CHAIN Winter School 2020 "Normativity and Sociality"
January 7th–11th, 2021

Day1: Thursday, January 7th

Satne Lecture #1 "From Human Normativity to Objective Normativity" (10:30–12:00)

(90 min divided in two parts: 30 min (sections 1 and 2) + 15 min Q &A / 30 min (sections 3 & 4) + 15 min Q &A)

This lecture presents normativity as a pervasive feature of human practices and discusses the challenges and conditions of adequacy for an account of it. The lecture is divided in 4 sections.

Section 1 takes as its starting point the fact that most human practices are normative: they are practices in which we assess each other's actions as correct or incorrect, right or wrong, according to different sets of standards and values. Furthermore, as Penn et al. (2008) claim, most of these normative practices seem to be unique to humans. Nevertheless, there is no unified account of such normative practices. Section 2 introduces a preliminary distinction between different kinds of normativity which draws on the work of Haugeland (1998). Biological normativity is defined in terms of fitness of organisms and natural selection; social normativity is a further layer of normative complexity instituted through mutual assessment and peer reinforcement; and objective normativity is understood as assessment based on norms of truth, that relate language and thought to worldly sates of affairs.

Sections 3 and 4 discuss in turn two promising accounts of normativity. Teleological accounts of normativity are discussed in section 3. Norms are understood in evolutionary terms as ways of behaving that were beneficial for organisms in the natural history of their species and were selected to perform those beneficial functions. I argue that while teleological accounts allow for a continuous picture of the emergence of human normativity in nature, they fall short of providing an explanation of the fact that most of human normative practices are quite distinct compared to those of other animals. Section 4 investigates accounts of normativity that rely on the notion of 'the space of reasons' (Sellars, 1956). According to this view, a practice is normative because its participants hold themselves accountable for giving reasons for their actions within it. I argue that this account makes a mystery of evolutionary continuity, attributing a sui generis nature to human normative practices that is difficult to reconcile with a naturalistic picture of their evolution.

The lecture concludes by putting forward the claim that the common feature of human normative practices is that they are social. They are practices in which we interact with others, we share goals and intersubjectively assess each other's performances vis-à-vis those goals according to different parameters of correction. I claim that this view overcomes the shortcomings of the alternative positions discussed. For on this proposal, social normativity is both biologically grounded and the platform for the emergence of cultural norms, among which objective ones are to be found.

Mandatory reading

Satne, G. (2015). "The Social Roots of Normativity", *Phenomenology and the Cognitive Sciences,* 14:4, 673-682.

Optional readings

Rouse, J., "Normativity", in Kiverstein, J. *The Routledge Handbook of Philosophy of the Social Mind*, Routledge 2017.

Penn, D., Holyoak, K., & Povinelli, D. "Darwin's mistake: Explaining the discontinuity between human and nonhuman minds". *Behavioral and Brain Sciences, 31*(2): 109-130, 2008. doi:10.1017/S0140525X08003543.

Further readings

Haugeland, J. "Intentionality All Stars", *Philosophical Perspectives*, 4: 383–427, 1990.

Haugeland, J. "Truth and Rule-following" in Haugeland, J. *Having Thought: Essays on the Metaphysics of Mind*, Harvard University Press, 1998.

Bar-On, D. "Expressive communication and continuity skepticism". *Journal of Philosophy* 110(6), 293–330, 2013.

Millikan, R. "Biosemantics", *The Journal of Philosophy* 86(6): 281–297, 1989. （ミリカン「バイオセマンティクス」 前田高弘訳，信原幸弘編 『シリーズ心の哲学 III 翻訳編』所収，勁草書房，2004 年）

Glenda Satne Lecture #2 "Social Accounts of Normativity" (13:00–14:30)

(90 min divided in two parts: 30 min (sections 1 and 2) + 15 min Q &A / 30 min (sections 3 & 4) + 15 min Q &A)

This lecture presents and discusses some of the most popular accounts of social normativity: namely, the communitarian and interpretationist approaches. The first explains norms in terms of consensus given by individuals to certain kinds of behavior. It is argued that while accounting for an important aspect of social normativity, the communitarian account misconstrues the nature of norms, for on this view, individuals do not target standards of correctness directly but rather social acceptance of such patterns. In section 2, the interpretationist account of normativity is explored as an alternative. According to interpretationism, norms are items through which we rationalize the behavior of ourselves and others to make sense of it. While this proposal gives room to the role that normative standards have in informing behavior, some of which might be plainly objective, it does so at the price of committing to a developmental/evolutionary gap in accounting for its origins. That is because interpretations must be contentful and cognitively rich to perform their function and yet interpretationism has no story as to how individuals come to grasp the relevant interpretative standards of assessment or how these were established in the first place in evolutionary history.

Sections 3 and 4 develop solutions to these problems. Section 3 proposes to distinguish constitutive accounts of social norms and genealogical ones. It argues that maintaining this distinction allows one to acknowledge the role norms play as devices for interpretation of behavior, as stressed in the constitutive theory of social normativity, while nonetheless accepting the important insights about the genealogical processes by which norms are instituted, as provided by the communitarian account. Section 4 sets the stage for investigating the shared character of norms in terms of the emergence of the basic forms of social engagement and conformism that can be thought to underpin the processes of mutual interpretation that sustains them in practice.

Mandatory reading

Hutto, D., Satne, G. "The Natural Origins of Content", *Philosophia,* 43: 3, 2015.

Optional readings

Satne, G. "Social Approaches to Intentionality" in In Kiverstein, J. (ed.), T*he Routledge Handbook to the Philosophy of the Social Mind*, Routledge 2017.

Hutto, D. & Satne, G. "Continuity Scepticism in Doubt: A Radically Enactive Take" in Durt, C., Fuchs, T. and Tewes, C. (Eds), *Embodiment, Enaction, and Culture*, MIT Press, 2017.

Further readings:

Davidson, D. *Subjective, Intersubjective, Objective*, Oxford: Clarendon Press, 2001. Especially Rational Animals (1982) and the Second Person (1992).（デイヴィドソン『主観的，間主観的，客観的』清塚邦彦ほか訳，2007 年，春秋社）

Davidson, D. "The Emergence of Thought", *Erkenntnis* 51 (1): 511–521, 1999. DOI: 10.1023/A:1005564223855

Brandom, R. *Making It Explicit*, Harvard University Press, 1998, Ch. 1, sections IV -VI (see esp. IV.4.)

Hutto, D., and Satne, G. Demystifying Davidson: Radical Interpretation meets Radical Enactivism, *Argumenta* 3, 1: 127-144, 2017. DOI 10.14275/2465-2334/20175.HUT

Day 2: Friday, January 8th

Glenda Satne Lecture 3: "Social Normativity in Evolution" (13:00–14:30)

(90 min divided in two parts: 30 min (sections 1 and 2) + 15 min Q &A / 30 min (sections 3 & 4) + 15 min Q &A)

This lecture investigates the emergence of social norms in the evolutionary history of the human species. The lecture is divided in 4 sections.

Section 1 presents a number of recent approaches to the evolution of modern humans that explain their evolution in socio-cultural terms. The central idea behind this approach is the Cooperative Evolutionary Hypothesis (CEH), i.e. that the human capacity for social cooperation is at the heart of the explanation of how humans came to share norms, including objective norms for truth in thought and language. Examples of the approaches include, closely related to the explanation of psychological mechanisms for cooperation, Tomasello's (2014, 2016) two-stage account of human evolution in terms of joint and collective intentionality, and Sterelny's (2013) account of the emergence of ecological feedback loops including socio-cultural cognitive niches, ecological cooperation and cultural learning. Section 2 discusses Tomasello's two-stage proposal for explaining the evolution of human-unique norms and finds it ill-suited for the task for three reasons: its inability to explain continuity and overlap of cognitive capacities associated with shared intentionality, the difficulty in accommodating

evidence from archeology and development, and the cognitively demanding character of the psychological explanations it provides.

Section 3 proposes and defends an alternative way of understanding shared intentionality that can help substantiate CEH. Instead of distinguishing two forms of shared intentionality—one joint and one collective—as Tomasello does, I propose to understand shared intentionality as collective from the outset, having different stages of development. Section 4 further develops this view. It argues that evolution is as much explained in terms of transformations in the environment as in terms of changes in genetic traits and brain size and function. In the view advocated, evolution is not thought of as 'the further elaboration of the same', as in the teleological view discussed in the first lecture, but as a 'kinky' process in which different elements constitute platforms for the emergence of distinct forms of cognition and behavior. I argue that one key element in such a process is the evolution of language, which scaffolds collective intentionality and thus leads to sophisticated rational forms of collective intentionality including those underpinned by joint practical reasoning and interpretative folk psychological practices, in which fully developed rational norms have their home.

Mandatory reading
Tomasello, M., Carpenter, M., Call, J., Behne, T., and Moll, H. "Understanding and sharing intentions: the origins of cultural cognition", *Behavioral and Brain Sciences* 28(5): 675–691, 2005. https://doi.org/10.1017/S0140525X05000129

Optional readings
Satne, G. Joint and Various (collective) forms of intentionality, *Journal of Social Ontology*, 2 (1): 105–116, 2016.
Satne, G., and Salice, A. "Shared Intentionality and The Cooperative Evolutionary Hypothesis", in Fiebich, A. *Minimal Cooperation and Shared Agency*, Springer, 2020.
Warneken, F., & Tomasello, M. Helping and cooperation at 14 months of age. *Infancy*, 11(3): 271–294, 2007.

Further readings
Tomasello, M. *A Natural History of Human Thinking*, Harvard University Press, Cambridge, 2014.
Tollefsen, D. Let's pretend! Children and joint action. *Philosophy of the Social Sciences*, 35 (1), 75–97, 2005.

Tomasello, M. "Emulation learning and cultural learning". *Behavioral and Brain Sciences*, 21 (5), 703–704, 1999.

Tomasello, M., & Carpenter, M. (2005). Imitation reading and imitative learning. In S. Hurley & N. Chater (Eds.), *Perspectives on imitation: From neuroscience to social science. Imitation, Human Development, and Culture (Vol. 2)*. Cambridge, MA: MIT Press.

Satne, G. "Collective Intentionality, Inferentialism and the Capacity for Claim-Making". In Koren, L., Schmid, H.B, Stovall, P., Townsend, L. (Eds.) *Groups, Norms and Practices*: Springer, 2020.

Wataru Toyokawa Lecture #1 "Why copy others: The cultural transmission and its eco-evolutionary implications" (15:15–16:45)

One of the foundations of collective behaviour and cultural evolution is social learning. I will give a brief overview of animal social learning strategies, explaining why selectivity in timing, contents, and target of copying is key to promote collective intelligence. I will also discuss why cumulative cultural evolution is rare in non-human animals, even in those animals that engage in and rely heavily on social learning.

Day 3: Saturday, January 9th

Wataru Toyokawa Lecture #2 "Understanding collective intelligence in multi-agent learning" (15:30–17:00)

The improvement in the performance of decision-making through collective learning is an emergent property. A conventional view of the wisdom of crowds, that is, a law of large numbers thanks to pooling independent pieces of information, cannot fully disentangle mechanisms underlying the self-organisation of collective decision-making. Using my recent works as an example context, I will demonstrate a strength of computational modelling in both theorising and quantifying collective human decision-making under uncertainty.

Wataru Toyokawa Seminar #1 "Observing human behaviour directly through theory" (17:00–18:30)

I would like to conclude my lecture by inviting you to a practical experience, sharing how the modelling-oriented work is actually done in behavioural science. Through playing with the simplest social learning model, we can get a lot of quantitative, testable questions that we couldn't have asked without a help of modelling. Once we have a tractable question, we can test it by fitting the model with empirical data. As we will see, the cycle of theorising and experimentation can be driven nicely through computational modelling.

あらかじめざっと読んできてもらいたいもの

Sutton, R. S., and Barto, A. G. *Reinforcement Learning: An Introduction*. 2nd ed. Chapter 2 Multi-armed Bandits (pp. 25–45). http://incompleteideas.net/book/RLbook2020.pdf
豊川 日本語総説「ヒトと動物の「集団意思決定」をつなぐ」
https://www.jstage.jst.go.jp/article/janip/63/2/63_63.2.1/_article/-char/ja/

参考図書

片平健太郎（2018）『行動データの計算論モデリング』（強化学習モデルで行動データを分析する方法論の教科書）https://www.amazon.co.jp/dp/B07HYSQYN2/
国里愛彦，片平健太郎，沖村宰，山下祐一（2019）『計算論的精神医学』
https://www.amazon.co.jp/dp/432625131X/
田村光平（2020）『文化進化の数理』（第 4 章で Toyokawa et al. 2019 のモデルが紹介されています）https://www.amazon.co.jp/dp/4627062710/

より発展的な文献 （講義後に読むと理解が深まるもの）

RW モデル + social な interaction のモデル（the "decision-biasing" process models）

- McElreath, R., Bell, A. V., Efferson, C., Lubell, M., Richerson, P. J., & Waring, T. (2008). Beyond existence and aiming outside the laboratory: estimating frequency-dependent and pay-off-biased social learning strategies. Philosophical Transactions of the Royal Society B: Biological Sciences, 363(1509), 3515-3528. https://royalsocietypublishing.org/doi/10.1098/rstb.2008.0131

- Aplin, L. M., Sheldon, B. C., & McElreath, R. (2017). Conformity does not perpetuate suboptimal traditions in a wild population of songbirds. Proceedings of the National Academy of Sciences, 114(30), 7830-7837.
- Barrett, B. J., McElreath, R. L., & Perry, S. E. (2017). Pay-off-biased social learning underlies the diffusion of novel extractive foraging traditions in a wild primate. Proceedings of the Royal Society B: Biological Sciences, 284(1856), 20170358.
- Toyokawa, W., Saito, Y., & Kameda, T. (2017). Individual differences in learning behaviours in humans: Asocial exploration tendency does not predict reliance on social learning. Evolution and Human Behavior, 38(3), 325-333.
- Toyokawa, W., Whalen, A., & Laland, K. N. (2019). Social learning strategies regulate the wisdom and madness of interactive crowds. Nature Human Behaviour, 3(2), 183-193.
- Deffner, D., Kleinow, V., & McElreath, R. (2020). Dynamic social learning in temporally and spatially variable environments. Royal Society Open Science, 7(12), 200734.

RW モデル「の中に」、社会的影響を仮定したモデルの論文（the "value-shaping" models）

- Biele, G., Rieskamp, J., Krugel, L. K., & Heekeren, H. R. (2011). The neural basis of following advice. PLoS Biol, 9(6), e1001089. （片平さんの教科書で解説されています）
- Najar, A., Bonnet, E., Bahrami, B., & Palminteri, S. (2020). The actions of others act as a pseudo-reward to drive imitation in the context of social reinforcement learning. PLOS Biology, 18(12), e3001028.