#### Ole Höffken

Dr Ole Höffken, Heidelberg University, Germany.

**ORCID:** https://orcid. org/0000-0002-4917-172X **E-mail:** 

ole.hoeffken@uniheidelberg.de

First submission: 18 March

Acceptance: 24 August 2024 Published: 28 December 2024

DOI: https://doi.org/
10.38140/aa.v56i2.8975
ISSN:0587-2405
e-ISSN: 2415-0479
Acta Academica •
2024 56(2): 116-137
© Creative Commons
With Attribution (CC-BY)





# Critical theory and human nature: Hartmut Rosa's resonance theory from an evolutionary-anthropological perspective

In one of the major contributions to current Critical Theory in the 21st century, Hartmut Rosa employs the notion of resonant subject-world-relationships to critically analyse structural features of modern societies that systematically undermine stable conditions for such relationships to unfold. The specific critical potential of resonance theory is based on its status as an account of the good life, which has to build on an account of human nature. Arguably, the best available account of human nature is given by evolutionary anthropology and psychology - proceeding from a wide notion of evolution as natural and cultural. I propose to complement resonance theory with evolutionary approaches to the question of the good life. Resonance theory can offer crucial refinements of the concept of the good life as presupposed by authors working within an evolutionary perspective, while in turn being able to profit from the empirical insights of evolutionary anthropology and psychology.

**Keywords:** resonance, alienation, good life, happiness, natural human evolution, cultural human evolution

#### Introduction

Hartmut Rosa's concept of resonance is one of the major contributions to current Critical Theory in the 21st century. Rosa employs the notion of resonant subject-world-relationships to critically analyse structural features of modern societies that systematically undermine stable conditions for such relationships to unfold (see Rosa 2016, 2020; Gros 2019).

The specific critical potential of resonance theory is based on its status as an account of the good life. As such, resonance can figure as a "positive counterconcept" (Rosa 2016: 306, 316) to states of alienation (Rosa 2016: 747-748), which has been the leading (but "merely negative") concept of traditional Critical Theory.

Resonance is an emphatically phenomenological concept, describing a relationship to the world or "segments" of the world ("Weltausschnitte", which may be animate or inanimate) as it is experienced. Accordingly, resonance theory has been characterised as an attempt to ground a "phenomenological critical theory" (Gros 2019). This "immanent approach to social criticism" (Gros 2019: 13) tries to strike a middle path between the Scylla of criticising society on the basis of essentialist preconceptions of human nature or the good life and the Charybdis of taking uncritically at face value the self-interpretations and self-descriptions of subjects in a given society.

While generating its concepts on the basis of "phenomenological" descriptions of the lived experience of actual subjects (in the society/culture under scrutiny, but possibly also other societies/cultures), a "phenomenological critical theory" still tries to generalise from there (rather than from armchair preconceptions) to a moderately universal, but empirically grounded, account of the good life. This means that the resulting notion of the good life (like any other) has to be based, implicitly or explicitly, on an account of human nature. Resonance theory indeed comprises the universal anthropological claim that a desire for resonance is an aspect of human nature (Gros 2019: 23). To properly ground this claim and to unfold its consequences, it seems advisable to situate it within the best available account of human nature. This account is arguably given by evolutionary anthropology. With this as the basis, we may get a better understanding of both the anthropologically universal "conditions of resonance" as well as the multifarious factors impeding them in modern societies. Accordingly, this paper is an attempt to complement resonance theory with evolutionary approaches to the question of the good life. This combination promises to be fruitful, since resonance theory can offer crucial refinements of the concept of the good life as presupposed by authors working within an evolutionary perspective, while in turn being able to profit from the empirical insights of evolutionary anthropology and psychology.

## The concept of resonance

Roughly, a resonant relation is one in which the experiencing subject takes her "other", the "segment of the world" she is interacting with, as responsive and open to influence, but in which the subject herself also evolves and transforms through engagement with that other. In a resonant relation, both poles are experienced in such a way that neither dominates the other, and both are transformed through their interaction.

In greater detail, any given experience of a resonant relationship to some "other" in the world (a person, a material object, a piece of music, a landscape) is characterised by Rosa via four essential aspects (Rosa 2017: 315, 2020: 38-45).

The first aspect consists in the other affecting the subject. Rosa refers to this simply as "affect", which is meant to denote the specific experience that the subject has of her other. Vital for resonance to occur is that the subject does not feel indifferent towards the other, but in fact "affected" or "touched" by it.

The second aspect is the subject's reaction to and her experienced impact on the other. Rosa calls this "emotion" (in the literal sense of "moving/reaching outwards"), which describes the subject's response to the "affect" by the other. This involves, for example, physiological reactions of the subject to the other (as a minimal form of "emotion"), but also the effective impact the subject may have on it, such as interpreting a book or working on a material.

The third aspect describes the resonant relationship that the subject enters into with the object. Rosa calls this "Anverwandlung" in German, which may be translated as "adaptive transformation" (or maybe "transformative adaption"). This is meant to indicate a reciprocal transformation of both the subject and the object as they are experienced. Neither only the subject has an impact on the object, nor only the object has an impact on the subject (again, in the experienced situation of their interaction). Neither of the two poles dominates the other and each is transformed by their mutual interrelation.

The fourth aspect of resonance is its constitutive "unavailability" or "uncontrollability" ("Unverfügbarkeit"). Experiences of resonance cannot be produced or forced (and sometimes not prevented) at will, and also the concrete outcome of the resonant interaction of subject and other (what they are transformed to in the process, respectively) is not predictable or engineerable.

Resonance is not only meant as a "positive counter-concept" to alienation, but also as a more flexible and pluralistic counter-concept than, for example, "autonomy", "authenticity" or "meaning".

Thus, resonance as a "meta-criterion of successful life" (Rosa 2016: 749) is pluralistic with regard to the concrete contents of a given life that make it a succeeding one (Gros 2019: 23). This pluralism is based precisely on the nature of resonance as a concept trying to grasp a certain quality of the experienced relationship to the world (or "segments" of the world): because the relevant quality lies on the relational level, the concrete contents with which one stands in the relation in question are variable from subject to subject (at least to a certain degree).

Rosa is eager to point out that he does not want to imply a conception of "essential human desires" in his resonance theory. Although resonance theory does state a universal anthropological desire for resonance, this is not an "essentialist" account of human nature, since the concrete content of experiences of resonance can be enormously variegated, in accordance with the diversity and plasticity of human being(s) (Rosa 2016: 300-301).

Despite, or maybe precisely because of, the pluralistic character of the notion of resonance, Rosa employs it as the unifying concept in his critique of modern societies. Thus, he suggests that alienation of modern subjects can be understood as a systematic inhibition of experiences of resonance through adverse social conditions. In effect, Rosa holds that "a *critique of relations of resonance* would appear to be the most elementary and at the same time most comprehensive form of social critique" (Rosa 2016: 70). Central to his critical diagnosis of modernity is the observation of what he calls a "resonance catastrophe", which will be considered in greater detail towards the end of this paper.

To serve the double function of both description and critique of social circumstances, Rosa wants to employ resonance as an ambidextrous concept, in both a descriptive and a normative sense (Rosa 2016: 293-294, while conceding the possibility to abstain from the normative interpretation, Rosa 2019: 200-201). However, it is not always absolutely clear in his writings how these dimensions relate to one another. For example, Rosa also sometimes calls the descriptive sense "weakly normative" and the normative sense "strongly normative" (Rosa 2019: 200-202).

# Happiness, well-being, positive and negative affect

It is thus advisable to assess resonance theory within a conceptual framework that distinguishes the descriptive and the normative dimensions of the question of the good life more clearly. A promising proposal in this direction has been made by the philosopher Daniel Haybron.

Haybron distinguishes a descriptive notion of "happiness" from a normative notion of "well-being" (or "flourishing", or "welfare"; see Haybron 2011: §1) as two levels of meaning of "the good life". In this usage of the terms, "happiness" roughly denotes a (long-term) psychological condition of a subject that has a positive quality for her – in some *non-normative* sense of "positive". That a state (mental or otherwise) of a subject is "good for" or "benefits" her in a *normative* sense is precisely what is denoted with the term "well-being" (also called "prudential value").

While "happiness" and "well-being" are clearly differentiated through falling into the spheres of the descriptive and the normative, respectively, they are also usually taken to be closely interrelated. Thus, happiness is often considered if not as a sufficient, then as a necessary condition for well-being (at least under normal conditions): A state that is normatively beneficial for a subject plausibly also has to include a favourable psychological condition as a pivotal aspect (Haybron 2011: §4.1).

The descriptive sense of resonance roughly falls into the domain of happiness, the normative sense into the domain of well-being. What is going to be considered in the following is only the descriptive or "happiness" dimension. In a further step, a normative social critique may build on the descriptive notion of the good life (and its conditions), but this would go beyond the scope of the present paper.

The same goes for discussion of other theories of happiness (see Haybron 2011: §2.1, for an overview). Nonetheless, a specific requirement that is implied in most variants of the extant accounts and which is intuitively plausible will act as the basis of the current discussion. Namely, a necessary condition for any subject to be happy seems to be the following: whatever other defining conditions this may consist in, the subject can only be said to be happy if she is frequently-enough in positive affective states, ¹ such as pleasure or a condition of positive emotions or mood,² and not-too-frequently in negative affective states, such as displeasure or a negative emotional condition. In short, a necessary aspect of happiness is a certain frequency of positive affective states, and conversely, a certain *in*frequency of negative affective states.

The question, now, is of course the following: what does it mean, specifically, that certain affective states are actually *positive* or *negative* for the subject being in these states (in a descriptive/psychological sense)?

<sup>1 &</sup>quot;Affective states" are to be understood here simply as all those states which are not exclusively cognitive, as life satisfaction judgements are, for example (see Haybron 2011: § 2.3).

<sup>2</sup> As opposed to emotions, which are an "immediate specific response to environmental stimuli or internal thoughts [...] moods are diffuse, lasting, and less-specific emotional states without a clear identifiable trigger" (Dornisch 2022: 170).

This question, in turn, can be approached from two perspectives, a third-person "objective" and a first-person "subjective" or phenomenological one. Thus, from the subjective phenomenological perspective, we may ask: (1) what are the specific qualities of experience that constitute "positivity" for the subject's experience? From the objective perspective, we may ask: (2) what are the objective conditions for these qualities to occur?

Arguably, these two perspectives have to complement one another in giving an adequate account of "positive" affective states.

# Resonance as an account of positive affect

An adequate answer to the first question most likely has to be pluralistic or multidimensional; the positivity or negativity of a given affective state is plausibly not constituted by simply one "affective dimension" (the balance of pleasure over displeasure, say). Thus, affective states may be considered to have a hedonic dimension, an emotional dimension, a mood dimension, or a combination of several of these dimensions. For an overall state of a subject to qualify as positive/ negative affect, it would then have to fall into a certain favourable range in each of the relevant dimensions. In other words, the different dimensions constitute individually necessary and jointly sufficient conditions for happiness.

Another possibly relevant dimension concerns precisely what resonance theory is meant to capture: the quality of the experienced relationship to the world, or to "segments" of it (persons, things, situations). While resonance is an emphatically phenomenological and in this sense subject-oriented approach, the focus lies on the *relationship* between, in phenomenological parlance, the intentional subject (which is experiencing) and an intentional object (which is experienced) – it is this relationship, having either the experiential quality of being resonant or non-resonant, which constitutes the explicans for affective positivity/negativity.

So, whichever further theoretical uses it may have (in the dimensions of normativity and social critique), the concept of resonance also offers an answer to question (1) through an explication of (at least a central dimension of) affective positivity. And this is the role in which it going to be considered for the purposes of this paper.

# Evolutionary anthropology as an account of conditions of resonance

With regard to the second question, an evolutionary approach offers an extensive, arguably the most far-reaching, account of the objective conditions of affective states (especially, resonance). "Evolution" means here two processes which run in parallel (in different paces), but also intertwine: natural (or biological) and cultural evolution.

Broadly, natural evolution (see Millstein 2017) is (at least with regard to certain traits and timescales, see Wilkins and Godfrey-Smith 2009) mainly driven by the processes of natural selection, sexual selection and kin selection. These selection processes lead to the propagation of certain traits via genetic variation and inheritance. The evolutionary success of the bearers of these traits is measured by their "fitness", that is, their adaptation to the inanimate environment, to the behaviour of other organisms in the environment, such as predators or prey, but also conspecifics (in terms of cooperation/competition and sexual selection).

The expression "cultural evolution" (see Chudek, Muthukrishna and Henrich 2016) stands for the notion that human cultural traits and behaviours "evolve" in an analogous manner. In cultural evolution, traits are propagated by selective mechanisms that function in a similar way as those in natural evolution – while "selection", "inheritance" and "variation" mean something similar, yet different, in the cultural compared to the biological sphere.

First, cultural inheritance is not genetic, but instantiated by learning from other conspecifics. Accordingly, "culture" in the context of cultural evolution means anything – "practices, techniques, heuristics, tools, motivations, values, and beliefs" (Henrich 2016: 3) – that opens or constrains possibilities for certain behaviours and actions, and that can be transmitted through social learning.

Second, what is selected for in cultural evolution are not biological traits (phenotypes, behavioural dispositions, and the genes underlying them), but cultural "behaviour-shaping information", such as acquired practices, beliefs, norms and values. For these, the selection consists in *sui generis* in-group and between-group dynamics (while such "group selection" is usually rejected for biological evolution, see Chudek, Muthukrishna, and Henrich 2016: 762).

Third, the cultural variations on which the cultural-evolutionary selection mechanisms operate are produced through human agency instead of genetic mutation. Nonetheless, the protagonists of cultural evolution are typically not aware of the specific "cultural fitness" effects of their behaviour (Chudek, Muthukrishna and Henrich 2016: 759).

The following will consider (natural and cultural) evolutionary conditions of affective states – and that means, especially, of states of resonance. But resonance is of course "only" one affective state among others. Thus, in answering question (2), we can proceed in two steps: first, considering the natural– and cultural–evolutionary conditions for affective states in general, and second, evolutionary conditions for states of resonance in particular.

# **Evolution and positive affect**

While they follow analogous (and sometimes cross-cutting) patterns, there is an important difference between natural and cultural evolution: natural evolution is much slower. In the short term, cultural evolution unfolds within the confines of natural evolution, while in the long run, it can have feedback effects on natural evolution (Chudek, Muthukrishna and Henrich 2016: 763-764).

So, cultural and natural evolution influence one another, and indeed, they cannot be told apart from a certain point onward in human evolution. We are an "evolved cultural species" (Chudek, Muthukrishna and Henrich 2016: 750), it is our nature to have culture. Accordingly, human affects cannot be understood from an exclusively natural or cultural evolutionary perspective, but only in the context of natural-cultural co-evolution.

Nonetheless, as the most basic question concerning (positive and negative) affective states, we may ask how such states evolved biologically in the first place. The answer would surely be complex (see Dornisch 2022 for an overview of theoretical and empirical approaches), and an important caveat in this regard is pointed out by Randolph Nesse, namely, that affective states never serve only one specific function:

In seeking evolutionary explanations for emotions and affects, the temptation is to jump directly to hypotheses about possible functions. This is a mistake. Although emotional states would not exist unless they had been useful, there is no one-to-one correspondence between an emotion and a function. One emotion can serve multiple functions, and one function may be served by several different emotions (Nesse 2004: 1337-1338).

But very broadly, we may say that affective states in general have a straightforward evolutionary function: to make us act in a way that is (on the face of it) beneficial to the propagation of our genes. Thus,

[f]rom an evolutionary perspective, [affective states] are conceptualized as constituent parts of motivational systems that have been shaped by natural selection to produce behaviors

that have increased fitness over evolutionary time [...]. From this view, the subjective components of any given emotional state – including both positive and negative affect – are not viewed as being good or bad, per se. Instead, these states are considered in terms of their function as psychological carrots and sticks, selected for their ability to help guide our ancestors toward behaviors that facilitated acquisition of fitness-related goals (positive affect) and away from those behaviors that did not (negative affect) (Hill, Delpriore and Major 2013: 876).

So, most generally, affective states, positive and negative, have an incentivising function in regulating behaviour of approach/pursuit or withdrawal/avoidance.

Now, as the caveat by Nesse cited above already indicates, many evolved capacities – and especially the capacity to experience certain affective states under certain circumstances – do not simply have one specific evolved function, but also more complex and derivative adaptive effects. A theory that proceeds on basis of this insight is the so-called Broaden-and-Build Theory, which has been proposed by Barbara Fredrickson (see Fredrickson 2013), and conceives of positive affect not simply as being part of an incentivising mechanism, but as part of a dynamic relationship of the organism with the environment (or the subject with the world, as it may be called from a phenomenological perspective).

Thus, while negative affective states serve a short-term purpose in motivating the subject to face imminent challenges (through fight or flight, say), or to work towards a change of the situation if things are not going well (in fitness-terms), positive affective states have developed more long-term "side" effects. Positive affect allows for a broadened awareness when occurring, opening possibilities for discovery of new knowledge, personal relationships and skills – in short: of new fitness-relevant resources. Resources built through positive emotions also increase the odds of experiencing subsequent positive emotions, with further broaden-and-build-benefits, thus creating an upward spiral toward improved fitness (Fredrickson 2013: 15–17). So, the importance of positive emotions is hypothesised to have amplified, over and above its basic incentivising function, through a self-reinforcing ("runaway") evolutionary process.

It may be added that, plausibly, the fitness-enhancing effect of (some) positive emotions does not necessarily have to lie in the broadening of attention, but more basically in the willingness to open up to outside forces, and to also be vulnerable to them, in order to seize on opportunities they present. So, the theory may more precisely be called "Open-Up-and-Build". In this line, also Fredrickson (2008: 455-462) herself suggests openness for experience/for the world as vital to positive affect (and, we may add, this openness may also be given in focused, not only broadened, awareness).

The runaway selection for positive affective states suggested by Broaden-and-Build theory is plausibly even further amplified in the context of cultural evolution. While "the subjective components of any given emotional state" – especially states of resonance – appear as mere "psychological carrots and sticks" from the vantage point of natural evolution, and "are not viewed as being good or bad, per se" (Hill, Delpriore and Major 2013: 876, full citation above), from the perspective of the experiencing individual, they are exactly this.

Accordingly, Ladislav Kováč (2012: 298) suggests that the conscious orientation towards affective states has long been the primary driver of cultural evolution (in a runaway process, as seen from the lens of natural evolution). So, "emotion-seeking" has become a major motive for cultural evolution – possibly building on the self-reinforcing dynamic of positive emotions posited by Broaden-and-Build theory. Cultural evolution thus appears to be to a large extent an "emotional evolution".

#### **Evolution and resonance**

Fredrickson formulates Broaden-and-Build theory in relation to "positive emotions" generally, but she actually only provides typical examples (Fredrickson 2013: 3-6), and no general criterion for what makes an affective state "positive". Such a criterion may be provided via an explication of "positivity" (and, conversely, "negativity") of affective states through defining phenomenological features – with resonance being the candidate explication considered here.

Now, while the notion of resonance may serve as a conceptual explication of "positivity" of affect as applied in evolutionary accounts of positive affect, for example Broaden-and-Build theory, such accounts may in turn help to clarify the putative anthropological universality of the capacity to experience resonance. In fact, in spite of its claim to anthropological universality, the concept of resonance has not yet been embedded into an empirical-anthropological account of human nature. For example, Hartmut Rosa's references to evolutionary anthropology and psychology remain sparse and cursory (consisting only of vague indications, see Rosa 2016: 247-248). In effect, his analysis of the reasons for the importance of resonance and the difficulties to sustain it in the modern world does not pervasively reach back to the natural and cultural evolution of human psychology.

To fill this gap, we may build on knowledge about (natural and cultural) human evolution to give an (admittedly still largely hypothetical) evolutionary account of resonance. This can basically be done by answering two main questions. First, why a desire for resonance has developed in the first place and which conditions

of life are predictably favourable to experiences of resonance. Second, which impact natural and cultural evolutionary developments did and still do have on the possibility to sustain such favourable "conditions of resonance" (on an individual and especially on a collective level).

An account of the natural-evolutionary basis of resonance may be developed by taking up the points made with regards to Broaden-and-Build theory and extending them to the more refined concept of resonance (as an explication of "positive affect").

The parallel between Broaden-and-Build and resonance theory is especially striking if we understand the former more generally as a theory about "Open Upand-Build" (with broadened and narrowed awareness alike), as suggested above. As already pointed out, a main aspect also of the idea of resonance is the potential ability and the actual gesture of opening up to the world.

Accordingly, just as hypothesised in Broaden-and-Build theory, this affective "opening-up" capacity may have developed evolutionarily through a secondary process building upon the function of affective states as mere motivators for seeking/avoiding behaviour. Especially, positive emotions may have grown out of the role of simply being sought-after rewards, and into constituting a dynamic, resonant relationship with the world.

In line with this, Broaden-and-Build theory describes a feedback loop between the concrete experiences of positive emotions and a more general dispositional propensity for these experiences (which plausibly fuelled the runaway selection for positive emotions). Rosa outlines a similar feedback loop between concrete realisations of resonance experiences and more dispositional resonance expectations, which can take the form of both a virtuous and a vicious circle (Rosa 2016: 296).

## Resonance, sociality and development

The selection for capacities to engage with the world in an "broadened", "opened-up", or "resonant" stance may have been further amplified through the specific evolutionary trajectory of homo sapiens as an intensely social species. Beginning at least 5 million years ago, after leaving the trees in the rainforest as their preferred habitat, our hominin ancestors faced new environmental conditions on the African savannah: namely, better opportunities for social learning, more diverse and fluctuating environments, increased danger from predators. These environmental pressures and opportunities created an evolutionary pathway

with mutually reinforcing factors, including upright walk (and free hands), brain growth, intensified tool use, diversified diet (especially big game hunting), use of fire (especially for cooking food), increased cooperation in larger groups and pairbonding strategies in mating (Henrich 2016: 298–312).

This multi-causal constellation also kick-started natural-cultural coevolution, which plausibly has had a decisive influence on our nature as social beings (apart from other factors such as kin selection, reciprocity and mutuality in in-group cooperation). Analogies to our ape cousins make it plausible that the social life of our chimp-like ancestors was initially characterised by routine behaviour of competition and dominance, with only occasional incidents of cooperation. But at some point, the just mentioned co-evolutionary processes made social cooperation an ecological success factor to the degree that prosocial³ norms, increasing in-group cooperation and harmony, were selected for (Richerson et al. 2016, Henrich 2016: 167).3 Such norms harness the genetically encoded social instincts, but can have feedback effects on the biological evolution of the human mind, catalysing a process of "self-domestication" (Hare and Woods 2020), which gradually pushed the biologically ingrained behavioural and affective dispositions in humans to unprecedented levels of cooperativeness, sociality and generally openness towards conspecifics.

The need for social resonance may also have been a restraining factor guarding against too outright domination of others when gaining an advantage over them, leaving open opportunities for future cooperation, even and especially in situations of power asymmetries (which may of course also be reversed in the future).

The ability to open up to the world and the trusting expectation to experience resonance in doing so is of specific importance in the context of child development, as pervasively stressed by Rosa (see, for example, Rosa 2017: 321, 328). We may hypothesise that humans as beings that have evolved for maximal behavioural flexibility and are thus by default open to the world, have to have resonance as a basic mode of experiencing the world. Thus, experiences of resonance are plausibly crucial in human development from early age on, for interaction with the non-human environment and with other humans. Above that, resonance may be expected in playful interactions with the world (see below), which are vital for learning in child development.

<sup>3 &</sup>quot;Prosocial" does not carry any normative meaning here, it can for example encompass explicitly xenophobic norms (Henrich 2016: 169).

# Resonance and goal-pursuit

Adult life, in contrast, may appear from an evolutionary perspective as a never-fully-accomplished to-do list of (fitness-related) tasks, revolving around survival, personal safety, cooperation, mate attraction and retention, and care for relatives (Kenrick and Lundberg-Kenrick 2022: 20–22).

Thus, it is common in evolutionary psychology to characterise a fulfilled life as one in which one does well with regards to the goals on this to-do list (where the "goals" are outcomes that are beneficial to survival and/or reproduction – or at least, outcomes that are similar in appearance to what would have constituted such success factors in the so-called "environment of evolutionary adaptation"). For example, Fiona Hill and colleagues hold:

Promoting happiness is [...] oftentimes merely a matter of exploiting knowledge of evolved desires and attempting to fulfill them [...]. Included among these are the desires for professional success and power, achieving intimacy in personal relationships, being more physically attractive, helping friends and relatives, securing personal safety and health, gaining access to high-quality food, and having personal and financial resources [...]. Taking steps to fulfill these desires and goals makes people feel happy (Hill, Delpriore and Major 2013: 879).

It is still an open question to what degree it is actually relevant to happiness whether one fulfills a certain fitness-relevant goal in a way that is similar to the way it must have been fulfilled in our evolutionary past and to what degree this is subject to cognitive and behavioural flexibility.

William von Hippel has coined the term "phenotypic indulgence" to describe this flexibility. Phenotypic indulgences are all the things we encounter in the modern world which "mimic ancient pleasures without delivering the outcomes that made those ancient activities adaptive and hence pleasurable" (Hippel 2018: 228; this definition may be widened to include activities that are not adaptive in the same way as the original activities they mimic, or adaptive only by chance). So, "[p]henotypic indulgences, while pleasing, are really just surrogates for our evolved preferences" (Hippel 2018: 228).

In modern life, basically anything rewarding or intriguing we encounter is a phenotypic indulgence: something which is not directly adaptive in the sense of enhancing our genes" reproductive success (or at least not in the straightforward way that the original signal would). In a way, modern happiness is unthinkable without them, since they ensure that we do not have to live the lives of huntergatherers to experience positive affect. But whatever the concrete contents

of happiness-relevant objectives and activities eventually are, humans have certainly evolved to consciously pursue personal goals (whether they are phenotypic originals or indulgences). In this regard, Hill and colleagues go on to add

that the process of moving towards one's goals may actually be more important to happiness than the end-goal attainment. For instance, goal striving is associated with feelings of satisfaction and contentment, as long as adequate progress is being made toward the goals at hand (Hill, Delpriore and Major 2013: 879).

Now, this "process of moving towards one's goals" can be understood as a specific instantiation of resonance. The experience of making efforts to reach a goal and receiving the feedback of constant progress towards it is precisely the kind of give-and-take relationship (with the persons, other living beings, or objects one is interacting with in goal-directed activity) that is envisioned in resonance theory.<sup>4</sup>

Accordingly, Rosa too describes this experience of "self-efficacy" as an important expression of resonance (he sometimes employs the term "self-efficacy" as a synonym to the aspect of "emotion" in resonance experiences), while also stressing that

there is [...] significant evidence suggesting that the "positive" impact of experiences of self-efficacy arises *not* from the instrumental effectiveness of one's actions, but rather from their resonance- and relationship-generating qualities. [..0] ne's *intrinsic interest* in a particular area of activity or segment of world increases not with the success of or "reward" received for one's engagement, but with the experience of being able to accomplish something oneself, to attain world. What matters is not the effected *outcome*, but the *experience of interplay and reciprocity* that emerges in the process (Rosa 2016: 274-275).

In this line, it may be added that not only experiences of successful goal-attainment, but also those of adversity or even failure can be transformative resonant interactions with the world. If resonance primarily lies in "the experience of interplay and reciprocity that emerges in the process" rather than "the instrumental effectiveness of one's actions", then resonance may be instantiated especially through experiences of the other, be it an object or a living being, not complying with one's plans. This "feeling the world kick back" is arguably

<sup>4</sup> Taking into account the nature of humans as an intensely social species, we can expect that cooperative action is a significant sphere of resonance-in-goal-pursuit for a majority of people.

part of the thrill – and the joy – of being alive. Rosa expresses a similar point in stressing that the "segment of the world" one interacts with as one's other has to be experienced as recalcitrant and uncontrollable ("unverfügbar"), to a certain degree, but as possibly open for "transformative appropriation", for resonance to possibly occur. If perfect "consonance" with or perfect control over the other is sought after, this is the most guaranteed way to stifle any possibility of true resonance (Rosa 2017: 319).

That a certain "uncontrollability of the world" (Rosa 2020) constitutes a central part of human happiness makes perfect sense in evolutionary terms. For all humans, constant success or control over their environment is basically impossible. Accordingly, experiencing a mixture of success and failure as a "good" life is possibly the most adaptive attitude.

# Resonance beyond goal-pursuit

There is of course more to resonance (and to life in general) than having a goal-directed interaction with the world.<sup>5</sup> Thus, many activities that are playful and/or creative, but not obviously goal-directed, and probably especially those, may certainly also be expected to elicit experiences of resonance,<sup>6</sup> for which we can plausibly give two main evolutionary reasons.

First, in situations in which there is no salient opportunity or threat, relaxed playfulness states offer a regenerating level and quality of activity (this is an instantiation of what Fredrickson has called the "undo effect" of positive affect, see Fredrickson 2013: 8-12). Being passive or "contemplative" at the right occasions is maybe just as important for fitness as being active at certain other occasions.<sup>7</sup>

<sup>5</sup> It is telling in this respect that Rosa describes the concept of resonance in German as an explication of "gelingendes Leben". Rosa prefers this expression over talk of "gutes Leben" ("good life"), because it carries a stronger processual connotation (Rosa 2019: 201). But interestingly, "gelingend" also does not have the same normative connotations as "good". There is no direct equivalent to "gelingend" in English, it is only inadequately translated as "succeeding", since it is not tied to goal-orientation. For example, a piece or an act of art that has its purpose only in itself can also "succeed" in the sense of "gelingen" (which seems to deviate from the standard application of "succeed" in English).

<sup>6</sup> Playfulness as an aspect of resonance may also have been further amplified by the prolongation of (especially behavioural) juvenile traits brought about as part of the (self-)"domestication syndrome" (see Hare and Woods 2020).

<sup>7</sup> And due to their evolved social nature, humans may find resonance specifically in playful or leisure activities that are done together with others, instead of alone.

Second, taking into account the importance of innovation for the success of human populations, playful activities appear as indirectly adaptive. For innovation to actually occur, new and basically random combinations of known ways of doing things are necessary. Playfulness states are wasteful in having no productive or goal-oriented outcome in the vast majority of the cases. But this waste or cost is offset by the benefits of the productive innovations that are made accessible in the seldom cases of random success.

For these reasons, also pointless playfulness and contemplative "inactivity" can be expected to contribute to, or maybe even to be necessary for, resonance. Thus, it is to be expected that we have on average an evolved propensity to be in a favourable psychological condition only if there is a certain degree of "looseness" in the situations we encounter. If too many situations are laden with a too high degree of goal pursuit/threat avoidance, this predictably quenches possibilities of resonance.

And this, as Rosa points out in his discussion of the dynamic between the basic human motivations desire and fear (which have great influence on the possibility to experience resonance), seems to be exactly the case in modern societies, leading him to the "surmise that capitalist societies geared toward growth have an inherent tendency to develop characteristics typical of pathological fears and desires" (Rosa 2016: 207).

#### Cultural evolution and resonance

In accordance with the idea of cultural evolution as "emotional evolution", driven to a large extent by "emotion-seeking" (see above), Rosa holds

that human actors are only capable of acting and making decisions when they possess at least an implicit answer to the question of the good life that provides them with both *positive* and *negative direction* in their lives, and that at a basic psychological level they tend to strive for happiness in the sense of psychophysical wellbeing (Rosa 2016: 41).

Rosa's proposition is, of course, that this "(implicit) sense for the good" is largely constituted by the desire for resonance. Thus, cultural-emotional evolution may be seen as a major driver towards realising favourable conditions of resonance (which is nonetheless hampered by the orientation towards resonance being largely "implicit", something that Rosa arguably tries to counteract by rendering the notion of resonance explicit).

But cultural evolution has also lead to developments creating adverse conditions for realising positive affect, and especially experiences of resonance. A major reason for this lies in a fact mentioned above, namely, that natural evolution takes place on a much grander timescale than cultural evolution. While cultural evolution brought about huge changes in the last 12 000 years (since the transition to agriculture) in the ways we behave, think and feel, our basic psycho-physiological makeup has remained largely unchanged. This leads to "mismatches" between our evolved biological traits and the modern environments we live in (Eaton, Konner and Shostak 1988). In the modern world, we are basically surrounded on all sides by such mismatches. Some of them do not have any negative effects and may even have positive ones (for example, sleeping on a modern mattress), while others are detrimental (for example, being exposed to stressful noise in urban environments). Bjørn Grinde has coined the term "discord" for the latter kind of mismatch (Grinde 2012: 71). If we interpret resonance as explicans for emotional-affective "positivity", then a discord in this sense would be a mismatch creating adverse conditions of resonance.

Such discords have been arguably created already by the transition to agriculture. Apart from disadvantageous conditions for health, such as field work, crowded living and a one-sided diet, it led to severe social stratification and gender inequality.

Furthermore, a massive mismatch, and often also a discord, in the modern world is its sheer complexity in many dimensions. The modern lifeworld confronts us with an enormous array of complex situations (comprising social, institutional, or environmental circumstances with which we have to interact). Taking into account that our minds did not have the time to evolve adaptations to these kinds of complexity, cognitive and emotional overload is no surprising outcome (Haybron 2008: 243–247).

Above that, we are faced with an overabundance of intriguing stimuli (intriguing because of being similar to original fitness-relevant stimuli, acting as "phenotypic indulgences", see above), often amplified to a "supernormal" intensity (Barrett 2010). Recreational drugs and junk food are obvious examples, but digital products like video games and social media also may have similar power by "only simulating" (to a large extent) real world mastery or social connection and increasing related stimuli to supernormal levels. The motivational dynamic in favour of the creation of phenotypic indulgences and supernormal stimuli is plausibly part of the "emotional evolution" (see above) of humans as "a unique hedonotropic species[,...] which seeks to amplify sensations [...] experience[d] as pleasant" (Kováč 2012: 298). The effects of the stimuli "overabundance" and "overdose" combine in modern societies with a particularly strong accentuation

of our evolved status concerns (Frank 1999: chapter 9, see Hippel 2018: 97-101). Thus, in relation to status competition, the (in other respects beneficial) mismatches of a modern affluent mass society act as tremendous discords. The dilemma seems to be that every gain in material wealth opens new arenas of competition with potentially a lot more people to compare to (Kenrick and Lundberg-Kenrick 2022: 122-123), leading to a runaway process of "positional arms races" (Frank 2011).

These mismatches leading to cognitive and emotional overload may be a major cause for the excess desire/fear reactions in the world-relationships of modern subjects that Rosa identifies as a major impeding factor against the possibility of resonance (Rosa 2016: 207-208).

Discords were arguably created also by the transition from "interpersonal" to "impersonal" sociality (see Henrich 2020). As bands in the low double-digit range and broader social networks in the low triple-digit range were the norm even for behaviourally modern homo sapiens (Dunbar 1992), we have evolved for face-to-face, interpersonal prosociality. In the hunter-gatherer context, this was based on so-called "extensive" social networks. Such networks are established along biological relatedness and other social ties, such as fictive kinship, and span multiple smaller groups of flexible composition (Henrich 2020: 71-72). With the development of sedentary ways of living, we transitioned to "intensive" sociality organized around bloodlines, clans, kindreds and religious congregations. This mode of sociality is still interpersonal, but granting severely less flexibility and personal autonomy (Henrich 2020: 104-108). Another huge step in the making of the modern world was the rise of impersonal sociality (Henrich 2020: 486-488). It also constituted a further step away from our ancestral, interpersonal mode of sociality, arguably creating new discords in the form of personal isolation and difficulties to relate to others – even close relatives or friends (Buss 2000: 16-17).

#### Conclusion and outlook

The provided cursory overview of (natural and cultural) evolutionary conditions of resonance may already afford important complements to Rosa's account of the historical development of the conditions of resonance in modern societies.

As indicated, Rosa observes a "resonance catastrophe" (Rosa 2016: chapter X) in modernity. According to him, this catastrophe has been caused by a mode of social organisation characterised by "dynamic stabilization" (Rosa 2016: chapter XIV) which is also fuelling the social acceleration that was the focus of Rosa's

previous work (see Rosa 2005). With this expression, Rosa aims to describe the fact that both individual and collective actors in modern societies can keep the *status quo* only through continuous efforts, which includes constant dynamic development and, typically, growth (of capacities to act and access to resources). But the phenomenon of "dynamic stabilization" has only little explanatory power, in being a structural feature of modern societies, not a causal factor by itself.

The deeper reason for "dynamic stabilisation" lies, according to Rosa, in an orientation towards "expansion of one's share of the world" ("Weltreich-weitenvergrößerung"), which he calls "the structural program and cultural project of modernity", and supplements by some fairly general indications towards an "escalatory capitalist regime of modernity" (Rosa 2016: 79). This seems to imply that this "program" or "project" is a more or less explicit ideology. Rosa traces the development of this ideology back into the 18th/19th centuries. But possibly, many relevant developments in this context reach back far more than this and are not exceptionally modern, but only have intensified in modernity.

An evolutionary-anthropological perspective may afford a deeper explanation for disturbed conditions of resonance, because its roots may reach back far deeper into human history than the shift to a societal system with the constant need of dynamic stabilisation. Namely, status competition – being induced by in-group selection pressures (not necessarily consciously) and amplified through the transition to agricultural and industrial societies – may have been pivotal for the increasing orientation towards expanding one's "world share" and fuelling the need for "dynamic stabilisation". From this perspective, the problematic conditions for resonance in modernity do not seem so much to have been brought about through a "catastrophe", but rather through a long and gradual, though maybe accelerating, process of cultural evolution.

While much is still open to further scrutiny and exploration, it is hoped the considerations presented here have effectively demonstrated the potential of a "mutual enlightenment" (Gallagher 2012: 314) between the objective and the subjective perspective within a critical theory which is both phenomenologically and anthropologically grounded. The resulting integrative approach may afford a sufficiently universal vantage point (empirically grounded in research on human natural and cultural evolution) from which to describe modern societies with the necessary critical distance, while also including the lifewordly first-person experience of subjects in these societies into the conceptualisation of the "good life". As I hope to have shown, the potential gain for critical theory both in depth and in reach is ample justification to explore this approach further.

# Acknowledgements

I thank the participants of the workshop "Resonance: The Concept's Political Uses and Potentials" (Université catholique de Louvain, September 12-13, 2023) and the South African Society for Critical Theory 5th Annual Conference "Critical Theory and Nature in the 21st Century" (University of the Free State, Bloemfontein, November 16-18, 2023) as well as Maria Balaet, Alaina Marangos and two anonymous reviewers for helpful comments on earlier drafts of this paper.

#### References

- BARRETT D. 2010. Supernormal stimuli. How primal urges overran their evolutionary purpose. New York and London: Norton.
- Buss DM. 2000. The evolution of happiness. *American Psychologist* 55(1): 15–23. https://doi.org/10.1037/0003-066X.55.1.15
- Chudek M, Muthukrishna M and Henrich J. 2016. Cultural evolution. In: D Buss (ed). *The handbook of evolutionary psychology*. London: Wiley. https://doi.org/10.1002/9781119125563.evpsych230
- DORNISCH S. 2022. The evolution of well-being: an anthropology-based, multidisciplinary review. *Humans* 2(4): 161–176. https://doi.org/10.3390/humans2040011
- DUNBAR R. 1992. Neocortex size as a constraint on group size in primates. Journal of Human Evolution 22(6): 469-493. https://doi.org/10.1016/0047-2484(92)90081-J
- EATON SB, KONNER M AND SHOSTAK M. 1988. Stone agers in the fast lane: chronic degenerative diseases in evolutionary perspective. *American Journal of Medicine* 84(4): 739–749. https://doi.org/10.1016/0002-9343(88)90113-1
- FRANK RH. 1999. Luxury Fever. Why money fails to satisfy in an era of excess. New York: Free Press.
- FRANK RH. 2011. The Darwin economy: liberty, competition, and the common good. Princeton NJ: Princeton UP.
- FREDRICKSON BL. 2008. Promoting positive affect. In: Michael Eid and Randy J. Larsen (eds). The science of subjective well-being. New York, London: Guildford Press.
- FREDRICKSON BL. 2013. Positive emotions broaden and build. Advances on Experimental Social Psychology 47: 1–53.
- GALLAGHER S. 2012. Taking stock of phenomenology futures. *The Southern Journal of Philosophy*50(2):304–318.https://doi.org/10.1111/j.2041-6962.2012.00108.x
- Grinde B. 2012. *The biology of happiness*. Dordrecht: Springer. https://doi.org/10.1007/978-94-007-4393-9

- GROS A. 2019. Towards a phenomenological critical theory: Hartmut Rosa's sociology of the relationship to the world. Foz, São Mateus 2(1): 8-46.
- HARE B AND WOODS V. 2020. Survival of the friendliest. Understanding our origins and rediscovering our common humanity. New York: Random House.
- HAYBRON DM. 2008. The pursuit of unhappiness. The elusive psychology of well-being. Oxford: Oxford UP. https://doi.org/10.1093/oso/9780199545 988.001.0001
- HAYBRON DM. 2011. Happiness. In: Edward N. Zalta (ed). Stanford encyclopedia of philosophy. Summer 2020 edition. Metaphysics Research Lab, Stanford University. Available at: https://plato.stanford.edu/entries/happiness/[accessed on 24 August 2024].
- HENRICH J. 2016. The secret of our success. How culture is driving human evolution, domesticating our species, and making us smarter. Princeton, Oxford: Princeton University Press. https://doi.org/10.1515/9781400873296
- HENRICH J. 2020. The WEIRDest people in the world. How the west became psychologically peculiar and particularly prosperous. New York: Farrar, Straus and Giroux.
- HILLSE, DELPRIORE DJ AND MAJOR B. 2013. An evolutionary psychological perspective on happiness. In: SA David, I Boniwell and AC Ayers (eds). *Oxford handbook of happiness*. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199557257.013.0065
- KENRICK D AND LUNDBERG-KENRICK D. 2022. Solving modern problems with a stone-age brain. Human evolution and the seven fundamental motives. Washington DC: American Psychological Association. https://doi.org/10.1037/0000286-000
- Kováč L. 2012. The biology of happiness. Chasing pleasure and human destiny. *EMBO* reports: 297–302. https://doi.org/10.1038/embor.2012.26
- MILLSTEIN RL. 2017. Evolution. In: Edward NZ (ed). The Stanford encyclopedia of philosophy. Spring 2022 edition. Metaphysics Research Lab, Stanford University. Available at: https://plato.stanford.edu/entries/evolution/[accessed on 23 August 2024].
- Nesse RM. 2004. Natural selection and the elusiveness of happiness. In: *Philosophical Transactions of the Royal Society of London, Series B* 359: 1333-1347. https://doi.org/10.1098/rstb.2004.1511
- RICHERSON P, BALDINI R, BELL AV, DEMPS K, FROST K, HILLIS V, MATHEW S, NEWTON EK, NAAR N, NEWSON L, ROSS C, SMALDINO PE, WARING TM AND ZEFFERMAN M. 2016. Cultural group selection plays an essential role in explaining human cooperation: a sketch of the evidence. *Behavioral and Brain Sciences* 39: 1–19. https://doi.org/10.1017/S0140525X1400106X

- Rosa H. 2005. Beschleunigung. Die Veränderung der Zeitstrukturen in der Moderne. Frankfurt am Main: Suhrkamp [English edition 2013].
- Rosa H. 2016. *Resonanz. Eine Soziologie der Weltbeziehung*. Frankfurt am Main: Suhrkamp [English edition 2019].
- Rosa H. 2017. Für eine affirmative Revolution. Eine Antwort auf meine Kritikerinnen. In: CH Peters and P Schulz (eds). *Resonanzen und Dissonanzen. Hartmut Rosas kritische Theorie in der Diskussion*. Berlin: transcript. https://doi.org/10.1515/9783839435656-020
- Rosa H. 2019. Zur Kritik und Weiterentwicklung des Resonanzkonzepts. In: J-P Wils (ed). Resonanz. Im interdisziplinären Gespräch mit Hartmut Rosa. Baden-Baden: Nomos. https://doi.org/10.5771/9783845288734-189
- Rosa H. 2020. *Unverfügbarkeit*. Frankfurt am Main: Suhrkamp [English edition 2020].
- Von Hippel W. 2018. The social leap. The new evolutionary science of who we are, where we come from, and what makes us happy. Melbourne: Harper Collins.
- WILKINS JF AND GODFREY-SMITH P. 2009. Adaptationism and the adaptive landscape. *Biology and Philosophy* 24: 199–214. https://doi.org/10.1007/s10539-008-9147-5