Introduction
Concepts and Practices of Comparison in Modern History

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The Importance and Impertinence of Comparison

This is the 'age of comparison'. Friedrich Nietzsche's remark is even more valid today than at the time when he jotted it down in his collection *Human, All Too Human* (1878).[1] Comparisons are ubiquitous in our daily experience. All over the globe, consumers make use of web portals to compare the quality of goods, services or tourist destinations. University administrations have developed sophisticated strategies to secure a good place for their own institution in the annually published league tables. The same is true for hospital trusts or city councils. And even governments and national publics are not indifferent to the practice of grading nation states by means of indices that claim to measure human development, the reading capabilities of pupils, degrees of corruption, or compliance with human rights declarations. Such comparisons are neither neutral nor harmless. Comparisons affect the ways in which individuals, organizations or nation states behave and relate to others. Comparisons are driven by strong emotions and in turn are a stimulus to fresh emotions such as envy, pride or shame. They are embedded in competitions and elicit new competitive games. They may provoke shifts in the priority of values and change the outlook of institutions. In short, comparisons have powerful effects and – sometimes perverse – side-effects.

Moulding a habit of competitive comparisons among individuals and companies may become a technique of governance. The most extreme case is present-day China, where a state-run Social Credit System is being implemented by which businesses and private citizens will be rated and receive scores not just for their creditworthiness, as if from a credit rating agency, but for the degree to which they meet certain behavioural standards defined by the Chinese government. Open exposure and punishment of wrongdoers, public praise and material rewards for those who receive the best scores are part of the programme. Pilot schemes in several Chinese cities have already been put in place. These schemes rely on citizens and businesses voluntarily supplying their data on a range of activities in the hope of reaping benefits or avoiding disadvantages such as being shut out from fast-train journeys.[2] Using carrots and sticks, the Chinese policy is similar to that used by health insurance companies in Western countries that want to induce their customers to lead a healthy lifestyle. However, the Chinese government's policy is much more comprehensive and radical in publicly communicating score tables that will enable China's citizens and businesses to compare themselves with others and outperform them in the future. At present, it seems that there is hardly any public criticism in China of the government's claim to set the standards according to which people's behaviour is evaluated. Nor is there any open debate on the need or justification for such a system of state-controlled governance by comparison. Most concerns limit themselves to the technical issues of how to guarantee a correct collection of the data and prevent their misuse by corrupt agencies or hackers.[3] It may well be that the mere public announcement of China's Social Credit System by an openly accessible state document in 2014 had already begun to direct the citizens' behaviour towards the goals desired by the government.[4]

These examples provide ample proof that comparisons are an important social practice that leads to changes in behaviour and creates new routines. At the same time, comparisons can also be *impertinent* in both senses of the word. Comparisons may deceive because the units compared are not genuinely comparable or because the criteria applied are misleading. Comparisons may also be deeply disturbing because they can destroy the social fabric and cause envious emotions or unfair competitive practices among the individuals, groups or states being compared. There is a long tradition of criticizing comparisons not just as a methodology with many pitfalls in the social sciences and humanities, but also as a potentially disruptive practice in all walks of life from private social intercourse up to international relations. *Comparaison n'est pas raison* – comparison is not reason – is an ancient French pun and proverb that sums up common reservations against comparisons. The allegation is that comparisons are not disclosing but hiding the truth. *Toute comparaison est odieuse* – comparisons are odious – is another old French proverb, also used in England from the fifteenth century onwards, to articulate the thought that comparisons may be emotionally hurtful to those being compared, or indeed hurtful to reason itself because they treat units as equal or similar that should not be equated in such a way. Sir John Fortescue (c. 1395–c. 1477) felt a need to defend himself against such a reproach when he compared the laws of England with those of continental Europe in a didactic dialogue written some time before 1471 and addressed to the young Prince

Edward, son of King Henry VI, while in exile in France: 'Comparisons, indeed, Prince, as I remember you said at one time, are reputed odious, and so I am not fond of making them but you will be able to gather more effectively whether both of these laws are of equal merit, or whether one more richly deserves praise than the other, not from my opinion, but from those points wherein their judgments differ.'[5] The Chancellor who addresses the Prince with these words in Fortescue's dialogue implies that it might be sufficient to hold back one's own opinion and just let 'the facts' speak for themselves so that the interlocutor may conclude which of the two entities compared is the superior one. In Fortescue's fictitious dialogue, the impartiality claim inherent in the Chancellor's words has the desired effect on the Prince, for towards the end of the first part of the book ('In Praise of the Laws of England'), he declares himself satisfied 'that these laws are not only good but the best'.[6]

Not all readers of Fortescue's book may have been so easily convinced as the young Prince. The practice of comparing laws or institutions, nation states, civilizations or famous historical figures across time and space with the intention of ranking them in relation to their respective achievements has rarely been uncontentious. Sooner or later, those deemed inferior in such comparisons have always cast doubt on the criteria used by the comparers and have tried to replace them with other criteria more favourable to them. More fundamentally, and increasingly from the late eighteenth century onwards, comparisons in general were criticized as irrelevant and misleading. Around 1800, uniqueness became an ideal that was applied to individual persons as well as collective entities or historical periods. The English literary critic William Hazlitt (1778–1830) resumed the scepticism expressed by many early nineteenth-century romanticists and historicists against comparisons. In his essay *On Thought and Action*, published in 1821 as part of his collection *Table Talk*, Hazlitt took up the old proverb and gave it a more sweeping turn: 'Comparisons are odious, because they are impertinent, and lead only to the discovery of defects by making one thing the standard of another which has no relation to it.' As an example, Hazlitt discusses comparisons between famous figures including artists and military leaders in order to explain his view that any ranking of such figures tends to miss the unique excellence of each of them: 'The mind is not well competent to take in the full impression of more than one style of excellence or one extraordinary character at once.' Therefore, he concludes, that if asked 'which is the greatest of those who have been the greatest in different ways', his answer would be 'the one that we happen to be thinking of at the time'.[7] Judging historical figures, peoples or periods by the standards of their own self and their own times only, not by any later standard that shows them to be defective in some point: this historicist formula was an option that was often chosen by historians, literary scholars and art critics from the early nineteenth century onwards.

In structural terms, Hazlitt's argument is not very distant from that of contemporary postcolonial critics who argue that comparisons between imagined entities such as nations, societies, empires or civilizations, past or present, are always at risk of discovering nothing but defects if the conceptual world of one of the compared entities ('Europe', 'the West') is taken as the point of departure for the comparison. In nineteenth-century Europe, the risk of finding that other cultures were 'lacking' something, or were 'arrested in development', was exacerbated when evolutionary conceptions of history came to the fore. The West European travellers, philologists and imperialists whose writings are analysed in Edward Said's classic study *Orientalism* (1978) are cases in point. Ernest Renan (1823–91), one of the orientalist authors studied by Said, was particularly outspoken with regard to the fantasies of power involved in the act of comparing: 'Me, being there at the center, inhaling the perfume of everything, judging, comparing, combining, inducing – in this way I shall arrive at the very system of things.'[8] Ordering the world by comparison, this vision of Renan, a philologist and scholar of religion, lay at the heart of all the comparative sciences and humanities that began to flourish in Europe from the late eighteenth century onwards. In the context of evolutionary thought, these attempts at ordering the world always had a temporal dimension using West European standards as yardsticks for progress or backwardness. The rhetorical figure of the noncontemporaneousness of the contemporary was one way to articulate that kind of comparative thinking. It often served to relegate non-Western societies to what Dipesh Chakrabarty famously called the 'waiting room of history'.[9]

Our eclectic introductory survey has revealed a puzzling spectrum of voices on comparison as practised and conceptualized in European history and the contemporary world. The anonymous French and English proverbs; Fortescue's early defence of comparing medieval institutions; Hazlitt's romanticist rejection of all comparisons; Renan's visions of ordering the world through comparison; Nietzsche's intuition that the late nineteenth century in particular could be called an 'age of comparison'; our present-day tension between postcolonial criticism of comparison on the one hand, and the ubiquity of comparative ranking and rating practices, embracing not only individual countries or sectors but the whole globe, on the other hand – all these instances of the importance and impertinence of comparison suggest that comparisons as a social practice have a history of their own that deserves to be explored. Yet surprisingly little research has been done on the changing relationship between the comparers and the objects or persons compared, on the different motives for and social effects of comparisons, on the variable criteria and commensurability assumptions applied, and on when and why the craze for subjecting almost everything and everyone to comparative rankings or ratings started. Except for comparison as a methodological issue, there is no reasonably coherent research tradition that deals with *comparisons as practices and concepts* that have a history of their own and indeed also *make* history in a very tangible way.[10]

This volume will open up new perspectives on how to research the changing forms, motives and impacts of comparison. Comparison is treated here not as a methodological problem, but as an object of inquiry in its own right and with far-reaching historical significance. The book's main hypothesis, expressed in its title, is that comparisons have been, and still are, a major driving force that has contributed to the dynamism of modern European history and contemporary world society. The topic is explored from several disciplinary angles: history and sociology, literary studies and the history of the visual arts. The temporal scope of the volume is broad, with examples ranging from the sixteenth to the twenty-first centuries. Geographically, the book's main focus is on modern and contemporary Europe and the Americas, but the chapters on twentieth- and twenty-first-century statistics and ranking practices (Chapters 9–12) extend the view to global linkages by means of contact or mutual observation.

While the initial chapters deal with historical conceptualizations and changing theoretical frameworks of comparative practices in literature, the sciences and the visual arts (Chapters 1 and 2), the subsequent chapters are long-range overviews or case studies on comparative practices in particular fields: comparisons in social intercourse (Chapter 3), comparisons between state constitutions, forms of imperial rule and patterns of governance in welfare and work regimes (Chapters 4–8), and finally comparisons through modern statistics (Chapters 9 and 10) and contemporary rankings (Chapters 11 and 12). The fields covered are not exhaustive, but exemplary in the sense that they expose typical, reiterated forms of comparison and describe their powerful effects in the modern and contemporary world.

Investigating Comparisons in Theory and Practice

Until very recently, the only coherent line of inquiry on comparisons has been concerned with the methodological issue of how to use them, or whether to use them at all, as a tool in the humanities and social sciences. All disciplines within that broad field have carried on their own particular controversies about that problem, and it is impossible and unnecessary here to follow their course in detail.[11] However, within those debates, one can discern a handful of basic ideas that have crossed disciplinary boundaries and, taken together, circumscribe the range of possible positions on whether and how to use comparisons. Although this volume is not intended to be yet another contribution to methodology, a brief discussion of those basic positions may be necessary, not least because comparative practices outside the academic field are often, and increasingly, informed by the conversations in the various branches of the sciences and humanities.

Roughly speaking, there are those who argue against and those who defend comparisons. The most radical critics reject comparisons more or less completely because they believe that any (nontrivial) comparison inevitably commensurates the incommensurable. It does so, they claim, by the very act of establishing the categories needed to make two or more things comparable at all. The trivial example is that we need a category like 'fruit' to compare apples and oranges. A nontrivial example is that we use a category like 'religion' to compare Buddhism, Hinduism and Islam. According to the critics, this is an unsound procedure because the category 'religion', as we use it today, is a European invention of the early modern period and imposes an artificial similarity and uniformity on belief systems and ritual practices that in reality should be seen as far more apart from each other and as much more porous and multifarious.[12] A similar argument could be made for the category 'culture'/'civilization'.[13] Following on from this, even the compared entities themselves (Buddhism, Hinduism, Islam) are said to be artificially homogenized formations of rather recent origin, only created by an interplay between European powers who demanded clear boundaries in accordance with their category of 'religion', and movements for 'purity' among the non-Christian communities who found the European demands useful for their own agenda.[14] Such historicizations of a category like 'religion' and entities such as Buddhism, Hinduism or Islam would make all comparisons applied to earlier periods than the colonial age appear highly problematic. Moreover, postcolonial critics can point out that 'religion' itself is a concept of Latin-European origin and therefore imbued with the semantic baggage of that particular tradition whose experiences should not be elevated to a general touchstone for allegedly similar phenomena in other cultures.

The crucial point of this line of criticism is not the familiar one of Eurocentrism or Western conceptual imperialism. The real challenge is that any practitioner of (nontrivial) comparison is inevitably bound to construct the compared units, as well as the categories needed to make the units comparable, by drawing on the conceptual apparatus of one particular language, usually his or her own. Hence, in the eyes of the radical critics, it is the very process of category-making and unit-construction that makes cross-cultural, or even diachronic comparison within one's own culture, a dubious enterprise. Compared to that fundamental objection, the contingent fact that most analytic concepts nowadays used in the humanities and social sciences happen to be of Western origin is of secondary importance. Theoretically, the objection could also be raised against Sinocentric comparisons. It is an objection against the modus operandi of comparison as such, and the fundamental nature of the objection makes it difficult to refute.

In response, defenders of comparison have followed several – mutually supportive – lines of argument. One of them confronts head-on the implicit or explicit incommensurability claim lying at the bottom of the radical critics' rejection of comparison. Are peoples, societies or other collective entities as well as their languages, institutions or belief systems really so quintessentially different that no common ground whatsoever can be found that would allow meaningful comparisons? And is not absolute incommensurability among human beings a much more unlikely assumption than similarity in at least some, if only elementary, respects? If the question is reformulated in that way we are getting closer to a position that postulates anthropological universals or at least stable features over a very *longue durée* and extended space. Many defenders of comparison admit that such a position is no definitive solution to the problems of category-making and unit-construction. The more flexible defenders of comparison therefore propose that historical events or different societies, although apparently similar on a phenomenal level, should indeed be studied as unique cases first. Small-number comparisons of such case studies should then only enter the stage as a kind of second-order inquiry on a theoretical level, designed to test hypotheses about the possible workings of causal mechanisms or structural effects.[15]

Comparing individual case studies from a distant, critical standpoint still leaves scholars with the problem of finding a neutral 'metalanguage' that might bridge the conceptual worlds of the societies compared and of the comparer. However, such a metalanguage, as Reinhart Koselleck once remarked, does not exist.[16] It seems futile to hope that the analytic terms of scholarly discourse could ever reach a sufficient degree of neutrality. The problem of being dependent on a particular linguistic tradition when defining the categories, units and *tertia comparationis* needed for any comparison still remains. One pragmatic way out of this dilemma is to organize – and present – the research process itself as an exercise in translation that involves both sides, the comparer and the societies compared. Cultural anthropologists can achieve nonunilateral translations by entering into a dialogue with those they observe. Historians, whose sources cannot 'speak' for themselves, may approximate that ideal by continuously discussing their translational activity, 'pointing out different ways of conceptualising and of drawing boundaries'. Such an explicit discussion of translation and its limitations may lead to a reciprocal semantic enrichment of the terms used for the analysis and, ideally, result in 'more elastic concepts representative of cultural plurality'.[17] Another pragmatic way to avoid the danger of hastily familiarizing the other by using one's own conceptual apparatus is to centre comparative inquiries around recurrent elementary problems or challenges, such as the ways in which societies include or exclude people, attribute positions or contend with past, present and future. The trick consists in starting the comparative inquiry at the most elementary level of meaning production through signs (semiosis), i.e. at the level of basic sentences in language or nonverbal sign usages that articulate the problem without naming or addressing it explicitly. This 'onomasiological' procedure at least has the advantage of not imposing the relevant abstract terms in advance, but making the finding of those terms one objective (*explanandum*) of the comparative investigation.[18] Admittedly, both solutions sketched here are pragmatic makeshifts only and cannot get rid of the comparer's dependency on his or her own conceptual world completely. Postcolonial critics therefore have a point when they stress that asymmetrical power relations between the comparer and the people or objects compared may still remain.[19] However, the alternative of relinquishing comparisons altogether seems no less unsatisfactory.

Another line of criticism engages with the ways in which comparative scholars have dealt with the problem of choosing the units and spatial scales of their comparisons. An obvious point is to reject the cruder varieties of methodological nationalism still to be encountered in some niches of political science departments or historical scholarship. Yet the critical issue is that any comparison, however self-reflective, requires an artificial, quasi-experimental, if only temporary, immobilization and homogenization of the units compared, whether they be called nation states, regions, societies, empires, civilizations or even transnational spaces. Those who raise that critical point usually call for a shift of focus from comparative studies to the historical examination of intersections, connections and circular movements of people, knowledge and things. Shifting the focus in that way to a 'crossed history', they claim, will help to elucidate and *historicize* the processes of boundary-drawing that have constituted and constantly rearranged the units and objects that comparative scholars tend to artificially immobilize.[20] While most comparative scholars concede the point, their counterclaims are that historicizing everything at the same time is practically impossible and that concentrating on intercrossings and entanglements will produce its own blind spots too. In particular, they say, comparisons are still needed when it comes to evaluating the relative impact (or even absence) of connections and circular movements within and between various nations, empires, world regions or other spaces and settings.[21]

The dilemmas posed by scholarly comparisons have thus brought some of its practitioners to demand yet another shift of perspective that gets very close to the objective pursued in this book: the study of *practices of comparison* not only in various scientific disciplines, but also in diverse social fields in which the scientists are one group of agents among others. Thus, in their book on *Comparative Political Thought*, Michael Freeden and Andrew Vincent turn our attention to 'the intriguing issue of the comparative study of practices of comparison or, in other words, the epistemologies through which comparison is effected'. They also suggest that we should ask where 'the quest for comparison' comes from, whether it is 'itself indicative of a particular view of the world' and whether we may 'distinguish between keen comparison and reluctant comparison as a cultural trait'.[22] Even more germane to this book's concerns is Ann Laura Stoler's call to historicize and investigate comparisons as conceptualized and practised by nineteenth- and twentieth-century travellers, anthropologists, sociologists, imperialists and, indeed, the colonial governments themselves: 'We might historicize the *politics of comparison*, tracing the changing stakes for polities and their bureaucratic apparatuses. What did agents of empire think to compare and what political projects made them do so? What did comparison as a state project entail?' Stoler also proposes looking at how categories like 'mixed bloods' or 'poor whites' were fabricated, and how these categories 'produced cross-colonial equivalencies' that made imperialists in various countries and participants at international conferences believe 'that they were in the same conversation, if not always talking about the same thing'.[23]

Angelika Epple's chapter in this volume builds on these suggestions when she proposes a model of how to study practices of comparing historically. Epple exemplifies her suggestions by looking at how natural historians, travellers and political observers made comparisons between Europe and the Americas from the sixteenth to the early nineteenth centuries. By dissecting the operations involved in the comparison process (unit-construction, invention of *tertia comparationis*, creation of racial or other categories), she highlights the mechanisms through which some comparisons were able to acquire a 'truth effect' that made them hegemonic, while other, formerly accepted comparisons lost in credibility. Over the period observed, Epple traces an 'increasing differentiation' of comparative practices, resulting in ever more 'second-order comparisons' and engendering a 'dynamic process' in which one comparison provoked further comparisons.[24] Alex Middleton's chapter on British imperialists in the Victorian period and the ways in which they compared their own methods of imperial rule with those of continental Europeans shows this dynamic process in full swing. In particular, Middleton places emphasis on two additional factors that helped to maintain the comparative drive: competition among European colonial powers on the one hand, and the needs to arouse or appease domestic public opinion with regard to the British imperial project on the other hand. Moreover, Middleton shows that when Victorian imperialists asserted the superiority of British rule over that of continental Europeans in all respects (moral as well as institutional or economic), they not only pursued a deliberate legitimizing agenda but also accentuated the distinctiveness of the British style of imperial rule itself as compared to others.[25]

As we have seen, criticism of comparison as a methodological tool has helped to effect the shift of perspective proposed in this book from the (normative) criticism of method to the (empirical) analysis of practice. The beginnings of such a shift are not only discernible in (post)colonial and crossed-history studies, but also in the fields of philosophical epistemology, aesthetics, literature, the visual arts and the natural sciences. Some rather intuitive remarks by Michel Foucault in *Les mots et les choses* (1966) have been an important inspiration for this shift of focus. In that book Foucault claimed that comparisons, from the mid seventeenth century onwards, began to exhibit a significant change in format and function. In lieu of being quests to prove resemblance and a god-given harmony by means of similes and analogies, comparisons now increasingly emphasized difference or identity by means of contrasts. Except for poetry and the fine arts proper, literary forms of comparison based on the figures of ancient rhetoric were now increasingly superseded and ultimately replaced by scientific forms of comparison based on logical reasoning and observation. Measurement and classification became the instruments by which these new forms of comparison were effected and gained prestige as the preferred way to achieve certain knowledge.[26] Recent studies have confirmed Foucault's basic hypothesis on the changing formats and functions of comparison, while providing a much more nuanced picture with regard to the timing, intensity and propagation of the transformation. Thus, a magisterial study by the literary comparativist Michael Eggers with in-depth analyses of key texts on the epistemology and practical uses of comparison from René Descartes and Carl Linnaeus to Friedrich Schlegel and Honoré de Balzac has relativized some of Foucault's insights. Eggers' findings, summarized here for an anglophone readership in the first chapter of this book, reveal that adjustments are particularly necessary with regard to Foucault's assertions about the supposed devaluation and decline of analogy as a means to acquire and certify knowledge.[27] Eggers shows that analogies, although indeed criticized early on, continued to be used side by side with the more 'scientific' forms of comparison as defined by Foucault far into the nineteenth century.[28] Other recent studies on the explosion of comparative studies in a variety of disciplines around and after 1800 (aesthetics, natural history/biology, anatomy, linguistics, anthropology, etc.) corroborate Eggers' discoveries. The American historian Devin Griffiths, without being aware of Eggers (and vice versa), even speaks of an 'Age of Analogy'.[29]

In art history, the fluid boundaries between comparison as a methodological tool of analysis and comparative practices that involve bodily movements and technical artefacts are particularly pertinent. There is a long tradition of rivalrous comparisons between different forms of art (painting, sculpture, poetry), all taking their cue from the allegation of resemblance between painting and poetry (*ut pictura poiesis*) in Horace's *Ars poetica* (19 BC). Since the Italian Renaissance, these comparisons have become a genre of their own under the designation of *paragone*. The tension between quests for superiority and definitions of specificity has been an inherent feature of this genre, which can thus be seen as an early template for similar controversies in other humanities.[30] From the early modern period onwards, art collectors and connoisseurs have used techniques such as the juxtaposition and cataloguing of pictures, drawings, prints and artefacts ever more extensively to distinguish between 'originals' and 'copies', to classify works by 'style' or to attribute particular works to an individual artist. More recently, the technique of parallel slide projection for teaching purposes and in mass entertainment has again reinforced the long-established routines of a comparative gaze among professional art historians as well as amateur beholders of art works.[31] More perhaps than in other human sciences, the comparative routines in art history have come under attack as being conducive to narrowing the view, but they have also found their defenders. Johannes Grave's chapter in this book engages with the arguments of both sides – critics and defenders – while pleading himself for an intense look, informed by sociological practice theories, at what beholders of art works, connoisseurs, professional art historians, curators of exhibitions and artists themselves actually *do* when they compare. This means paying close attention to the performative aspects, the material objects involved in, and the situatedness of, comparative viewing practices. Case studies on Johann Wolfgang Goethe and other eighteenth- and nineteenth-century commentators and collectors of engravings exemplify Grave's conclusion that comparative viewing practices have a double-edged effect: on the one hand, they may sharpen the perception to enable a viewer's understanding of even the smallest details in an image, such as the folds of a robe, as bearing significance; on the other hand, they may lead to a conditioning of the eye movements in such a way as to isolate the individual units of meaning from their visual context, thus promoting a 'latent semiotic reading of images'.[32]

The Emergence of Competitive Comparisons: Individuals and Political Regimes

Debates about comparison as a method in the sciences and humanities are not the only pathway towards the empirical study of *practices of comparison* proposed in this book. Another starting point is the study of *competition* on various levels and stages.[33] Social psychologists and historical sociologists have analysed envious comparisons and confident emulation among individuals and groups competing for prestige, material advantages or sportive success.[34] Explaining economic competition among businesses is a classical object in economics and in sociological inquiries into the structure of markets.[35] And the manifestations of rivalry among empires, nation states and political regimes in all conceivable respects – military strength, economic power, cultural prestige – have occupied historians and political scientists for a long time.[36] In all these competitive settings, self-comparisons of the agents play a crucial role, yet in most works on competition, those comparisons are only mentioned in passing, as if their functioning and specific forms were a matter of course. Several chapters in this book therefore address the intertwinement of comparison and competition in a more explicit way.

Useful hints for the study of comparison in the context of competitions can be gathered in Georg Simmel's chapter on conflict ('Der Streit') in his general *Sociology* (1908).[37] In particular, Simmel draws attention to the decisive impact of a third party in all pure forms of competition. Pure competition, he says, is not just a fight between two or more parties for a certain good or a position, but a contest for the favour of a third party. Businesspeople, public intellectuals or professional football teams do not just engage in a combat against each other; rather, they strive for recognition and acceptance of their products, capacities or efficiency by a *third party*. The third party may be customers in the case of businesses, the reading public, students or the mass media in the case of intellectuals, and spectators and potential employers in the case of football players. These third parties, whose attention is courted by the competitors, are incessantly comparing the products and performances of those who compete. Hence, the success of the competitors does not depend on any absolute quality of their own, but first and foremost on the judgement of the third party about their *relative* value in relation to someone else's performance. The third parties set the standards for the comparisons, and it is through their continuous comparative activity that the competitors must learn how to compare themselves. They do so by estimating and continuously re-adjusting their own position in relation to others with respect to the known (or presumed) quality criteria of the third parties.

Building on Simmel's insights, Tobias Werron and Bettina Heintz have pointed to the fact that the third parties in modern world society may, or may not be, visible persons or agencies. In fact, competitors nowadays feel increasingly called to conform to what they suspect to be the comparative criteria of largely anonymous audiences. Thus, global 'comparison horizons' (*Vergleichshorizonte*) are spreading even without any previous direct contact between the competitors themselves or the (presumed) third parties to whose criteria they respond.[38] In a pioneering article of 2007, Wendy Espeland and Michael Sauder made similar points with regard to the effect of national and international ranking and rating practices in the field of higher education.[39] Wendy Espeland's and Bettina Heintz's chapters in this book expand their respective earlier research on the reasons for, and the consequences of, ranking and rating practices.[40] Both chapters – Espeland's on the case of higher education and Heintz's on a broad variety of social fields – arrive at a more fine-grained typology, to be further explained below, with regard to competitive comparisons, their form, function and ever more acutely felt presence in contemporary world society.

In abstract terms, one might conceive the relationship between competition and comparison as one of mutual reinforcement. Competitions necessitate comparisons, and comparisons may enhance existing competitions and entail new ones. The relation is best described as a circular movement where it is impossible to tell which of the two – comparison or competition – comes first. However, in *historical* terms, it seems appropriate to ask whether the intensity of that circular movement of mutual reinforcement has grown since the onset of modernity and, more particularly, to what degree it presupposes the existence of societies based on the principles of economic and political freedom. Competition, as conceived by Simmel, seems to require a certain amount of freedom of choice and can only flourish in the absence of regulations or unwritten conventions that inhibit it. Although competition in personal interaction (for example, children's play) can probably be considered an anthropological universal, there are reasons to assume that as a practice invading nearly all spheres of life in politics, economics and culture, it could be a phenomenon of more recent origin. One might hypothesize that the form of competitive comparison identified by Simmel was less relevant in a society in which the position, wealth and sociopolitical function of individuals and groups depended mainly on preordained rank or *status* rather than on free competition. In an article on 'Personal Competition' (1899), the American sociologist Charles Horton Cooley came to a conclusion along those lines: 'There is but one alternative to competition as a means of determining the place of the individual in the social system, and that is some form of *status*, some fixed, mechanical rule, usually a rule of inheritance, which decides the function of the individual without reference to his personal traits, *and thus dispenses with any process of comparison*.'[41]

But is it true that there is no personal competition, and hence no comparison among, or between, individuals and groups in a society based on status? Cooley at least takes care not to associate too closely the principles of status on the one hand and competition on the other with particular historical periods or stages. While he posits that the 'general tendency in modern times has been toward the relative increase of the free or competitive principle', he sees a persistence of status in some respects 'even in the freest countries' – and also vice versa, instances of competition in premodern societies.[42] However, as a historian of comparison and competition, one should go beyond these cautious reservations and question more radically the habitual assertion that competition is coextensive with modern market societies of a Western, liberal type.

In this book, David Priestland does exactly that in a long-range survey, encompassing the period from the sixteenth to the twenty-first centuries, on the metamorphoses of competition and the comparisons underlying it.[43] His main arguments are that we should think of competition as situated 'both within and outside the context of markets and economic liberalism', and that even within liberalism, as well as 'neoliberalism', one should distinguish several types of competition. For a provocative start, Priestland points to the (perhaps not so) strange resemblances between the regulated forms of 'socialist emulation' (*sorevnovanie*) in Stalinist Russia and the 'neo-liberal methods of performance-measurement by comparisons' in English and other Western universities. Moving on from these observations, he unfolds a differentiated tableau of conceptions of competition in time and space. He starts with a distinction into three basic, reiterable and combinable types of competition, each originally related to the ethos of a social group: the first a competition of merchants relying on values such as self-discipline and turning around buying cheap and selling dear, the second a competition of warrior aristocrats turning around codes of rivalry, honour and courage, and the third a preoccupation of technocrats and officials with regulating and overseeing competition.[44]

Priestland interprets the long-term history of competition as a struggle between these different conceptions and the groups supporting them, but his main point is that, from the late nineteenth century onwards, hybrid forms of the basic types became increasingly common both in liberal and socialist economic theory *and* in governmental practices of states, bureaucracies and private enterprises. In that way, Priestland arrives at a more subtle explanation of rivalrous conceptions of competition. And thus he can also explain why there are those strange resemblances between Soviet efforts to stimulate 'socialist emulation' in an otherwise extremely regulated economy on the one hand, and various shades of neoliberal visions geared to educate economic subjects to behave competitively and yet also to conform to the rules of quasi-markets dictated by New Public Management on the other hand.

Willibald Steinmetz's chapter in this volume also takes a long-range view on the intertwinements between comparison and competition, but he concentrates on the changing modes and forms of social comparison among individuals in social intercourse and other pursuits of ordinary life.[45] His particular focus is on the long transitional period from a society regulated by rank and inherited status to one based primarily on competition. With regard to that period, reaching from the late sixteenth to the turn of the twentieth centuries, Steinmetz distinguishes three types of social comparison, which in abbreviated language he calls 'above/below', 'better/worse' and 'simply different'. His main findings are, first, that social comparisons between persons of higher and lower rank (above/below), although theoretically illicit, were indeed common practice in early modern Europe and further on until the turn of the twentieth century; second, that the competitive (better/worse) variant of social comparison has been on the increase, as one might expect, from the mid eighteenth century onwards; but, third, that it found a vigorous counterpart almost simultaneously in explicit assertions of individuals to be 'simply different' – in other words, in emphatic assertions of uniqueness. Up to the present day, Steinmetz concludes, modernity is characterized by a tense and sometimes uneasy co-presence of all three types of social comparison that may come to the fore, or recede, depending on the situation.

In today's world, comparisons in a competitive context not only affect individuals or small groups, but also large collective entities, particularly nation states. It is obvious that contemporary nation states compete for material advantages, but they also compete at least as much for 'soft goods' administered by third parties. Examples are quests by national governments (and various other agents who claim to represent their nations) for cultural prestige in the eyes of global publics or for positive evaluations by professional comparing agencies.[46] Yet it is less clear whether, *historically speaking*, the practices of comparing states or empires have followed a logic and timing resembling that which has governed social comparisons between individuals. However, the indications are strong that, as far as England is concerned, there was a growing awareness, and pride, already at work in the later Elizabethan period of being in advance of continental European nations that were seen as commercial and military rivals, in particular France and the Dutch Republic. Moreover, as Paul Slack has shown, the seventeenth-century English comparisons with continental European states had a strong temporal bias in envisioning the contest with the competitors as an open-ended race towards 'infinite improvement' in the future.[47] For all their apparent modernity, one has to bear in mind that these early modern progressive comparisons extended above all to the fields of commerce and the general wellbeing of citizens and also, increasingly in the eighteenth century, to the fiscal-military complex – the state's capacity to raise taxes and loans for sustaining military effort. On the other hand, the political system itself, the constitution and legal order, was hardly touched by the progressive-competitive mode of comparison, despite a long tradition, reaching back to Sir John Fortescue, of comparing English and continental European laws. The standard by which Fortescue and his early modern followers 'measured' the relative excellency of laws was an ideal of absolute justice, not a capacity to improve infinitely.

The assumption that the political field did not lend itself so easily to the progressive-competitive mode of comparison is underscored by Lars Behrisch's chapter in this book.[48] In a broad sweep ranging from the sixteenth-century Dutch revolt to the late eighteenth-century American and French Revolutions, Behrisch investigates how early modern revolutionaries, mostly republicans, drew parallels between their own endeavours and those of earlier or contemporaneous revolutionaries elsewhere. Comparing the comparisons made by the Dutch, English, French and American revolutionaries with foreign attempts to establish a republican government, Behrisch finds almost as many different kinds of comparison as there were situations. While he can indeed point to several instances in which the parallels were meant to encourage positive emulation, as when some Dutch revolutionaries recommended following the model of the Swiss confederacy, he discovers many more comparisons that served the opposite purpose. Comparisons were either plainly discouraging, as in the case of the French *Frondeurs* who assured themselves and the public that they would never follow the course of the English regicides, or they were made to buttress claims that proved the uniqueness, exceptionalism or absolute novelty of one's own situation and goals, as in the case of the American Federalists during the debate about the U.S. Constitution or the Abbé Sieyès' proposals for a new French constitution. Until the end of the eighteenth century, then, and in some cases further into the nineteenth century, comparisons in the field of legal and political institutions were not predominantly framed in a logic of competing for progress with other, supposedly more 'advanced' states along an imagined, commonly accepted scale of what would nowadays be called 'best practices'. As Behrisch demonstrates, comparisons could just as well belong to a type that stressed above all differences, if not incommensurability.

However, comparisons among nation states and empires changed significantly in the course of the nineteenth century, especially towards its end. Vulgarized versions of Charles Darwin's supposed dictum of the 'survival of the fittest' (in fact coined by Herbert Spencer) were increasingly mobilized to underpin comparisons that put existing institutions, including political systems, under closer scrutiny. The most important *tertium comparationis* now became the 'efficiency' of nations in comparison to other major powers that were seen as competitors. On all sides, state agencies supported by statistical bureaus were busy figuring out why competing nations or empires were more successful than others, whether in military, economic or technological terms. The cultural and moral prestige of a nation, made visible and audible at world exhibitions or international expert congresses, became another asset in the (perceived) struggle of nations for supremacy. The important watchword here was 'civilization'. Belonging to the club of 'civilized' nations, being recognized as 'civilized' by others, was a precondition for deserving to be comparable at all – as Julia Moses demonstrates in her chapter in this book on international debates about the issue of accidents at work around 1900.[49] While the technological, military and commercial exploits of the most successful nations served as points of comparison for 'efficiency', the relevant benchmarks for 'civilization' were soft goods such as a well-educated population, a low crime rate, a high level of health, hygiene and morality among the working classes, the degree of emancipation of women, the absence of coercion, a great amount of personal freedom, effective suppression of slavery and violence in the colonies, the existence of provisions for the sick, the old or the victims of workplace accidents at home, and ultimately a political system that could be described as self-government of the people.

Pride and shame became the prime movers of international and inter-imperial comparisons on the levels of both efficiency and civilization. Alex Middleton's chapter in this book provides examples of a British sense of pride, mixed with complacency, in comparisons with imperial rivals, while Julia Moses discusses the German government's indefatigable, yet only moderately successful, efforts to propagate the Bismarckian social insurance legislation as a model.[50] On the other hand, being noticeably backwards in one, or several, of the fields mentioned was considered a reason for shame. Thus, in his 1908 State of the Union Address to the U.S. Congress, President Theodore Roosevelt called it 'humiliating that at European international congresses on accidents the United States should be singled out as the most belated among the nations in respect to employers' liability legislation'.[51] Julia Moses' chapter examines the congresses alluded to by Roosevelt at work.[52] The main role of these international expert gatherings (twelve alone on workplace accidents between 1889 and 1912) was to promote the exchange of regular – and comparable – information in the shape of statistics along uniform principles, to define the problems to be solved (including the agreement on the meaning of key terms such as 'professional risk') and to reach a consensus on the broad goals of legislation, in this case some scheme of compensation for accident victims, without however recommending any specific national scheme as a model. Generalizing Moses' findings, one might say that international expert congresses around 1900 were at best able to make problems *comparable* by finding a common (numerical and verbal) language and developing a broad idea of what might constitute best practices in a certain field, but much less effective when it came to advocate concrete solutions.[53] Legislation remained entirely the domain of nation states. Moses analyses the comparisons made in domestic British and Italian debates on compensation schemes. Here she finds that older ideas of national specificity and path-dependency often prevailed over anxieties of falling behind a certain standard. This was especially the case if that proclaimed standard, as in the case of workmen's compensation, originated from a country like Wilhelmine Germany, which in political respects was considered as authoritarian and militaristic – in other words, 'backwards'. Comparisons used in the realm of *political* argument, one might conclude, often followed another logic than the progressive one and were also far removed from the allegedly unpolitical language used in expert discussions on legal or technical issues.

Throughout the twentieth century, comparisons of welfare legislation and labour laws in particular continued to attract much attention from state bureaucracies, professional observers and international bodies like the International Labour Organization (ILO).[54] In the 1950s and 1960s, Scandinavians were particularly eager to praise the 'Nordic model' as an item for export. As Julia Moses also shows, historical and sociological studies of the welfare state, often comparativist themselves, should be interpreted as an integral part of, and a stimulating factor for, welfare state expansion in the twentieth century.[55] And as Pauli Kettunen remarks, even recent comparative research on welfare state models is 'often associated with comparative concerns about economic competitiveness' – with the important difference that growing competitiveness is nowadays often equated with a reduction of welfare provision.[56] Since the 1970s, comparisons of welfare state models have rarely served as an incentive for expansion, but much more frequently as a justification for less generous welfare regulations. Yet, a driving force they have remained – one way or the other.

The Seductive Power of Numbers and the Suggestiveness of Rankings

It makes a difference whether comparisons are communicated through language, bodily performance, images or numbers. Even if language often intervenes in performative, pictorial or numerical communication, these nonverbal communication media possess an intrinsic logic that affects their potential effectiveness, outreach, clarity or ambiguity; in short, the meaning of the message. Following art historians who postulate an 'iconic difference' with regard to the specific operating mode of images,[57] Bettina Heintz speaks of a 'numerical difference' to stress the remarkable qualities (and hidden drawbacks) of communication by numbers.[58] Quantitative comparisons, she explains, are complex operations as soon as they go beyond simple statements of 'more' or 'less', expressed in isolated figures. Before one can even begin to calculate average scores, growth rates over time, relative increase or decrease in view of certain units, one has to be sure that these units (for instance, 'industrial workers', 'states', or 'universities') are indeed comparable, i.e. sufficiently similar in at least one relevant respect. This act of category-making, which social scientists generally refer to as the operationalization of variables, is far from self-evident and may give rise to all kinds of controversies. The steps are, first, to fix the criteria for the comparison (for example, 'relative backwardness'), second, to define the specific countable and calculable indicators that allow to measure it (for example, ratio of 'industrial workers' per general workforce) and, third, to determine the practical methods of data collection. All these steps involve further acts of abstracting from specific, local qualities in the interest of making things countable, calculable and hence numerically comparable across space and time. In a short formula, Wendy Espeland and Mitchell Stevens have called the entire sequence of these steps 'commensuration'. They define it as the 'transformation of different qualities into a common metric'. They thereby emphasize the fact that numerical comparisons inevitably simplify and reduce the complexity of the reality they pretend to present, yet in fact actually produce to a large extent.[59]

The seductive power of numbers and statistics, once established, consists above all in their capacity to be removed from the original contexts from which they were derived. Statistics and their representations in tables or charts tend to conceal the complex sequence of steps that were needed to fabricate them. The figures acquire a life of their own and may be used without reference to their sources or to the objects they once represented. Another advantage of numbers is that they can be decontextualized and translated much more easily than verbal language. For the knowledgeable, the language of mathematics is universally understandable, and even laypersons may read the figures of a chart or league table. Numbers also seem to be more unambiguous than images and less open to intercultural misunderstanding than body language or other nonverbal signs. Taken together, these specific qualities make up what Bettina Heintz calls the 'numerical difference' as compared with other communication media (language, images, performances). Ultimately, she argues, it is the 'decontextualizing effect' of numbers and statistics that has made the numerical comparisons based on them a moving force of globalization.[60]

The ease with which numbers and statistics circulate in today's world obscures the fact that their historical development was a protracted process.[61] Each of the steps involved in 'commensuration' described above required the buildup of a complicated infrastructure and the achievement of a consensus on difficult epistemological questions. Pioneer historical studies on the growth of statistics have mostly focused on these infrastructural and epistemological problems: the setup of national statistical bureaus, the formation of international expert networks, the methods of calculation, and the use of statistics in the natural and social sciences.[62] In recent years, scholars have paid more attention to aspects that are relevant for a history of the practices and politics of numerical comparison, both within nation states and across borders. There are now numerous case studies, covering individual countries as well as transnational actors in nineteenth- and twentieth-century Europe and the world, that deal with the construction of units to be counted, the formation of categories to make units comparable and the definition of the criteria for comparisons.[63] Of particular interest here is the laborious invention of numerical indicators such as Gross National Product (GNP), a conflict-ridden story told by Daniel Speich Chassé.[64] Stepping back in time, Lars Behrisch's impressive work on eighteenth-century Germany and France has highlighted how statistics already in their early days relied on, and helped to substantiate, a new conception of a national economy that was seen as a complex mechanism, capable of improvement and to be managed by the state. Already in their eighteenth-century beginnings, then, statistics were a modernizing project of welfare promotion combined with biopolitics. To proceed towards that goal, the early French and German statistical bureaucrats created uniformity, reduced complexity and suppressed particularities. Their sometimes ruthless neglect of local knowledge and habits of measuring things explains why they met with massive obstacles and passive popular resistance.[65]

Two nineteenth-century innovations were crucial for facilitating numerical comparisons: the institutionalization of official statistics and their publication at regular intervals in a standardized printed format. The regularization of the practice accustomed the population to being counted and to accepting the categories used by the statisticians as self-descriptions – a feedback effect that in the long run helped to secure comparability. The open accessibility of the printed statistics allowed businesspeople and other interest groups to use them for their own purposes and learn to argue numerically – another feedback effect. Moreover, the expansion of counting and calculating to ever more fields, including moral issues such as crime and suicide, meant that the statistical results for several sectors could now be interrelated to make new, experimental calculations. And the longer the series of published statistics became, the more it was also possible to widen the *temporal* horizons of numerical comparisons. Historical change could now be described in quantitative terms.

However, what remained a problem and could not be solved in a satisfactory way before the mid twentieth century was to make statistics comparable across national borders. It has already been mentioned how international expert congresses on workplace accidents could only reach modest progress in terms of agreeing about the definition of criteria and terminology. The same was true for other efforts to fit national statistics on particular issues to a common standard. It is only after the First World War that these efforts became more successful. Two interlocking chapters in this volume by Martin Bemmann on the 1920s and 1930s and by Daniel Speich Chassé on the 1940s address the intricacies and obstacles to be surmounted by statistical experts and politicians committed to construct economic statistics on a global scale.

Bemmann examines the reasons why the efforts of the international experts, against all odds, found more positive resonance in the crisis years of the interwar period than in the last decades before the First World War, which in many other respects saw a massive drift towards globalization.[66] One reason he finds for the 'cacophony' of international statistics before 1914 was, paradoxically, the successful implementation and firm entrenchment of national statistics. This, he argues, raised the threshold for the national statisticians to depart from their routines, a departure that would also have been regarded at home as a loss of prestige and an interference with internal affairs. By contrast, the years after 1919 saw the establishment of international organizations such as the ILO with at least some competencies under the umbrella of the League of Nations. These organizations not only augmented the need for comparable statistical data, but also, by their very mode of operation, strengthened the willingness of nation states to cooperate. Since a majority of state representatives in the ILO's governing body was to be nominated by the eight member states 'of the chief industrial importance', national governments had a strong incentive to partake in the debates about the indicators supposed to measure 'industrial importance' and then make their national statistics conform to these demands. Thus, a primitive ranking mechanism among states was introduced that had effects similar to those known from university or other rankings today. In addition, the financial weakness even of powerful states such as Britain after the war made them more inclined to abandon regular parts of their own prewar statistics and pool resources with other member states for international statistical ventures. Furthermore, it became a matter of national prestige for newly created states such as Poland and Czechoslovakia, as well as for colonial or semi-colonial countries like India, to build up their own statistical apparatuses, and they did so from scratch in accordance with the rules set by the expert gatherings. Coupled with the demands by private businesses for reliable comparative information, and technocratic visions of government officials to steer the economy through the crisis years, these motives were sufficient to give the efforts of the international statisticians a boost they had not known in the prewar decades. Despite their relative success in relation to achieving comparability, Bemmann concludes, global economic statistics in the interwar years still remained limited to separate series of data for particular economic aspects such as foreign trade, industrial production or state finances.

Global statistical comparisons became a key issue again after the Second World War, particularly at the World Statistical Conferences at Washington DC in 1947, discussed in Daniel Speich Chassé's chapter.[67] The awareness of the pitfalls of statistical comparability as well as the willingness, technocratic fantasies and institutional pressures to erect a global 'centre of calculation' (an expression coined by Bruno Latour) were perhaps even stronger after 1945 than after the First World War. Yet, as Speich Chassé shows, the several hundred experts and government officials gathered at Washington DC could reach no agreement to create such a centre or to invest an existing organization, whether the then already sixty-year-old International Statistical Institute (ISI) or some new organization under the umbrella of the United Nations, with that function. Apart from the rivalries between possible candidates, the main reason for this failure were disagreements about the priorities to be attained between academic experts like the economist Simon Kuznets on the one hand and political pragmatists closer to the concerns of governments, in particular the U.S. government, on the other hand. While the academic experts insisted on the elaboration of categories and criteria that could stand up to rigorous scientific testing, the pragmatists pushed towards solving the problems of comparability through 'compromise', as one U.S. government delegate put it. What happened, Speich Chassé says, was that the 'science-policy-nexus' changed in the course of the Washington Conferences and in the following years. Despite the protests of the scientists, numerous statistical indicators began to be used for comparative purposes and proliferated in an uncontrolled, incremental way, driven largely by political demands. No recognized global 'centre of calculation' developed after 1945, and until today no such centre exists. Consequently, national governments, nongovernmental organizations (NGOs) and institutions like the World Bank and the International Monetary Fund have to use a plethora of statistical indices from a wide range of sources to produce their comparisons and rankings, with tangible effects for those who are being compared.

It is at this point that the final chapters of this volume by Wendy Espeland and Bettina Heintz take up the thread to explore the origins and portent of rankings in our contemporary world. Drawing on Georg Simmel's sociology of social forms, Espeland interprets rankings as a 'historical, globalized and consequential *specific* symbolic form of social life, one grounded in comparison, hierarchy and exchange', as well as a 'commodity form' that is characteristic for Simmel's (and our own) understanding of the 'tragedy and freedom of modern life'.[68] Referring to Kenneth Burke's *Rhetoric of Motives*, Espeland also underlines the capacity of forms such as rankings to 'channel cognition and emotion in patterned ways' as well as their specific 'dramatism'. It makes sense, she says, to analyse rankings not just with regard to their method that produces 'many layers of commensuration' resulting in 'reductions of reductions of reductions', but also in terms of their rhetoric and aesthetics and even their entertainment value, for instance, the ways in which rankings are graphically visualized to make them look attractive and elegant, if one wishes to fully understand why they have proliferated and become so seductive. On the other hand, she also points to social and political reasons – the expansion of choice in the systems of education and the introduction of neoliberal performance measurement policies – to account for the emergence of rankings in the particular field of higher education. A closer look at the ways in which American law schools or Chinese universities deal with, and try to manipulate, rankings – for example, when they have to decide whether or not to admit students who tend to score less well on standardized tests – then allows her to explain how the 'feedback loop between rankings and effects' functions in practice.[69] The case studies substantiate her point that rankings, despite producing many negative feelings such as anxiety, create an almost irresistible appeal because of their formal qualities.

While most contemporary ranking orders make use of numbers or symbols that are akin to numbers (such as stars), not all rankings are actually based on numbers in the strict sense that any calculating operation has taken place. In fact, as Bettina Heintz stresses in this book's final chapter, many ranking orders rest entirely on qualitative assessments ('connoisseurial reviews').[70] Rankings, Heintz argues, should be seen above all as 'comparative devices'. Thus, not all rankings presuppose commensuration as defined by Wendy Espeland, but comparison is the indispensable foundation and purpose of all ranking orders. The first part of Heintz's chapter contains useful terminological clarifications.[71] Analogies are a less complex operation than comparisons because they produce knowledge by stressing similarities only, not similarities *and* differences. Category-making is a necessary step in comparisons, and new categories may induce new comparisons, but categorization is not itself a complete comparison. The same is true for classifications that may be described as hierarchically organized systems of categories and also for dichotomies that are a special case of classification, and again for asymmetric dichotomies (or counterconcepts in Reinhart Koselleck's sense) that are a special case of a dichotomy. Heintz goes on to distinguish between neutral (nonevaluative) comparisons, evaluative (better/worse) comparisons and progressive comparisons (evaluative comparisons with a temporal index). Statistical tables that merely present the information, but hide the valuation, may be described as neutral comparisons, whereas ranking orders are evaluative comparisons – with or without a temporal index.

On the basis of her terminological clarifications, Heintz briefly reviews the historical development of ranking orders since the eighteenth century to demonstrate that many rankings until today are nothing other than qualitative judgements expressed in a numeral or symbolic form, not valuations based on statistical operations. On the other hand, many early statistics were not transformed into ranking orders. Only by the late nineteenth century was there the appearance of the first truly quantifying ranking orders based on indicators that were counted and compared, and since then, and especially from the 1980s onwards, they have spread all over the world. Still, different forms of ranking orders are to be distinguished. Thus, in ratings, the entities are judged individually and only then compared and assigned to quality classes that are not exclusive: many states may receive a 'triple A'. By contrast, in rankings, the entities are directly compared to each other, and these comparisons are zero-sum games: the rise of the one entails the fall of the other. Both ratings and rankings may rely on qualitative assessments or quantifying procedures – or combine both methods in a sequence of steps. Applying Andrew Abbott's concept of 'fractal distinctions'[72] to supposedly 'qualitative' and 'quantitative' ranking orders, Heintz ends up with a more fine-grained heuristic that shows a continuum of steps and procedures rather than a clear-cut distinction. While the belief in numbers – and their seductive power – may have grown, quantification as a procedure in the strict sense is only present in a much smaller fraction of ranking orders. The suggestiveness of ranking orders, Heintz concludes, does not primarily (and sometimes not at all) reside in quantification, but in their 'promise to tame human subjectivity and to replace it by an objective assessment'. Ranking orders are a device to bridge the gap between the claims for uniqueness and quests for comparability at the same time. They thus deal with a tension that is typical for our own contemporary world, which, according to Bettina Heintz, is no longer just an 'age of comparison', as it was for Friedrich Nietzsche, but an age that glorifies the superlative in which excellence is elevated to a norm for everyone.

Concluding Remarks: For an Integral History of Conceptualizations and Practices of Comparison

This book wants to give a new impulse for the study of comparisons. It draws together research traditions that hitherto have existed only unconnected to each other: the history of ideas about comparisons; present-day criticism and praise of comparison; the history of competition in various settings and spatial scales; and the history of statistics and rankings. The common thread that binds the overviews and case studies of this volume together is the question as to what people actually do, think, say or show when they compare.[73] The media they use, the emotions they encounter and the purposes they pursue must occupy an important place in that new history of comparative practices as proposed in this volume. Whether comparisons are communicated by means of script, print, verbal acts, bodily performance, visual images, numbers, statistical tables, maps, infographs or interactive websites, and whether they are kept secret or published makes a huge difference. Comparisons may be used to politicize issues, but may also be part of efforts to depoliticize contested problems, for instance, if they appear embedded in technocratic visions.

Apart from the experiences and expectations of the agents, the unintended effects of comparisons – in particular, their apparently irresistible mobilizing force in the last two hundred years of European and world history – need to be investigated. The interplay of competition and comparison has undoubtedly been responsible for much of that dynamism. On the other hand, comparisons can also be brought about by a mere curiosity to know and result in peaceful encounters or even cooperation. The history of comparative practices and conceptualizations of comparison is thus not a linear story of the emergence of one particular kind of comparison, the progressive-competitive variant being the obvious candidate. There were always countermovements to being compared, or at least to being compared in a specific way: claims for uniqueness or absolute incommensurability, radical individualism or fundamentalisms, and more limited contests about the categories or criteria applied.

If there is anything specific about the history of comparisons since the eighteenth century, it seems to be precisely the intensification of such conflicts about the use and misuse, meaningfulness or impertinence, legitimacy or outlawing of particular kinds of comparisons or even comparison in general. The more comparisons have become a key method in the sciences and humanities, the more they have been an object of explicit reflection and sometimes vehement rejection. Since the advent of print and other media of preserving and distributing knowledge, comparisons have been a means to cope with growing amounts of available information by category-making, unit-construction and ordering the world through criteria and standards. On the other hand, it is important not to forget the possibility of a reluctance to compare or the demise of an urge to compare where, formerly, comparison was a frequently used and hotly contested practice. Comparisons may be routinized in such a way that they are no longer recognizable as comparisons, for example, when once explicit comparisons congeal into stereotypes or fixed classifications that are no longer questioned by anyone. The history of the vocabularies of comparison in different languages as well as the history of inconspicuous basic sentences that perform comparisons may be one way to elucidate the changing degrees of reflexivity in the history of comparison. The new history of comparisons as advocated here should therefore be an integral one, combining the history of conceptualizations and practices of comparison.

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Notes

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24. See below, Chapter 5. For an explanation of the analytical model, see also A. Epple, 'Doing Comparisons: Ein praxeologischer Zugang zur Geschichte der Globalisierung/en', in Epple and Erhart (eds), *Die Welt beobachten*, 161–99.
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27. See below, Chapter 1.
28. M. Eggers, *Vergleichendes Erkennen: Zur Wissenschaftsgeschichte und Epistemologie des Vergleichs und zur Genealogie der Komparatistik* (Heidelberg: Universitätsverlag Winter, 2016).
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33. For historical views on competition in various fields, see R. Jessen (ed.), *Konkurrenz in der Geschichte: Praktiken – Werte – Institutionalisierungen* (Frankfurt am Main: Campus Verlag, 2014).
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40. See below, Chapters 11 and 12.

41. C.H. Cooley, 'Personal Competition' (1899), in *Sociological Theory and Social Research*, R. Cooley Angell (ed.) (New York: Augustus R. Kelley Publishers, 1969), 163–226, at 165 (emphasis added).
42. Ibid., 167.
43. See below, Chapter 8.
44. For an inspiring historical overview based on that typology, see D. Priestland, *Merchant, Soldier, Sage: A New History of Power* (London: Penguin, 2013).
45. See below, Chapter 3.
46. See Werron, 'What Do Nation States Compete for?'
47. P. Slack, *The Invention of Improvement. Information and Material Progress in Seventeenth-Century England* (Oxford: Oxford University Press, 2015).
48. See below, Chapter 4.
49. See below, Chapter 7.
50. See below, Chapters 6 and 7.
51. T. Roosevelt, State of the Union Address, Part I, 8 December 1908, retrieved 18 February 2019 from http://teachingamericanhistory.org/library/document/state-of-the-union-address-part-i-13; see also Werron, 'What Do Nation States Compete for?'; and D.T. Rodgers, *Atlantic Crossings: Social Politics in a Progressive Age* (Cambridge, MA: Harvard University Press, 2000).
52. See below, Chapter 7.
53. On the limited success of international efforts to standardize statistics before the First World War, see also the chapters by Martin Bemmann and Daniel Speich Chassé in Chapters 9 and 10 in this volume, below.
54. On practices of global comparisons in the ILO, see T. Wobbe, 'Das Globalwerden der Menschenrechte in der ILO: Die Umdeutung von Arbeitsrechten im Kontext weltgesellschaftlicher Strukturprobleme von den 1930er bis 1950er Jahren', in B. Heintz and B. Leisering (eds), *Menschenrechte in der Weltgesellschaft: Deutungswandel und Wirkungsweise eines globalen Leitwerts* (Frankfurt am Main: Campus Verlag, 2015), 283–316.
55. See below, Chapter 7; see also C. Conrad, 'Wohlfahrtsstaaten im Vergleich: Historische und sozialwissenschaftliche Ansätze', in H.-G. Haupt and J. Kocka (eds), *Ansätze und Ergebnisse international vergleichender Geschichtsschreibung* (Frankfurt am Main: Campus Verlag, 1996), 155–80.
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57. The term 'iconic difference' was coined by Gottfried Boehm; see G. Boehm, 'Ikonische Differenz', *Rheinsprung 11 – Zeitschrift für Bildkritik* 1 (2011), 171–76, retrieved 19 February 2019 from https://rheinsprung11.unibas.ch/fileadmin/documents/Edition_PDF/Ausgabe1/glossar-boehm.pdf.
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61. See also M. Poovey, *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society* (Chicago: University of Chicago Press, 1998).

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64. D. Speich Chassé, *Die Erfindung des Bruttosozialprodukts: Globale Ungleichheit in der Wissensgeschichte der Ökonomie* (Göttingen: Vandenhoeck & Ruprecht, 2013).
65. L. Behrisch, *Die Berechnung der Glückseligkeit: Statistik und Politik in Deutschland und Frankreich im späten Ancien Régime* (Ostfildern: Thorbecke Verlag, 2016).
66. See below, Chapter 9.
67. See below, Chapter 10.
68. See below, Chapter 11.
69. See also W.N. Espeland and M. Sauder, *Engines of Anxiety: Academic Rankings, Reputation, and Accountability* (New York: Russell Sage Foundation, 2016); for a historical view on the changing forms of competition, including rankings, between universities in nineteenth and twentieth-century Germany, see M. Szöllösi-Janze, '"Eine Art *pole position* im Kampf um die Futtertröge": Thesen zum Wettbewerb zwischen Universitäten im 19. und 20. Jahrhundert', in Jessen (ed.), *Konkurrenz in der Geschichte*, 317–51.
70. See below, Chapter 12.
71. See also B. Heintz, '"Wir leben im Zeitalter der Vergleichung": Perspektiven einer Soziologie des Vergleichs', *Zeitschrift für Soziologie* 45 (2016), 305–23.
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