: 3-875.
- Metaphysische Anfangsgründe der Naturwissenschaften.* AA IV: 465-566.
- Opus Postumus.* AA XXI-XXII: 1-645 / 1-825.
- Preisschrift über die Fortschritte der Metaphysik.* AA XX: 253-332.
- Prolegomena.* AA IV: 253-383.
- Recensionen von J.G.Herders Ideen zur Philosophie der Geschichte der Menschheit.* AA VIII: 43-66.
- Reflexionen zur Metaphysik.* AA XVII-XVIII: 227-746.
- Träume eines Geistersehers, erläutert durch Träume der Metaphysik.* AA II: 315-374.
- Über den Gebrauch teleologischer Prinzipien in der Philosophie.* AA VIII: 157-184.

Secondary Literature:

- Allison, Henri. 1991. "Kant's Antinomy of Teleological Judgment". *The Southern Journal of Philosophy* 30: 25-42.
- Allison, Henri. 1983. *Kant's Transcendental Idealism. An Interpretation and Defense.* New Haven: Yale University Press.
- Allison, Henri. 2001. *Kant's Theory of Taste. A Reading of the Critique of Aesthetic Judgment.* New York: Cambridge University Press.

- Allison, Henri. 2003. "Kant's Antinomy of Teleological Judgment". In *Kant's Critique of the Power of Judgment. Critical Essays*, edited by P. Guyer, 219-236. New York: Rowman & Littlefield publishers.
- Aquila, Richard. 1991. "Unity of Organism, Unity of Thought, and the Unity of the Critique of Judgment". *The Southern Journal of Philosophy*, Volume XXX, Supplement: 139-155.
- Ayala, Francisco. 1970. "Teleological Explanations in Evolutionary Biology". *Philosophy of Science* Vol. 37, No. 1: 1-15
- Ayala, Francisco. 2007. "Darwin's Greatest Discovery: Design without Designer". *PNAS* May 15, 104: 8567-8573.
- Baeumler, Alfred. 1923. *Kants Kritik der Urteilskraft. Ihre Geschichte und Systematik*. Halle: Max Niemeyer Verlag.
- Behler, E. (ed.). 1987. *The Philosophy of German Idealism: Fichte, Jacobi, and Schelling*. New York: Continuum.
- Beisbart, Claus. 2009. "Kant's Characterization of Natural Ends". In *Kant Yearbook. Kant and German Idealism*, edited by D. H. Heidemann, 1-30. Berlin: Walter de Gruyter.
- Beiser, Frederick. 2006. "Kant and Naturphilosophie". In *The Kantian Legacy in Nineteenth-Century Science*, edited by Friedman and Nordmann, 7-26. Cambridge, Massachusetts: The MIT Press.
- Benson, Keith R. 1989. "Biology's "Phoenix": Historical Perspectives on the Importance of the Organism". *American Zoologist*, Vol. 29, N° 3: 1067-1074.
- Bielefeldt, Heiner. 2003. *Symbolic Representation in Kant's Practical Philosophy*. New York: Cambridge University Press.
- Boswell, Terry. 1988 "On the textual Authenticity of Kant's Logic". *History and Philosophy of Logic* N°9: 193-203.
- Breitenbach, Angela. 2006. "Mechanical explanation of nature and its limits in Kant's Critique of judgment". *Studies in History and Philosophy of Biological and Biomedical Sciences* 37: 694-711
- Breitenbach, Angela. 2008. "Two Views on Nature: A Solution to Kant's Antinomy of Mechanism and Teleology". *British Journal for the History of Philosophy*, 16: 351-369.
- Breitenbach, Angela. 2009a. "Teleology in Biology: A Kantian Perspective". In *Kant Yearbook 1: "Teleology"*, edited by Heidemann, 694-711. Berlin and New York.
- Breitenbach, Angela. 2009b. *Die Analogie von Vernunft und Natur: Eine Umweltphilosophie nach Kant*. Berlin and New York: Walter de Gruyter.

- Breitenbach, Angela. 2014a. "Biological Purposiveness and Analogical Reflection". In *Kant's Theory of Biology*, edited by I. Goy and E. Watkins, 131-148. Berlin and New York: Walter de Gruyter.
- Breitenbach, Angela. 2014b. "Kant on Biology and the Experience of Life". In *Kant und die Philosophie in weltbürgerlicher Absicht*, edited by C. La Rocca, 19-31. Berlin and New York: Walter de Gruyter.
- Breitenbach, Angela. 2011. "Kant on Causal Knowledge: Causality, Mechanism and Reflective Judgment". In *Causation and Modern Philosophy*, edited by Allen and Stoneham 201-219. London: Routledge.
- Buchdahl, Gerd. 1992. *Kant and the Dynamics of Reason: Essays on the Structure of Kant's Philosophy*. New York: Blackwell Publishers.
- Butts, Robert. 1990. "Teleology and Scientific Method in Kant's Critique of Judgment". *Noûs* 24 (1):1-16.
- Callanan, John J. 2010. "Kant on Analogy". *British Journal for the History of Philosophy* 16 (4): 747–772.
- Cassirer, E. (1994 [1918]). *Kants Leben und Lebre*. Damstadt: Wiss. Buchges.
- Cassirer, Ernst. 1907. *Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit*. Vol. 2. Berlin: Bruno Cassirer.
- Cassirer, Ernst. 1920. *Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit*. Vol. 3: *Die nachkantischen Systeme*. Berlin: Bruno Cassirer.
- Cassirer, Ernst. 1981. *Kant's Life and Thought*. (trans. James Haden). New Haven and London: Yale University Press.
- Cheung, Tobias. 2006. "From the organism of a body to the body of an organism: occurrence and meaning of the word 'organism' from the seventeenth to the nineteenth centuries". *British Society for the History of Science* 39, N° 3: 319–339.
- Cohen, Alix. 2006. "Kant on epigenesis, monogenesis and human nature: The biological premises of anthropology". *Studies in History and Philosophy of Biological and Biomedical Sciences* 37: 675–693.
- Del Luján Di Sanza, Silvia. 2010. *Arte y Naturaleza. El concepto de "Técnica de la naturaleza" en la Kritik der Urteilskraft de Kant*. Buenos Aires: Ediciones del Signo.
- Di Giovanni, G. and Harris, H. (ed.). 1985. *Between Kant and Hegel*. Albany: State University of New York Press.
- Dörflinger, Bernd. 2000. *Das Leben theoretischen Vernunft: Teleologische und praktische Aspekte der Erfahrungstheorie Kants*. Berlin and New York: Walter de Gruyter.

- Driesch, Hans. 1924. "Kant und das Ganze". *Kantstudien*, 29 (B II): 365-376.
- Düsing, Klaus. 1968. *Die Teleologie in Kants Weltbegriff*. Bonn: H. Bouvier u. Co. Verlag.
- Förster, Eckart. 2000. *Kant's Final Synthesis. An Essay on the Opus Postumum*. Cambridge Massachusetts: Harvard University Press.
- Fricke, Christel. 1990. "Explaining the Inexplicable. The Hypotheses of the Faculty of Reflective Judgment in Kant's". *Noûs*, Vol. 24, N° 1, *On the Bicentenary of Immanuel Kant's Critique of Judgment*: 45-62.
- Friedman, Michael. 1992. *Kant and the Exact Sciences*. Cambridge Massachusetts: Harvard University Press.
- Garrido, Juan Manuel. 2015. "A Kantian Account of the Knowledge of life and the life sciences". *Idealistic Studies* 45 (3): 355-379.
- Gill, Jerry H. 1984. "Kant, Analogy, and Natural Theology". *International Journal for Philosophy of Religion* Vol. 16, N° 1: 19-28.
- Ginsborg, Hannah. 1997. "Kant on Aesthetic and Biological Purposiveness." In *Reclaiming the History of Ethics: Essays for John Rawls*, edited by A. Reath, B. Herman, and C. Korsgaard, 329-360. Cambridge: Cambridge University Press.
- Ginsborg, Hannah. 2001. "Kant on Understanding Organisms as Natural Purposes". In *Kant and the Sciences*, edited by P. Guyer, 231-258. New York: Oxford University Press.
- Ginsborg, Hannah. 2006. "Kant's Biological Teleology and its Philosophical Significance." In *The Blackwell Companion to Kant*, edited by G. Bird, 455-469. Oxford: Blackwell Publishing.
- Goy, Ina. 2012. "Kant on Formative Power". *Lebenswelt* N° 2: 26-49.
- Goy, Ina. 2014. "Epigenetic Theories: Caspar Friedrich Wolff and Immanuel Kant". In *Kant's Theory of Biology*, edited by I. Goy and E. Watkins, 43-60. Berlin, Walter De Gruyter.
- Guyer, P. (ed.). 2003. *Kant's Critique of the Power of Judgment Critical Essays*. New York: Rowan & Littlefield Publisher Inc.
- Guyer, P. (ed.). 2006. *The Cambridge Companion to Kant and Modern Philosophy*. Cambridge: Cambridge University Press.
- Guyer, Paul. 1987. *Kant and the Claims of Knowledge*. Cambridge: Cambridge University Press.
- Guyer, Paul. 1990. "Reason and Reflective Judgment: Kant on the Significance of Systematicity". *Noûs* 24, N° 1: 17–43.
- Guyer, Paul. 1990. "Reason and Reflective Judgment: Kant on the Significance of

- Systematicity”. *Noûs* 24 (1):17-43.
- Guyer, Paul. 1997. *Kant and the Claims of Taste*. New York: Cambridge University Press.
- Guyer, Paul. 2001. “Organisms and the Unity of Science”. *Kant and the Sciences*, edited by P. Guyer, 259-282. New York: Oxford University Press.
- Guyer, Paul. 2005. *Values of Beauty: Historical Essays in Aesthetics*. New York: Cambridge University Press.
- Hanna, Robert. 2009. “Freedom, Teleology, and Rational Causation”. In *Kant Yearbook. Kant and German Idealism*, edited by D. H. Heidemann, 99-142. Berlin: Walter de Gruyter.
- Hesse, Mary. 1966. *Models and Analogies in Science*. Indiana: Notre Dame University Press.
- Huneman, Philippe (ed.). 2007. *Understanding Purpose. Kant and the Philosophy of Biology*. New York: University of Rochester Press.
- Huneman, Philippe. 2006. “Naturalising purpose: From comparative anatomy to the ‘adventure of reason’”. *Studies in History and Philosophy of Biological and Biomedical Sciences* 37: 649–674.
- Ingensiep, Hans Werner. 2006. “Organisms, Epigenesis, and Life in Kant’s Thinking. Biophilosophy between Transcendental Philosophy, Intuitive Analogy, and Empirical Ontology”. *Annals of the History and Philosophy of Biology* 11: 59-84.
- Kahl, Russell (ed.) 1971. *Selected Writings of Hermann von Helmholtz*. Middletown, Connecticut: Wesleyan Universiy Press.
- Kolb, Daniel. 1992. “Kant, Teleology, and Evolution”. *Synthese* 91: 9-28.
- Kreines, James. 2005. “The Inexplicability of Kant’s Naturzweck: Kant on Teleology, Explanation and Biology”. *Archiv für Geschichte der Philosophie* 87: 270–311.
- Lebrun, Gerard. 2008. *Kant y el final de la metafísica. Ensayo sobre la Crítica del juicio*. Madrid: Escolar y Mayo Editores.
- Lenoir, Timothy. 1989. *The Strategy of Life. Teleology and Mechanics in Nineteenth-Century German Biology*. Chicago: University of Chicago Press.
- Lerussi, Natalia. 2014. “Acerca de la analogía de la razón con lo orgánico. Reflexiones en torno a la expresión ‘epigénesis de la razón pura’ en Kritik der reinen Vernunft B §27”. In *Temas Kantianos*, edited by M. Caimi, 113-136. Buenos Aires: Prometeo Libros.
- Lewens, Tim. 2004. *Organisms and Artifacts. Design in Nature and Elsewhere*. Cambridge: MIT Press.
- Longuenesse, Beatrice. 1998. *Kant and the Capacity to Judge. Sensibility and*

- Discursivity in the Transcendental Analytic of the Critique of Pure Reason*. New Jersey: Princeton University Press.
- Lotfi, Shidan. 2010. “The ‘Purposiveness’ of Life: Kant’s Critique of Natural Teleology”. *The Monist* N°93: 123-134.
- Löw, Reinhard. 1980. *Philosophie des Lebendigen. Der Begriff des Orgaischen bei Kant, sein Grund und seine Aktualität*. Frankfurt: Suhrkamp.
- Makkreel, Rudolf. 1994. *Imagination and Interpretation in Kant: The Hermeneutical Import of the Critique of Judgment*. Chicago: University of Chicago Press.
- Mayr, Ernst. 1992. “The Idea of Teleology”. *Journal of the History of Ideas* Vol. 53, N° 1: 117-135.
- McAndrew, Matthew. 2014. “Kant’s Theory of Inductive Reasoning: The reflecting power of judgment in Kant’s Logic”. *Kant-Studien* 105 (3): 394-405.
- McFarland, John. 1970. *Kant’s Concept of Teleology*. Edinburgh: University of Edinburgh Press.
- McLaughlin, Peter. 1990. *Kant’s Critique of Teleology in Biological Explanation: Antinomy and Teleology*. Lewiston, New York: E. Mellen Press.
- McLaughlin, Peter. 2001. *What Functions Explain Functional Explanation and Self-Reproducing Systems*. New York: Cambridge University Press.
- McLaughlin, Peter. 2003. “Newtonian Biology and Kant’s Mechanistic Concept of Causality”. In *Kant’s Critique of the Power of Judgment. Critical Essays*, edited by P. Guyer, 209-218. New York: Rowman & Littlefield publishers.
- Melnick, Arthur. 1973. *Kant’s Analogies of Experience*. Chicago: University of Chicago Press.
- Mensch, Jennifer. 2013. *Kant’s Organicism: Epigenesis and the Development of Critical Philosophy*. Chicago: The University of Chicago Press.
- Molina, Eduardo. 2009. “Natura Materialiter Spectata. Naturaleza, Finalidad y Organismos en la Crítica de la Facultad de Juzgar de Kant”. *Revista de filosofía* 65: 43-56.
- Molina, Eduardo. 2011. “Kant and the Concept of Life”. *The New Centennial Review* 10, N° 3: 21–36.
- Molina, Eduardo. 2013. “Finalidad y contingencia. La concepción kantiana de los organismos”. *Anuario filosófico* 46/3: 523-541.
- Nagel, Ernest. 1961. *The Structure of Science: Problems in the Logic of Scientific Explanation*. San Diego: Harcourt, Brace & World.

- Nassar, Dalia. 2015. "Analogy, Natural History and the Philosophy of Nature: Kant, Herder and the Problem of Empirical Science". *Journal of the Philosophy of History*, 9 (2): 240-257.
- Nassar, Dalia. 2016. "Analogical reflection as a source for the science of life: Kant and the possibility of the biological sciences". *Studies in History and Philosophy of Science*, 58: 57-66.
- Neiman, Susan. 1994. *The Unity of Reason. Rereading Kant*. New York: Oxford University Press.
- Nuzzo, Angelica. 2005. *Kant and the Unity of Reason: History of Philosophy*. West Lafayette: Purdue University Press.
- Olson, MJ. 2016. "Kant on anatomy and the status of the life sciences". *Studies in History and Philosophy of Biological and Biomedical Sciences* N°58: 77-84.
- Pringe, Hernán. 2007. *Critique of the Quantum Power of Judgment A Transcendental Foundation of Quantum Objectivity*. Berlin: Walter de Gruyter.
- Pringe, Hernán. 2014. "El concepto kantiano de analogía y el desarrollo histórico del pensamiento de Bohr". *Revista Latinoamericana de Filosofía* 40 (1): 29-45.
- Quarfood, Marcel. 2006. "Kant on biological teleology: Towards a two-level interpretation". *Studies in History and Philosophy of Biological and Biomedical Sciences* 37: 735–747.
- Rajiva, Suma. 2009. "Safely Satisfying Reason: The Metaphysics of Design in Kant's Teleology". In *Kant Yearbook. Teleology*, edited by D. H. Heidemann, 173-196. Berlin: Walter de Gruyter.
- Richards, Robert. 2000. "Kant and Blumenbach on the Bildungstrieb: A Historical Misunderstanding". *Studies in History and Philosophy of Biological and Biomedical Sciences* 37, N° 1: 11–32.
- Richards, Robert. 2002. *The Romantic Conception of Life: Science and Philosophy in the Age of Goethe*. Chicago: University of Chicago Press.
- Schrader, George. 1953. "The Status of Teleological Judgment in the Critical Philosophy". *Kant-Studien*, Vol. 45: 205-218.
- Sciences, 37 (1): 1-15.
- Sloan, Phillip R. 2002. "Performing the Categories: Eighteenth-Century Generation Theory and the Biological Roots of Kant's A Priori". *Journal of the History of Philosophy* 40 (2): 229-253.
- Sloan, Phillip R. 2012. "How was teleology eliminated in early molecular biology?"

Studies in History and Philosophy of Biological and Biomedical Sciences N° 43: 140–151.

- Sloan, Phillip. 2006. "Kant on the history of nature: The ambiguous heritage of the critical philosophy for natural history". *Studies in History and Philosophy of Biological and Biomedical Sciences* 37, N° 1: 627–648.
- Steigerwald, Joan. 2006. "Kant's concept of natural purpose and the reflecting power of judgement". *Studies in History and Philosophy of Biological and Biomedical Sciences* 37, N° 1: 712–734.
- Taylor, R. (ed.). 1982. *The Romantic Tradition in Germany: An Anthology with Critical Essays and Commentaries*. London: Methuen.
- Toepfer, G. 2004. *Zweckbegriff und Organismus: über die teleologische Beurteilung biologischen Systeme*. Würzburg: Königshausen & Neumann.
- Tonelli, Giorgio. 1954. "La formazione del testo della Kritik der Urteilskraft". *Revue internationale de philosophie*, volume 8: 423–448.
- Underhill, G.E. 1904. "The Use and Abuse of Final Causes". *Mind*, New Series, vol. 13, N° 50: 220-241.
- Vaihinger, Hans. 1968. *The Philosophy of 'As if': A System of the Theoretical, Practical and Religious Fictions of Mankind*. New York: Routledge and Kegan Paul, Ltd.
- Van den Berg, Hein. 2014. *Kant on Proper Science: Biology in the Critical Philosophy and the Opus Postumum*. Luxemburg: Springer.
- Van den Berg, Hein. 2017. "Kant and the Scope of Analogy in the Life Sciences". *Studies in History and Philosophy of Science*, part A, 71: 67-76.
- Vigo, Alejandro. 2004. "Determinación y Reflexión". *Anuario Filosófico*, XXXVII/3: 749-795.
- Vossenkulh, Wilhelm. 1992. "Schönheit als Symbol der Sittlichkeit. Über die gemeinsame Wurzel von Ethik und Ästhetik bei Kant". *Philosophisches Jahrbuch*, 99: 91-104.
- Watkins, E. (ed.). 2001. *Kant and the Sciences*. Oxford and New York: Oxford University Press.
- Watkins, Eric. 2009. "The Antinomy of Teleological Judgment". In *Kant Yearbook 1*, edited by H. D. Heidemann, 197-221. Berlin: Walter de Gruyter.
- Whistler, Daniel. 2013. *Schelling's Theory of Symbolic Language: Forming the System of Identity*. Oxford: Oxford University Press.
- Wick, Robert. 2007. *Kant on Judgment*. New York: Routledge.
- Willson, A. L. (ed.). 1982. *German Romantic Criticism*. New York: Continuum.

- Zammito, John. 1992. *The Genesis of Kant's Critique of Judgment*. Chicago: The University of Chicago Press.
- Zammito, John. 2002. *Kant, Herder, and the Birth of Anthropology*. Chicago: Chicago University Press.
- Zammito, John. 2006. "Teleology then and now: The question of Kant's relevance for contemporary controversies over function in biology". *Studies in History and Philosophy of Biological and Biomedical Sciences* 37, N° 1: 748–770.
- Zammito, John. 2009. "Kant's Notion of Intrinsic Purposiveness in the Critique of Judgment". *Kant Yearbook 1*, edited by H. D. Heidemann, 223-248. Berlin: Walter de Gruyter.
- Zuckert, Rachel. 2007. *Kant on Beauty and Biology. An Interpretation of the Critique of Judgment*. New York: Cambridge University Press.
- Zumbach, Clark. 1984. *The Transcendent Science Kant's Conception of Biological Methodology*. Den Haag: Kluwer.