



Psychology as a historical science? Theoretical assumptions, methodological considerations, and potential pitfalls

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Abstract

The current condition of (Western) academic psychology can be criticized for various reasons. In the past years, many debates have been centered around the so-called “replication crisis” and the “WEIRD people problem”. However, one aspect which has received relatively little attention is the fact that psychological research is typically limited to currently living individuals, while the psychology of the past remains unexplored. We find that more research in the field of historical psychology is required to capture both the similarities and differences between psychological mechanisms both then and now. We begin by outlining the potential benefits of understanding psychology also as a historical science and explore these benefits using the example of stress. Finally, we consider methodological, ideological, and practical pitfalls, which could endanger the attempt to direct more attention toward cross-temporal variation. Nevertheless, we suggest that historical psychology would contribute to making academic psychology a truly universal endeavor that explores the psychology of all humans.

Keywords Historical psychology · History of psychology · Replication crisis · Methodological pluralism

In the past years, the current state of (Western) academic psychology has been criticized for various reasons. For instance, the observation that the results of many psychological studies could not be replicated, which lead to the so-called “replication crisis”, has stirred up heated debates about ways of ensuring the quality and reliability of psychological research (Open Science Collaboration, 2015). While most efforts were directed at improving the existing quantitative-experimental methods (e.g., by asking authors to outline the grounds on which they chose a certain sample size or to report effect sizes and Bayes factors), it has also been advised that psychology should move towards more openness and transparency (e.g., by encouraging preregistrations and by sharing analysis plans as well as data and materials; Nosek et al., 2015) and that psychological academia should rethink its incentive structure (Lilienfeld, 2017). On an even more fundamental level, it has been claimed that psychology should take the replication crisis as grounds to move towards

methodological pluralism (Hutmacher & Mayrhofer, 2021; Mayrhofer & Hutmacher, 2020) and that more space should be given to a social science perspective on psychological issues (Teo, 2017).

Apart from the aspects stated above and somewhat independently of the replication crisis, it has also been established that the vast majority of psychological data originates from people who live in Western, educated, industrialized, rich, and democratic countries (so-called “WEIRD countries”; Apicella et al., 2020; Henrich et al., 2010). As most people live in non-WEIRD societies, however, and as many psychological mechanisms that were once deemed to be universal have turned out to be shaped by culture, the peculiarity of psychological samples may severely impair the generalizability and interpretability of the obtained findings. In other words, the typical participants in psychological studies are in fact very atypical cases from a global point of view: Building psychological theories almost exclusively on WEIRD-samples can therefore be considered highly problematic. The WEIRD people problem becomes an even bigger issue when considering that psychological samples are not only limited because they merely cover a *small fraction* of the people currently living on this planet, but that they are limited even more so because they *only* cover people currently living on this planet.

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Solely focusing on contemporary cultures and societies leads to neglecting cross-temporal variation (Muthukrishna et al., 2021; see also Hutmacher & Mayrhofer, 2021): It leads to neglecting the fact that past cultures and past societies may have had ways of thinking, feeling, and behaving which fundamentally differ from the ways we are familiar with today. This can be taken as an indication that academic psychology should at least also consider itself as a historical science: In order to become truly universal in the sense that it explores the psychology of all humans, academic psychology should not only be more interested in cultural, but also in historical heterogeneity. The potential advantages of such an approach are outlined in the first section (“Psychology as a Historical Science?”) and illustrated using the example of stress in the second section (“The Example of Stress”). Based on these elaborations, it becomes possible to discuss potential theoretical and methodological obstacles that should be kept in mind when trying to establish a historical approach to psychological phenomena (“Potential Obstacles and Pitfalls”).

Psychology as a Historical Science?

Although the claim that psychology could and should also be understood as a historical science has been brought forward with new emphasis in recent publications (Hutmacher & Mayrhofer, 2021; Muthukrishna et al., 2021), the basic idea has already been described in various publications over the last decades (e.g., Danziger, 2003; Gergen, 1973; van den Berg, 1961). This raises two important questions: First, what has made the idea of a historical psychology appealing to different thinkers and scientists throughout the decades – and second, why has the attempt to create space for such a subdiscipline within mainstream academic psychology failed so far? We will begin by answering the first question based on theoretical considerations and a practical example before getting back to the second question in the section on “Potential Obstacles and Pitfalls”.

From our perspective, there are at least four reasons indicative of why the development of a greater understanding of historical psychology is highly desirable. As Muthukrishna et al. (2021) have put it, understanding the psychology of the past “is crucial to understanding the psychology of the present and its many cross-cultural differences” (p. 721). This claim contains two interrelated ideas of which the first is that understanding the psychology of the past enables us to understand the genesis of the psychological reality of the present: It enables us to understand how we have become the societies and the human beings that we are today, that is, to understand how certain ways of thinking, feeling, and behaving have changed and developed over the course of time. The second idea connected to the fact that understanding the

psychology of the past is essential to understanding present psychology and its cross-cultural differences is that comprehending the psychology of the past contributes to deepening our understanding of the present. For example, if we want to unravel why people in present-day societies experience specific psychological and mental states or why the states observed in one society differ from the states observed in another society, including historical trajectories may at least provide part of the explanation.

Third, the results from historical-psychological research can help sketching the space of psychological possibilities: As members of a particular society and as members of a globalized world, we are accustomed to the way this world and our societies work – and we are accustomed to the way people around us think, feel, and behave. The psychological and mental states we are familiar with may seem completely natural to us. However, in many cases they are not. In other words, exploring the psychology of the past can broaden our horizon regarding the kinds of psychological and mental states that are possible within the human species (Hutmacher & Mayrhofer, 2021). Fourth, being able to sketch such a space of psychological possibilities may ultimately strengthen human agency: If there is indeed cross-temporal variation within psychological mechanisms, this insight can help us to realize that the present state of things is neither unavoidable nor unchangeable. Understanding that certain psychological and mental states are time-bound allows us to take a step back and to reflect upon the design of our societies.

In order to avoid misunderstandings, two points need to be emphasized. On the one hand, the claim that the psychology of the past may differ fundamentally from the psychology of the present and that cross-temporal variation exists, should not be taken as a plea for relativism. Similar to cross-cultural investigations, cross-temporal investigations should not be preoccupied with the conception that certain psychological mechanisms are essentially always the same, nor with the idea that they are always fundamentally different (for a brief overview of the different points of view in the relativism-universalism debate, see, e.g., Berry et al., 2011). Rather, investigating which aspects of human cognition and behavior are universal and which are not is one of the key tasks of historical psychology. That is, “historical psychology involves no prior commitment to either continuity or rupture” (Pettit & Davidson, 2014, p. 713). On the other hand, cross-temporal variation can be the result of different mechanisms, in particular biological evolution and cultural evolution (e.g., Boyd, 2018). Apart from minor exceptions, however, biological evolution is too slow to explain cross-temporal variation between the societies of which we have secure knowledge. Put differently, research in historical psychology will most likely focus on processes of cultural evolution rather than processes of biological evolution.

In short, we believe that directing more attention toward cross-temporal variation could help to make psychology a truly universal endeavor in the sense that it takes into account the psyche of all human beings—and not only of those who are currently living on this planet. However, research in historical psychology will not only help us to deepen our understanding of the past, but also our understanding of the present. And by presenting us with the richness and diversity of human thinking and behavior across different times and societies, it may also stimulate reflection and help to guide future developments.

The Example of Stress

How can these general ideas be put into action? We will try to answer this question using the example of stress (for details, see the line of reasoning elaborated in Hutmacher, 2019, 2020, 2021). Although “stress” is a widely used concept both inside and outside the academic discourse, it is also a concept that “causes psychologists headaches” (Martin et al., 2013, p. 682), as there are many different definitions and theories. Even experts find it hard to pin down what exactly stress is. As Hutmacher (2021) has demonstrated by looking at the definitions provided by various psychology textbooks, however, all of these definitions seem to share three common features.¹ First, stress seems to capture the notion that things are getting too much and out of balance. That is, people feel stressed when they feel that their resources may be insufficient for dealing with the current challenges and demands. Second, the reaction to a stressor is commonly understood as an inseparable combination of physiological and psychological factors – as a pattern that consists of endocrinological, physiological, emotional, cognitive, and behavioral responses to a perceived threat. As stress leads to specific thoughts and actions, it is not merely a physiological state – and as it based on bodily reactions initiated and regulated by the hypothalamic-pituitary-adrenocortical axis (HPA axis; e.g., Charmandari et al., 2005), it is more than a purely psychological phenomenon. Third, stress is assumed to be a universal mechanism which can be found across times and cultures. In simplified terms, cave-men experienced stress when facing a saber-toothed tiger, medieval peasants experienced stress after a crop failure, and we experience stress today when the deadline for submitting a project proposal is getting closer.

¹ As Hutmacher (2021) argues, that is not to say that psychology textbooks capture the “truth” about stress. Nevertheless, the definitions provided by these textbooks can be assumed to provide a condensed summary of the way stress is typically understood within the contemporary scientific discourse.

This is the point where a historical psychologist could begin asking critical questions: Is stress really a universal mechanism? The answer seems clear: yes and no.

Yes, because the physiological and endocrinological mechanisms underlying the stress response are the same across times and cultures; and no, because the social practices in which these physiological and endocrinological mechanisms are embedded, have changed over time: Being stressed out has become, but has not always been, a way to be a person. (Hutmacher, 2021, p. 5)

What does this distinction imply? On the one hand, it means that the functioning of the HPA axis is not a modern development. In brief, the physiological and endocrinological aspects of the stress response are the result of biological evolution. For instance, this is also the reason why it is possible to measure the cortisol levels of long-deceased individuals such as the so-called “Iceman” Ötzi from South Tyrol (Capasso, 1994), people who lived in Roman and early medieval France (Quade et al., 2021) or in South America between 500 and 1.500 years ago (Webb et al., 2010), in order to gain new insights into the living conditions around the time of their death. On the other hand, it means that societies as well as the overall environment back then differ fundamentally from societies and the overall environment today. This difference can be captured by the claim that being stressed has become, but has not always been “a way to be a person, to experience oneself, to live in society” (Hacking, 2007, p. 299), which means that a “stressed subject is different from one without such a qualifier: she or he can be treated or behave differently” (Bicknell & Liefoghe, 2006, p. 381). In our present-day (Western) societies, referring to the concept of stress structures our daily lives:

People use a stressful day at work as an excuse not to tell their children their bedtime story or as an explanation why they are always fighting with their partner. They participate in stress management seminars in order to learn relaxation techniques and coping strategies, ask their doctors to put them on sick leave, and talk to their psychotherapists. Stress is also used to state the discomfort with current societal and economic developments. (Hutmacher, 2019, p. 181)

The Iceman from South Tyrol and the individuals living in Roman or early medieval France or in pre-colonial South America could not behave in this way and they could not experience themselves in that way. They could not use a stressful day at work as an excuse not to tell his children their bedtime story or as an explanation why they are always fighting with their partner. They could not participate in stress management seminars, they could not ask their doctor to put them on sick leave, and they did not have a

psychotherapist to talk to. Importantly, these psychological and behavioral patterns are not a negligible by-product of being stressed. On the contrary, they are inextricably linked to the way stress is commonly understood. In humans, stress is not merely a biological state based on hardwired mechanisms: It “keeps consultants busy, researchers productive, exercise instructors jumping, and ordinary citizens experimenting with an increasingly complex array of diets, lifestyles and technological stress-reducing gadgets” (Kugelmann, 1992, p. 21). In other words, stress is inconceivable without the cultural and social practices that we use to relate to our body’s reactions.

If this is the case, that is, if stress is – at least in a certain sense – deeply bound to our modern societies, what does this tell us about these societies? What can we learn from the fact that before the Second World War “no one spoke of stress [while] after it, increasingly, everyone did” (Kugelmann, 1992, p. 54)? At first glance, it seems plausible to argue that stress allows (post-)modern individuals to express their concerns and worries with respect to the societies they live in. It allows them to complain about the acceleration (Rosa, 2010) as well as the flexibilization (Sennett, 2006) of (post-)modern life. At second glance, however, it turns out that stress is not only linked to complaints about the negative aspects of our present-day societies, but also used to reinforce these problematic structures, making it a janus-faced concept that is deeply connected to the constituents of modern identity (for a detailed analysis, see Hutmacher, 2019, 2020).

To give but one illustrative example, members of (post-)modern societies are less bound to following the paths of their ancestors or the rules given by certain traditions than members of previous societies. However, having the possibility to exhaust more of the options offered by the world and to live up to one’s full potential is easily transformed into the norm that one should exhaust as many options as possible and that one should constantly develop and improve oneself. Trying to fulfill this norm can result in being permanently stressed. Simply put, infinite freedom can result in infinite stress. This may lead individuals to conclude that the demands imposed by society are too high. At the same time and quite paradoxically, however, being stressed can also be regarded as a sign of success, as “an individual and collective indication of political and cultural endeavour, a testimony to the modern aptitude for working productively under pressure, and a barometer of technological and social progress” (Jackson, 2013, p. 267). Thinking along those lines, stressed individuals are the individuals who make the best out of their opportunities and manage to live up to the norm, while a life without stress appears to be a limited and boring life.

In summary, these considerations about the concept of stress and its meaning for past and present societies illustrate the possible advantages of a historical psychology sketched

above. As we have argued, such an approach may enable us to differentiate between those aspects of human thinking and behavior that are the result of biological evolution (e.g., the HPA axis) and those that come from cultural evolution (e.g., the social practices and individual coping strategies in response to stress). This also enables us to capture and differentiate the dimensions of psychological mechanisms that remain the same across times and cultures and those that do not. Moreover, understanding that psychological concepts such as stress are deeply intertwined with the way our present-day societies work as well as with the constituents of (post-)modern identity, potentially deepens our understanding of the present. In addition to the brief overview provided in the previous paragraphs, one could ask how stress has become a way to be a person, and which developments have driven the genesis of the stress concept (for a history of stress, see Jackson, 2013; Kugelmann, 1992).

As we have already established, being stressed was not a way to be a person human beings in pre-modern times. Investigating how these human beings (and the past societies that they were part of) dealt with hardships, difficulties, and potentially overwhelming situations would be an important next step in order to outline the full spectrum of psychological possibilities in the case of “stressful” events. Even without having completed this next step, however, realizing that stress is – at least partially – a socially constructed concept can “enable us to take a step back and to develop a more reflective point of view towards the notion that ours is an age of stress” (Hutmacher, 2019, p. 191). Ultimately, such a reflective point of view can strengthen human agency: It can help us to think about alternatives to the structure of our present-day societies.

Potential Obstacles and Pitfalls

This positive overall evaluation of the potential benefits of a historical approach to psychology – as illustrated by the example of stress – brings us back to the second question mentioned above: Why has the attempt to create space for a subdiscipline of historical psychology within mainstream academic psychology failed so far? To phrase in a slightly more optimistic way: What are potential obstacles and pitfalls that researchers need to keep in mind when engaging in the endeavor of historical psychology? From our perspective, three aspects are of particular importance: the debate about the set of methods that historical psychology could and should use, the related question as to what kind of science historical psychology is, and the potential difficulties associated with finding a place for historical psychology within the contemporary academic discourse. Let us consider these three aspects in more detail.

First, what are the methods and the kinds of data that researchers working on projects in historical psychology could and should use? It goes without saying that we cannot “experimentally manipulate or directly observe historical participants” (Muthukrishna et al., 2021, p. 720). However, we have access to a wide range of historical data, ranging from archeological artifacts to written texts that are sometimes even available in extensive databases (for an in-depth discussion of the difficulties associated with creating such databases, see Slingerland et al., 2020). While our elaboration of the example of stress also referred to empirical data at some points, most of our analysis was narrative and hermeneutic in nature. In contrast, Muthukrishna et al. (2021) have argued that “ideally, [...] psychologists making use of historical data would like to turn these qualitative assessments into quantitative data that can then be analyzed statistically” (p. 733). We emphatically disagree with this proposed “ideal” state. It is certainly true that historical psychology can make use of quantitative data and statistical methods. However, the general idea that quantitative methods should be the norm in historical-psychological studies mirrors the preconceptions of contemporary mainstream psychology rather than being a necessity given by the subject matter (cf. Mayrhofer & Huttmacher, 2020). In different words, turning to methodological pluralism instead of unnecessarily restricting historical psychology to a limited set of quantitative and statistical methods seems to be of crucial importance. As historical processes in general and cross-temporal variation regarding psychological phenomena in particular are complex and require a multi-layered analysis to capture their essence (Margolis, 1995; Mayrhofer et al., 2021), reducing them to quantified fragments of information may lead to creating oversimplified models and explanations. Again, this does not mean that quantitative methods should not play a role within historical psychology. We merely claim that historical psychology should not – knowingly or unknowingly – repeat the mistakes of mainstream psychology, which have contributed to the replication crisis.

Second, the discussion regarding the appropriate set of methods for historical psychology immediately brings up the question what kind of science historical psychology represents or should represent. While many mainstream psychologists typically “regard their subject as a natural science” (Brock, 2016, p. 184), this categorization does not seem appropriate for historical psychology for the reasons mentioned above. However, understanding historical psychology as a discipline at the intersection of the humanities as well as the social and natural sciences (Teo, 2017) may have contributed to pushing historical psychology to the brink of academic psychology. Furthermore, the repeated call for directing more attention to historical psychology over the past decades may have fallen on deaf ears not only because the overall idea is unorthodox, but also because it is perceived

to be at odds with the functioning of the “normal science” (Kuhn, 1962) within psychology. Given this background, researchers who are willing to work on projects in the field of historical psychology should keep two points in mind. On the one hand, it would be valuable to avoid engaging in another round of the eternal debate between those who favor “a rigid positivistic conception of research with a quantitative, experimental methodology [and those who prefer] an open, explorative, descriptive, interpretive conception using qualitative methods” (Mayring, 2014, p. 6), which has been a part of psychology since its academic beginnings. To the contrary, historical psychologists could seize the opportunity to demonstrate that combining different methodological approaches and data analysis strategies can turn academic psychology into a vibrant and diverse generator of knowledge. On the other hand, realizing that historical psychology is a multi-faceted endeavor could inspire researchers to engage in an interdisciplinary discourse and to exchange ideas with neighboring disciplines and research programs such as the history of mentalities (Hutton, 1981) and the history of everyday life (Steege et al., 2008), but in particular also with cognitive archeology (Henley et al., 2019), historical anthropology (Wulf, 2013), and cultural history (Burke, 2019).

Third, one could also be skeptical regarding the idea of strengthening the role of historical psychology because an interdisciplinary endeavor within the humanities does not fit with the overall atmosphere and incentive structure of “our neoliberal times” (Pettit & Davidson, 2014, p. 709). As Martha Nussbaum (2010) has put it quite pessimistically:

The humanities and the arts are being cut away ... in virtually every country in the world. Seen by policy-makers as useless frills, at a time when nations must cut away all useless things to stay competitive in the global market, they are rapidly losing their place in the curricula. (p. 2)

This perspective has led others to conclude that “there is no reason to suppose that historical psychology will have a greater impact on psychology than it has had in the past” (Brock, 2016, p. 184). This conclusion is of course a prime example of the power of using history to understand the present and to extrapolate past developments in order to predict the future. However, looking at the past also allows us to see that the current situation is not inevitable and that change is possible. Regardless of whether the prediction that the impact of historical psychology will be negligible will ultimately turn out to be true or not, it is certainly not helpful for the future of historical psychology. It is not helpful, because it may turn out to be a self-fulfilling prophecy: If even those researchers who sympathize with the endeavor of historical psychology and who think that historical psychology should be considered, explored, and pursued are skeptical about its future prospects, this may lead young and interested

scientists to refrain from conducting research in historical psychology. However, if no one engages in historical psychology, historical psychology will definitely remain an outsider within mainstream psychology. In addition, even if one accepts that neoliberal thinking has a firm hold on universities, one should not forget that even in an environment where a certain way of thinking dominates, there are niches in which historical psychology can find its place. It is not to be expected or necessary, of course, that historical psychology will become the new dominant paradigm within academic psychology. Importantly and based on what we outlined above, such dominance should not be a goal at any rate: Strengthening historical psychology is not equivalent to proclaiming a scientific revolution that wipes away other subdisciplines. If anything, historical psychology can thrive as an integrative approach, which is open to considering insights from various fields and traditions. Finally, researchers should take the argument seriously that historical psychology is a “useless frill”. Simply put, it will not suffice to claim that all those who cannot see the benefits of a historical approach to psychological phenomena are ignorant and shortsighted. It will be the task of historical psychologists to demonstrate that the results of their investigations are not only relevant to a handful of specialists with peculiar interests, but that understanding the psyche of human beings from past times is also enlightening for our present-day societies.

Overall, these considerations can be understood as an encouragement to engage in historical psychology and to fill at least some of the many knowledge gaps that we still have regarding the psychology of the past. In order to increase the chance of being accepted as valuable members of psychological academia, historical psychologists should embrace methodological pluralism, avoid being dragged into the old ideological conflicts within psychology, and try to develop an own unique voice worth hearing. With about 150 years of institutional history (Baker, 2012), psychology is a relatively young discipline that can – at least in a certain sense – still be considered being in a phase of formation and differentiation. In any case, academic psychology has repeatedly proven its ability to incorporate new developments and approaches (e.g., neuroscience or research on digital media) into the canon of the discipline. Hence, there seems to be no a priori reason to assume that the same could not happen for historical psychology.

Conclusion

Contemporary academic (Western) psychology is – by and large – limited to investigating the psychology of the present, that is, to investigating currently living individuals, while the psychology of the past remains unexplored. As this may blind us to various forms of cross-temporal variation (but also to forms of cross-temporal stability), more research in historical psychology is essential if academic psychology strives to

become a truly universal endeavor that explores the psychology of all humans. In essence, historical psychology tries to understand processes of biological and cultural evolution as well as the similarities and differences between psychological mechanisms at different points in the history of humankind. Ultimately, historical psychology would not only enrich our knowledge about the past, but could also offer new perspectives on the psychology of the present and stimulate reflections on the psychological reality of our (post-)modern societies.

Since several authors have brought forward the idea that historical psychology could be an important add-on to academic psychology over the past decades without achieving any substantial change, new initiatives in this direction need to avoid the mistakes of the past. In particular, we have argued that historical psychology should neither understand itself as a revolutionary discipline that tries to overcome and replace the psychological mainstream, nor merely copy the quantitative methods that contemporary psychological research is most familiar with. In addition, cooperation with researchers from other disciplines examining phenomena within an historical context as well as the ability to explain the intrinsic value of projects in historical psychology to a broader audience are both important preconditions for strengthening the role of historical psychology in academic discourse. As a result of the so-called replication crisis and the increased awareness for the WEIRD people problem, the current state of academic psychology has been heavily criticized. So perhaps the time is right for another step in the evolution of our discipline – this step being the direction of more attention to the historicity of psychological phenomena.

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References

- Apicella, C., Norenzayan, A., & Henrich, J. (2020). Beyond WEIRD: A review of the last decade and a look ahead to the global laboratory of the future. *Evolution and Human Behavior*, 41(5), 319–329. <https://doi.org/10.1016/j.evolhumbehav.2020.07.015>
- Baker, D. B. (2012). *The Oxford handbook of the history of psychology: Global perspectives*. Oxford University Press.
- Berry, J. W., Poortinga, Y. H., Breugelmans, S. M., Chasiotis, A., & Sam, D. L. (2011). *Cross-cultural psychology: Research and applications* (3rd ed.). Cambridge University Press.
- Bicknell, M., & Liefoghe, A. (2006). The art of stress. *Journal of Occupational and Organizational Psychology*, 79(3), 377–394. <https://doi.org/10.1348/096317906X105706>
- Boyd, R. (2018). *A different kind of animal: How culture transformed our species*. Princeton University Press.
- Brook, A. C. (2016). The future of the history of psychology revisited. *History of Psychology*, 19(3), 175–191. <https://doi.org/10.1037/hop0000037>
- Burke, P. (2019). *What is cultural history?* (3rd ed.). Polity Press.
- Capasso, L. (1994). Ungual morphology and pathology of the human mummy found in the Val Senales (eastern Alps, Tyrol, bronze age). *Munibe Antropologia-Arkeologia*, 46, 123–132.
- Charmandari, E., Tsigos, C., & Chrousos, G. (2005). Endocrinology of the stress response. *Annual Review of Physiology*, 67, 259–284. <https://doi.org/10.1146/annurev.physiol.67.040403.120816>
- Danziger, K. (2003). Prospects of a historical psychology. *History and Philosophy of Psychology Bulletin*, 15(2), 4–10.
- Gergen, K. J. (1973). Social psychology as history. *Journal of Personality and Social Psychology*, 26(2), 309–320. <https://doi.org/10.1037/h0034436>
- Hacking, I. (2007). Kinds of people: Moving targets. *Proceedings of the British Academy*, 151, 285–318. <https://doi.org/10.5871/bacad/9780197264249.003.0010>
- Henley, T. B., Rossano, M. J., & Kardas, E. P. (Eds.). (2019). *Handbook of cognitive archeology: Psychology in prehistory*. Routledge. <https://doi.org/10.4324/9780429488818>
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2–3), 61–83. <https://doi.org/10.1017/S0140525X0999152X>
- Hutmacher, F. (2019). On the Janus-facedness of stress and modern life. *Journal of Theoretical and Philosophical Psychology*, 39(3), 181–192. <https://doi.org/10.1037/teo0000113>
- Hutmacher, F. (2020). Vom postmodernen Menschen und seiner schwierigen Suche nach dem guten Leben und dem guten Tod [The postmodern human and the difficult quest for a good life and a good death]. *Zeitschrift für Praktische Philosophie*, 7(2), 15–34. <https://doi.org/10.22613/zfpp/7.2.1>
- Hutmacher, F. (2021). Putting stress in historical context: Why it is important that being stressed out was not a way to be a person 2,000 years ago. *Frontiers in Psychology*, 12, Article 539799. <https://doi.org/10.3389/fpsyg.2021.539799>
- Hutmacher, F., & Mayrhofer, R. (2021). Die Psychologie der Jetzt-Zeit. Eine kritische Bestandsaufnahme methodischer Monokultur in der akademischen Psychologie [The psychology of the present: A critical look at the methodological monoculture in academic psychology]. *psychosozial*, 44(3), 99–108. <https://doi.org/10.30820/0171-3434-2021-3-99>
- Hutton, P. H. (1981). The history of mentalities: The new map of cultural history. *History and Theory*, 20(3), 237–259. <https://doi.org/10.2307/2504556>
- Jackson, M. (2013). *The age of stress: Science and the search for stability*. Oxford University Press.
- Kugelmann, R. (1992). *Stress: The nature and history of engineered grief*. Praeger.
- Kuhn, T. (1962). *The structure of scientific revolutions*. University of Chicago Press.
- Lilienfeld, S. O. (2017). Psychology's replication crisis and the grant culture: Righting the ship. *Perspectives on Psychological Science*, 12(4), 660–664. <https://doi.org/10.1177/17456916166687745>
- Margolis, J. (1995). *Historied thought, constructed world. A conceptual primer for the turn of the millennium*. University of California Press.
- Martin, G. N., Carlson, N. R., & Buskist, W. (2013). *Psychology* (5th ed.). Pearson.
- Mayrhofer, R., & Hutmacher, F. (2020). The principle of inversion: Why the quantitative-empirical paradigm cannot serve as a unifying basis for psychology as an academic discipline. *Frontiers in Psychology*, 11, Article 596425. <https://doi.org/10.3389/fpsyg.2020.596425>
- Mayrhofer, R., Kuhbandner, C., & Lindner, C. (2021). The practice of experimental psychology: An inevitably postmodern endeavor. *Frontiers in Psychology*, 11, Article 612805. <https://doi.org/10.3389/fpsyg.2020.612805>
- Mayring, P. (2014). Qualitative content analysis: Theoretical foundation, basic procedures and software solution. Klagenfurt. URN: <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395173>
- Muthukrishna, M., Henrich, J., & Slingerland, E. (2021). Psychology as a historical science. *Annual Review of Psychology*, 72, 717–749. <https://doi.org/10.1146/annurev-psych-082820-111436>
- Nosek, B. A., Alter, G., Banks, G. C., Borsboom, D., Bowman, S. D., Breckler, S. J., ... Yarkoni, T. (2015). Promoting an open research culture. *Science*, 348(6242), 1422–1425. <https://doi.org/10.1126/science.aab2374>
- Nussbaum, M. C. (2010). *Not for profit: Why democracy needs the humanities*. Princeton University Press.
- Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. *Science*, 349(6251). <https://doi.org/10.1126/science.aac4716>
- Pettit, M., & Davidson, I. (2014). Can the history of psychology have an impact? *Theory & Psychology*, 24(5), 709–716. <https://doi.org/10.1177/0959354314534005>
- Quade, L., Chazot, P. L., & Gowland, R. (2021). Desperately seeking stress: A pilot study of cortisol in archaeological tooth structures. *American Journal of Physical Anthropology*, 174(3), 532–541. <https://doi.org/10.1002/ajpa.24157>
- Rosa, H. (2010). *Alienation and acceleration. Towards a critical theory of late-modern temporality*. NSU Press.
- Sennett, R. (2006). *The culture of the new capitalism*. Yale University Press.
- Slingerland, E., Atkinson, Q. D., Ember, C. R., Sheehan, O., Muthukrishna, M., Bulbulia, J., & Gray, R. D. (2020). Coding culture: Challenges and recommendations for comparative cultural databases. *Evolutionary Human Sciences*, 2, Article e29. <https://doi.org/10.1017/ehs.2020.30>
- Steege, P., Bergerson, A. S., Healy, M., & Swett, P. E. (2008). The history of everyday life: A second chapter. *The Journal of Modern History*, 80(2), 358–378. <https://doi.org/10.1086/588855>
- Teo, T. (2017). From psychological science to the psychological humanities: Building a general theory of subjectivity. *Review of General Psychology*, 21(4), 281–291. <https://doi.org/10.1037/gpr0000132>
- van den Berg, J. H. (1961). *The changing nature of man: Introduction to a historical psychology*. Norton.

Webb, E., Thomson, S., Nelson, A., White, C., Koren, G., Rieder, M., & van Uum, S. (2010). Assessing individual systemic stress through cortisol analysis of archaeological hair. *Journal of Archaeological Science*, 37(4), 807–812. <https://doi.org/10.1016/j.jas.2009.11.010>

Wulf, C. (2013). *Anthropology: A continental perspective*. University of Chicago Press.

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