



# The Systemic Challenge and Practice of Leadership in a Post-centaurian Society

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## Abstract

For thousands of years, humans and horse have co-habitated on the earth. From the steppes of Mongolia to the shores of Ireland and Iceland, horses gradually became an increasingly integral part of the social fabric, as they offered their services to humans in exchange for domesticated survival. In this article, we trace the equestrian iconography of power and leadership from its origins in ancient times through to modern times and identify the transitory position of contemporary management, moving into a post-centaurian age in which the complex iconographic reservoir of meanings and figures is supplanted by new forms of managerial reasoning, founded in the long legacy of the anthropocentrism of the Enlightenment. Through an explorative approach, the systems theoretical approach of Niklas Luhmann is extended to include the modus operandi of pre-modern societies with its abundance of non-human actors such as demons, gods, angels and horses. In conclusion, the article demonstrates how the widely used idea of post-heroic leadership is a severe misconception of historical concepts of heroes; rather, post-heroic deeds are in adherence with equestrian treatises of heroic leadership which promoted the demonstration of heroic excellence in the equestrian manège. As the horses and the heroes of modernity are seemingly relegated to the confinements of history books, the reservoir of equine-heroic semantics and concepts is still with us today and continues to resonate in semantic figures of power, framing the life of the post-centaurian manager, politicians, Ukrainian soldiers and the plethora of societal realms still using the language connected to equestrian semantics.

**Keywords** Leadership theory · Management · Horse · Power · Organization · Practice of leadership · Systems theory

Black riders came from the sea.

There was clang and clang of spear and shield,  
And clash and clash of hoof and heel,  
Wild shouts and the wave of hair  
In the rush upon the wind:  
Thus the ride of sin.  
(Stephen Crane)

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War is back in Europe. The Russo-Ukrainian war has once again catapulted (retired) generals into the mainstream media, and public opinion has showed a renewed desire for swift and decisive action in this arena. Politicians steeped in the managerial approaches suited to times of peace were suddenly criticized for dragging their feet and wavering in their support. A great example was the prolonged initiative of German and international opposition, subsumed under the hashtag #freetheleopards (Noll 2023). Proponents argued that Germany should grant an export license for Leopard tanks produced in Germany, so allied partners could send their Leopards to support the Ukrainian cause. Not granting it right away was even considered to be aiding the Russian cause, leading to intense debates in the public media in the West. Once again, war entered European politics and demanded a radical acceleration of decision making. The tempo of cavalry charges of war replaced the logistics of peace in European politics. Leadership geared for peace was overrun by leadership fit for war.

Understanding leadership in peace and war needs a proper theoretical grounding, able to discern not just temporal differences, but being able to compare qualitative differences. When leadership in war is about accelerating the decision making (Osinga 2007), then it is more than longer working hours for politicians, managers, and generals. It incorporates decision making within the framework of war and warfare, which is almost always a deadly endeavor (Harste 2016b, van Creveld 1987), and builds on the technological and social facilities available for communicating leadership.

Understanding the specificities of leadership in times of peace and war requires a theoretical framework that incorporates the ability to split society in all its complexity into a two-sided universe of war and peace.

All wars eventually end (Reiter 2010). War studies and research in diplomacy identify multiple war-termination options. In our case, these are only of secondary interest. Rather, as we focus on the temporal aspect of leadership in war and peace, the theoretical framework requires a strong theory of temporal forms. Time does not exist per se, but rather is formed in semantic forms such as calendars, clocks or duration of kisses. And finally, the theoretical framework requires a clear-cut understanding of the socio-technical evolution of communication media and means of communication. When Napoleon governed his troops in large battles, he had to contend with the dangers of messengers getting lost, or orders arriving in the wrong order. Van Creveld's seminal study on command in war dedicates large sections on sociotechnical developments for coping with the conditions in which communication – of all kinds – takes place. In the case of Napoleon, an intricate numbering scheme was invented in the years 1806–1812. From then on, the division commanders were able to check if a message was legitimate and 'next in line' from the emperor (1985, 70–73). Only very few theoretical frameworks exist within the social sciences that provide us with the capabilities to incorporate the socio-technical, semantic and temporal forms of leadership evolution, divided into the realms of peace and war. Of these, only the approach by Niklas Luhmann "claims universality rather than exclusivity or a monopoly for its grasp of the social world" (Roth 2019; Roth et al. 2019a). The theory of society is conceived as a continuous feedback cycle between observations of the social world. If empirical findings cannot be accounted for within the theoretical framework of social systems theory, the contradiction turns into productive evolution of the theory. In its new iteration, the contradiction is turned into a driver of theoretical evolution. In this regard, the Luhmannian systems theory of society is not a finished grand cathedral. It is a strong theory, continuously adapting to the challenges and irritations that new empirical findings produce. (Walther 2004). When theory observes itself as "an object of observation", it

becomes self-referential: “however, then what is true for its self-referential observations must be true for its heteroreferential observations” as well (Roth et al. 2019a, b).

To understand the fundamental change of leadership conditions and requirements in times of war compared to leadership in times of peace, we need semantic markers to discern what our ‘object of observation’ is as our guiding distinction. As a starting point, we shall identify leadership in war as heroic, while the leadership conditions in times of prolonged peace shall be called post-heroic. Societies operating in a mode of peace reneges calls for action and practice destined for times of war.

The advent of post-heroic leadership as a distinct approach to the conditions of leadership in a time after the end of the cold war is such an example. With its emphasis of a global power competition in a society contempt of threats of war and destruction. In the new world after 1991, leaders and organizations were not competing within a binary east–west framework. In the new world of cooperation and competition, the main competitor became self-referential: organizations entered into a competition with themselves to expand productivity, efficiency and capabilities. Whereas the heroic leader defended the organization, state or corporation against outside enemies, performing threat and mitigation efforts with SWOT-models, the new leadership condition of self-referential competition conceived forms of stable identities over time that instilled self-competition, often leading to radical changes in organizational and managerial practice. Nokia produced rubber boots before it became, for a short time, the world’s leading supplier of mobile phones. The semantics of self-referential competition understood itself as progressing beyond external competition; in line with the advent of post-modernism as society’s description of itself, organizations started describing leadership as post-heroic (Roth 1994). Research was fast to point out the deficiencies in the seemingly outdated fixation on individual action. With all its deficiencies, Harter & Havel argue that the term ‘post-heroic’ signifies a dissemination of power-relations within organizations, rather than expressing a psychological make-up of leaders in action (Harter and Heuvel 2020). It follows a growing argument that in the onslaught of complexity in an ever more interlinked world, leadership might even be dead and the whole business and research on leadership “is in danger of becoming obsolete” (Kellerman 2012: 200). This is confounded in the empirical study in the future of leadership challenges in view of current megatrends in societal transformation, conducted by Eberhardt and Majkovic (2016). Leadership framed in the industrial age is unfit for the twenty-first century. In its place, “...the most important and exciting leadership task of the future will be to connect different people with diverse skills, expectations, resources, motivations, national origins, talents, sexes and ages together!” and “the most important challenge for the development as a leader will be resilience” (2016: 46). Resilience, being the continuous process of ““try, error, and retry”” (2016:32).

Distinguishing between heroic and post-heroic leadership determines a temporal progression in which a new form supersedes an older practice. With reference to the war in Ukraine, we initially presented it as a binary distinction locked within the separation of war and peace; heroic leadership in times of war – be it hot or cold – and post-heroic leadership in times of absence of war. Adding the temporal aspect, the distinction collapses. There is no clear-cut distinction, no point in history where everything changes. The crucifixion of Christ or the bombing of Nagasaki and Hiroshima are radical breaks in the chronology of societal self-descriptions, but cannot mark a radical shift from heroic to post-heroic leadership across the board. As the war between Russia and Ukraine rages on, Ukraine continues to hand out its highest medal, poignantly called ‘Hero of Ukraine’. It is handed out in civilian and military versions, depending on the legal status of the recipient. Established in 1998, it continues in the tradition of two similar Soviet (now Russian) orders: Hero of the

Soviet Union and Hero of Socialist Labour. Temporalization neither delivers a clear-cut distinction nor does it offer a recourse to either a factual or a social dimension to frame the distinction. Answers to questions about what is being managed—or who is managing/being managed in a certain manner—deliver what Roth has termed ‘false distinctions’: they are, “unlike true distinctions, (...) neither mutually exclusive nor jointly exhaustive” (Roth 2019: 90). A true distinction delivers “perfect continence” (Spencer-Brown 1994: 1, cf. Clausen 2021a), splitting the world in two mutually exclusive and jointly exhaustive sides.

Distinguishing between heroic and post-heroic leadership is exclusive only if an observer decides to exclude all other available options, like listing Alpha and Omega, and disregarding all of the other letters in the Greek alphabet. Understanding these historical limitations, the socio-historical context in which the distinction emerged becomes even more interesting when we convert the distinction into a list. If it is possible to imagine and observe concepts of leadership predating the heroic form, then heroic leadership can’t be the primordial form from which post-heroic leadership evolves as an absolute opposition. Theocratic forms of leadership present themselves as an option for helping us understand leadership in the context of relations to divine forms of leadership. Extending an argument by Felder (2022) on the theological underpinnings of societal and individual optimization, the inherent self-referential competition in the post-heroic approach is a continuation of theocratic concepts harking back millennia, revisited, and reformulated in the Calvinist demand for self-enhancement (Felder 2022: 216ff). Heroic leadership then stands out as a prevalent historical exception. It is activated in situations of war or external threats, while post-heroic—or rather: non-heroic leadership—appears in the absence of war (Khan et al. 2022).

Societal transformations due to the emergence of new media of dissemination of communication since Eisenstein and Marshall McLuhan popularized their revolutionary capacity, have led to important theoretical breakthroughs in media history (Poe 2011) which Niklas Luhmann (2012, 2013) formed into a self-observing object of theorizing societal evolution.

If heroic leadership is the exception, then it must communicate exceptionalism; it must be identifiable throughout the ages and across the revolutions of oral, manuscript, printing press and electronic media galaxies (McLuhan). Heroes, and thus heroic leadership is scarce. It clads itself in semantics in both visual as well as alphabetical forms. Heroic leadership is linked to speed, strength, decisiveness – and has its reflexive moments in the silenced knowledge of the tragic suffering, despair and loss (Girard 1972).

This leads us to the question, how the relationship between humans and horses evolved in the context of leadership dynamics, examining the semantic and structural evolution of heroic and post-heroic forms of leadership from its inception to the twenty-first century.

To answer this question, we need to (1) get a thorough understanding of the history of man-horse through history, (2) tackle the theoretical challenge on how to understand and frame inter-species communication between horse and man within the chosen theoretical framework, and finally consider, (3) why the equestrian semantics continues to inform motives and narratives within both heroic and post-heroic leadership discussions, while at the same time, horses have left the farms, armies and infrastructure business.

Only then might we be able to answer, why the changes occurring are far more radical than what the post-heroic leadership research considers, as leaders and organizations move into the next society.

In this article, we propose to identify the mounted horse – the equestrian partner-in-crime for faster-than-human transport for approx. 5000 years – as an important

condition for both heroic and non-heroic leadership. As we shall argue below, the advent of the term ‘post-heroic leadership’ and its propagation mark a recognition of a radical change, a shift in societal conditions for communication, socio-technological transformations due to the emergence of digital technologies, and a waning of the (physical) use of the horse as a carrier of heroic leadership semantics.

It is important to point out that we by no means intend to demonstrate a complete theory of the co-evolution of horses and humans, leadership, or society. Our intent is to rectify and strengthen the societal recognition of synchronicity of (a) the ongoing media revolution, (b) the waning of the horse as bearer of semantics of heroism and rebase the existing arguments related to post-heroic leadership on a sound and solid theoretical conception of the fundamental shifts occurring, built on the systems theory of Niklas Luhmann.

In consequence, the invention of the term post-heroic leadership is a marker of the deflationary tendency in times of peace, while the renewed time of war generates an inflation in more than money: it generates inflation in the recognition of heroic leadership.

A far more fundamental issue is that the distinction itself will have to re-invent itself in a society in which horses have retired from most of the political and organizational activity occurring in the twenty-first century. Leadership, we argue, will have to re-invent its semantic in a world mostly void of horses. This is the initial starting point for the analysis of the advent of what we propose to name: post-centaurian leadership.

The argument engages with the topic of iconography of leadership and managerial powers in connection with the horse. Delving deep into existence and function of the horse through time and engaging with a theoretical exploration of how horses and communication have co-evolved over time. The analysis builds on the foundation of core systems-theoretical terms from the tradition of Niklas Luhmann, Steffen Roth and others, while it challenges the contemporary notions of horses as a legacy device and object of communication.

Society and horses have co-evolved for thousands of years. As this article intends to demonstrate the historical complexities of human-horse relations as the precondition of the iconography of power, embodies in the expression and understanding of leadership, it necessitates a wider use of historical examples than what would otherwise be needed.

The first section titled *in to the saddle*, provides a short introduction to historical evidence of the changing use of horses in the perspective of power. It invites the reader to acquaint him or herself with the long history of what horse-human relations in their changing relationship and mutual influence.

The second section titled *in the society of codes*, performs a shift in observation from history of horses to the evolution and encoding of power, as it engages with and disconnects itself from the imagery and language of horses. From the beginning, we introduce the close relation with the mythical notion of a centaurian motive.

The third section titled *iconic communication* combines the two strands or arguments from the prior sections into a wider discussion of theoretical feasibility of applying and transforming social systems theory for the use of widening the understanding of the human-horse relation, as it relates to power and leadership as a unique communicative form introduces as ‘iconics’.

The fourth and final section concludes the argument by infusing the insights of the centaurian motive into the framework of post-heroic leadership. As we shall argue, the tradition of post-heroic leadership got their understanding of hero wrong. By using the centaurian motive, it becomes possible to rebase the branch of post-heroism in the wider revolutionary process the emergence of the post-centaurian society. It marks some of the

symptoms and proposes ideas of managing the transition in the forming of power, leadership, and society by new expressions in the post-centaurian society.

## In the Saddle

Contemporary management and leadership theory excel in their analysis of what comes next, kickstarted by Druckers' work on managing in the Next Society (2002), followed by Baecker (2010) and others. Roth et al. (2019a, b) remind us of the need to adjust our theory forms to new social forms of communication. Wherever you look, the view presented must inevitably be formulated as: we are indeed at the beginning of a reinvigorated transformation towards the digitalized form of a next society in its global, quasi-synchronous trajectory – for the first time without the companionship of the horse.

This article takes us through historical events and semantics of management, government and leadership across a wide swathe of territories and periods of the Mediterranean-European history and ends in the contemporary challenges facing managers and theories alike in the transition from distinctly modern forms of organizations, leadership and management, contempt on adapting to a society readjusting itself to the new realities of compucentric forms of markets, organizations, and, last but not least, management and leadership.

Scrutinizing the very foundation of the concept of the hero and their horse, we identify central steps in the transformation from the cave images of hunter-gatherers to the battlefields of Troy and the mounted emissaries under the emperor Charlemagne, before we cease on the waning of the millennia-old concept of equine-human partnership in leadership training and performance. Looking back, we ask ourselves: How does the waning of the horse from everyday society impact the historical legacies of iconography of power, so ingrained in the societal tradition of symbolizing power, might and authority?

Once every while, transformative events occur that lead to fundamental changes in the very core of existence. A big bang occurs; a universe comes into being. Noah embarks on his ark; the gene-pool of God's creation is saved from the ensuing flood. Alphabetic writing emerges on the world scene; an unlimited number of universes emerges in the scrolls, tablets, parchments and printed books which appear. A volcano erupts and covers Pompeii in ashes. Kingdoms, republics and cities emerge and disappear from the surface of the earth.

Jesus rides into Jerusalem not on a horse, but on a donkey, where he dies and is resurrected from the dead after a painful and prolonged crucifixion, sparking the creation of a new religion.

An old philosopher rides out of a field not on a horse, but on a green cow, never to be seen again, leaving the Dao De Jing for generations of learned men and administrators alike in the eternal challenge of understanding the Dao.

Prince Siddhartha escapes the royal palace on his horse Kanthaka, whereafter he leaves his mount to a mourning death and goes on to become Buddha, riding on elephants. Horses, it seems – and stallions in particular – are unfit mounts for the origins of what turned new philosophies, or should one say religions, with a global following.

Pegasus flies. Another time. Another place.

The news of the destruction of Lisbon by a combined earthquake, tsunami and the ensuing raging fires on the day of the Feast of all Saints reverberated across Europe in 1755. For the first time in European history, the press enabled a near-synchronous

experience of the presence and immediacy of the catastrophe. The geological shockwaves eradicated the capital of the Portuguese Empire; the communicative shockwaves reverberated across an increasingly literate and literary public, fueling the growth of the public sphere (Araujo 2006). The news travelled at a gallop, carried by horses.

For millennia, men of outstanding powers have put considerable efforts into constructing monuments which commemorate their acts of glory, displays of strength and power to capture or give them immortality. This is illustrated in the words of Hector in the Iliad, who declares his intention to build a monument for a brave – yet unsuccessful – opponent:

*“Which when some future mariner surveys,  
Wash’d by broad Hellespont’s resounding seas,  
Thus shall he say, ‘A valiant Greek lies there,  
By Hector slain, the mighty man of war,  
The stone shall tell your vanquish’d hero’s name.  
And distant ages learn the victor’s fame.”*  
(Book VII, Trans. Alexander Pope, 1899)

It was up to the Romans to initiate a mass-production of monuments of mounted noblemen and, as Hunecks remarks teasingly litter public spaces with lavish equestrian statues of generals and Caesars (Hunecke 2008: 13). Today, the only surviving statue from ancient times is the one of Marcus Aurelius (Imperator Caesar Marcus Aurelius Antoninus Augustus) – the staunch stoic and ardent opponent of Christianity. It is quite ironic that the statue was saved by a double act of forgery. The first was the alleged contract in which the dying Roman emperor Constantine donated the Roman Empire to the Christian Church. The second was the renaming of the equestrian monument, allegedly depicting the emperor Constantine.

From the dusk of Renaissance Italy in Florence, Verona, and Venice, the equine statue re-emerged with renewed vigour until bronze horses lost out to other counterparts due to the rising frequency and intensity of upheavals and revolutions throughout mainland Europe. Through the centuries prior, the mounted prince had signified far more than just personal wealth and vanity. They had become icons of “royal simulacra and bearers of royal memory”, enforcing “re-presentations of an absent king imposed on the lived space of the city”, and were “swept away literally and discursively by the Revolution [in 1792]” (McClellan 2000: 5–6). Where princes and equestrian statues endured the tumultuous times of revolutionary shockwaves, kings and members of royal families retreated from their mounts, relinquishing the last signs of royal potestas as commanders of armies and sovereigns in their territories. The Danish King Christian X was probably the last mounted king in Europe, taking a ride through occupied Copenhagen during the Second World War. Albeit an experienced rider, he was a far cry from the mounted knights and princes from the glorious battlefields of the Middle Ages or the grandeur of equine display so important to his ancestors in the royal manèges of the ancient regimes. His riding was that of an experienced cavalry officer – in itself, a clear marker of the political transformation of potestas from the king to parliament and government. In this new age, power holders ride (or are driven in) cars, trains, popemobiles, or airplanes. The descendants of Christian X have fallen in line with the rest of European nobility, retreating to horse-drawn carriages with coachmen and coachwomen governing the horses, and ministers or secretaries governing the state.

The symbolic unity of man and horse seems to have come to a preliminary end. What started with the incomprehensible powers of Sleipnir, Odin’s 8-legged, highly intelligent horse in Norse mythology, and the centaur Chiron, the son of Chronos and teacher of such

immortal heroes as Achilles and Hercules, Odysseus and Ajax, ends as a piece of sports equipment or an expensive proving round for girls in puberty (Raulff 2018).

The historian Reinhard Koselleck argues that we are undergoing a global transition into a post-equine age [DE: *Nachpferdezeitalter*], driven by industrialization, electric, and now electronic communication, combined with the mechanized transport technologies powered by electricity and internal combustion engines. In contrast to the speed of ‘news’ in 1755, it no longer takes 14 days to traverse mainland Europe to get stories of events disseminated on the backs of galloping horses. Modern-day events – be they stock market fluctuations or the appearance of new tsunamis – are shared across the globe in an instant. The horse has been outpaced by the ever-accelerating social and technological transformation of contemporary society so vividly described by H. Rosa.

Management research framed the concept of post-heroic leadership (Roth 1994), rejecting the experiences and teachings from the ancient times of Homer. The heroic leader and the horse were both relegated to the past as figures unfit for a new age; a digital and post-industrial society emerging demanding completely new approaches to leadership. Leadership research set out to identify the unique traits and qualities of excellent leadership for the twenty-first century.

Sims and Manz calls for a “superleadership” (1991) as a replacement for the heroic approach. Bradford & Cohen describes the classical heroic leadership in its modern form as evolved into “Technician” (task-focus) and “Conductor” (string puller). The new times require a post-heroic “posture” (Bradford and Cohen 1984, cf. Peters and Waterman 1982) to build subordinates responsibility-taking. “History is replete with illustrations of ways in which charismatic, transformational and power-hungry individuals use coercive pressure to lead people to evil ends”, with an urgent need for a stronger emphasis on theorizing on the historical and contemporary forms of followership in organizations (Ford and Harding 2018). The heroic leader exhibits traits, skills and abilities are “socially ascribed to men in our culture and generally understood as masculine (...) In contrast, the traits associated with new, postheroic leadership is feminine”, requiring “behavior with new leadership practices is assumed to give women an advantage in today’s business environment” (Fletcher 2004). On the other hand, data from Australia suggests a framing within mass media of post-heroic leaders with a “fallback on masculinist discourse and heroism to frame the performance of post-heroic leadership, [and] can therefore be seen as a reformulation and reification of masculinities which therefore remain dominant in responses to changing societal contexts” (Khan et al. 2022).

The literature on post-heroic leadership, it investigates – and rejects – the dynamic, interactive part of the traditional hero motif (Campbell 1973).

Ajax and Agamemnon, Hector and Odysseus had not yet invented fighting on horseback (cavalry). half a millenium later, the politician, general and historian Xenophon wrote two short treatises on horsemanship for noblemen and knights with an intense link between the rider and his mount in peace and warfare (Xenophon 87). Two treatises treatise, that continue to be widely read and whose teachings are influential in equestrian circles across the globe. A warrior general leading his troops from the front, mounted on a strong and beautiful stallion. Yet his leadership approach was a marked departure from subjugating and commanding superiors in his (and our) times. “One can easily suggest this behavioral range describes the transactional-transformational leadership continuum that Bass and Avolio (1994) label as the full range of leader behavior. Xenophon was an exceptional leader for an extraordinary time. He consistently displayed leader behaviors and communication consistent with the factors associated with authentic transformational leadership (charisma, inspirational motivation, individual



consideration, and intellectual stimulation). By doing so, he created followers who performed beyond expectations.

There is little doubt that Xenophon can be held up as one of the ancient world's examples of a truly transformational leader and that his leadership style and behaviors should be emulated by those seeking to influence followers in today's turbulent times" (Humphreys 2002).

Bass and Avolio (1994) describe criteria for a novel approach to leadership, equivalent to the criteria proposed for post-heroic leadership of distributed decision making, active support for building followership, and empowerment of members in the organization. Xenophon describes the archetypical transformational leader, and instructs other leaders in good practice for how to perform in the role of leadership within a hierarchical organization, investing in building leadership from a post-heroic posture.

Chiron was a centaur by birth and became an adopted son of Apollon, the Greek God for wisdom. Chiron taught the heroes of European classical heritage, and ever since, man and horse have entered into a centaurian pact: men care for the horses, and the horses make their superior strength, speed, endurance and fighting capabilities available for (selected) men. The suggestion by Koselleck to distinguish our contemporary society from those still reliant on the strength, endurance and speed of horses as an epochal rift in historical time invites us to take a more thorough look at the forgotten importance of horses for societal structure, semantics, its functional importance for clergy and nobility, cavalrymen and peasants – and not least the ingrained part it plays in terms of heroic leadership.

## In the Society of Codes

Imagine a world devoid of order. The sun moves erratically across the sky. Grass grows in the frozen ground while wives get pregnant without any male intervention. Employees act as priests, and markets stop behaving according to accustomed rules and practices. For the last few millennia, communicative evolution has provided forms of spoken and written languages with the capacity to categorize experiences like these as something out of the orderly and out of the ordinary. The neolithic hunter who drew wonderful images in caves in Lascaux was able to express a sight of horses so plentiful, while his kin were living off deer, ox and other animals. We have no means of assessing whether this impressive display of artistry was inspired by mere wishful thinking or whether it was attached to magic and proto-religious aspirations. Whatever the language, they were able to *code* their drawn messages in a temporal form which speak of wishes or expectations for future hunting success, distinguishing between the presence in the illustrations and the non-presence of the horses and the other depicted animals in actuality. The images of the horses are acts of communication, similar to gestures (Corballis 1999: 145). Vocal gestures, growling and even verbal communication via spoken words are even more elaborate in their coding than their volatile existence as oral punctuation in the flow of time suggests. Not only do they evaporate as soon as they are expressed, but gestures are physio-motorial actions hugely dependent on *timing*. A raised eyebrow, a first kiss, the infusion of presentations with necessary rhetorical shocks or casual jokes are everyday examples we can easily relate to. Gestures are as relevant today as they were millennia ago. Business activities and decision-making processes are highly dependent on elaborate time structures to organize sequences of actions and decisions in corporate settings and to predict market behavior.

The form of iconic expression implies the code of drawings inside (on the walls in the cave of Lascaux) and the depicted horses roaming the steppes and grasslands outside the cave. Gestures disappear the moment they are expressed, and thus are extremely time-sensitive in their application. Nevertheless, the iconic cave paintings have a lasting presence for viewers. They span days, weeks, and—as we bear witness—more than 10 millennia. The drawings predate written language in alphabetic form; yet the writing is on the wall, as Armstrong points out:

*“What human beings appear to notice first is that the objects and events around them can be represented by signs that have analogous relationships with the objects or events they refer to. Visual representation can be expected to precede auditory representation because of the vastly greater possibility for iconic productivity in the visual medium.”* (Armstrong 2008: 307)

Were managers of the twenty-first century to meet the imagined artist from the corballis, they would be able to relate to a similar experience, which for most other events in human history would not be the case. Horses are known from images and stories but seldom from dining plates or from companionship in everyday life. The manager and the artist from Lascaux mark the two ends of Koselleck’s epoch of ‘Pferdezeitalter’, the age of horses – observed as similar, but not identical. What changed? How did initial domestication lead to an increasing differentiation of use-forms, escalated by intentional breeding and selection efforts throughout the centuries? How did we go from initial widespread domestication of horses 10,000 years ago to their use in agriculture, transportation, education, religion, warfare and politics, transforming corporate, financial and military-political leadership along the way? The trajectory is clear, yet even historians such as Koselleck have difficulty pinpointing and grappling with groundbreaking shifts from the point of view of a history of management and leadership formation through education and training in the co-presence of equine animals. It seems as if society not only made pacts with gods, but with animals too. Compared to the role and function of dogs, the *equuss* surpasses relevance in all but a few (semantic) frames. Horses have lent their bodies to the suffering and joys of human companionship, accepting death and punishment in return for societies’ dependence on equine powers and services, securing the survival of the species. This is the ‘centaurian pact’. “A horse, a horse”, Richard III cries out loud and puts the horse at an equal value to his realm: “My kingdom for a horse!” In Shakespeare’s play, no horse comes to his rescue – at least not in time. The king dies on the battlefield; the crown passes on. Shakespeare was acutely aware of the interlinked and intrinsic connection between military might, political power and the horse. Kings and noblemen on horseback were icons of power, immediately apprehensible to every peasant and every city dweller.

Charlemagne (742–814 CE) knew in practice what Shakespeare put unto words more than 700 years later. At the height of his power, according to lore, he moved the equine statue of the late-roman Visigothic ruler King Theodoric from the city of Ravenna to his residential castle in Aachen in a bid to link the ancient Roman Auctoritas to his kingship, the horse being so large “that birds would build nests in the nostrils of the immense bronze horse” (Dunning 2004: 62). Historical facts contradict the specifics of the story. The ‘history’ of the statue is far more contested – and the statue imported neither depicted Theodoric nor was it from Ravenna; most likely, it was an artefact from Rome itself (Friis 1932: 74). The statue in Ravenna is no less interest, though. It bore the name ‘Regisole’, the seat of the king. The Regisole endured wars and conflicts up until the revolutionary and Napoleonic wars, after which it was dismantled, destroyed, and the scrap metal sold off to a shipbuilder (Friis 1932: 78). The Visigothic ‘king’

Theodoric was raised in Constantinople, married the daughter of the emperor and, even though he was a king of his people (*reges Gothorum*), he effectively reigned as a Byzantine viceroy, taking Ravenna as his city of residence (Pirenne 1957: 43,46). In an age where *authenticity* was yet to be invented as a powerful tool in political communication (Moeller and D'Ambrosio 2019), strong messaging was driven by plausibility of *sincerity*. Moving statues from Italy to Aachen was a sincere effort to connect to the still-powerful eastern Roman Empire and to political legitimacy as King and soon-to-be crowned emperor by the pope in Rome. Statues and castles, churches and monasteries grew out of the soil across his vast empire. As a king, he governed his kingdoms from the saddle. Especially in the first years of his reign, he would hold annual or semi-annual councils at different centers of power. But it soon became evident that administering the multiple entities that made up his realm (spanning approximately present-day France, Switzerland, the western part of Germany, Belgium, Netherlands and northern and central parts of Italy, including Rome) was unsustainable. Instead, Charlemagne implemented a dual form of synchronization of communication across the territories. Relying heavily on written texts, the administration evolved a new form of *missus regis*, that turned into the *missi dominici*, literally the 'messengers of the ruler (and lord)', who would ride in pairs of one layman and one ecclesiastic nobleman to secure both representation of the double-sided authority of the holy king and pope, as well as safeguarding the administration from emissaries engaging in bribery and textual errors.

The *missi* were carriers of communicative codes. Computers are coded in computational languages. Computers do not (as yet) partake in human communication, and, for obvious reasons, never did so in the ages before their invention and mass-dissemination. Codes are codes in language. A code is a distinction. It splits the world in two, just as any distinction does. Ice cream and Sahara form a distinction, to which further communication can relate. For example, the business case of selling ice cream for dessert in deserts such as the Sahara, including aspects of production, transportation, storage, marketing, employment contracts, lease agreements, and which tastes, and at what prices, customers might be expected to buy the product.

The distinction of Sahara and ice cream does not constitute a code. It does not split the world in two, in a way in which no further value can or need be added, nor is it widely used in the empirical material of past societies, identifiable in the "...complete horizon of meaning in the exalted, serious communication worthy of preservation" [orig: ...der gesammte Sinnhorizont der gehobenen, ernsthaften, bewahrenswerten Kommunikation] (Luhmann 1981: 7).

Codes, on the other hand, splits the world in two, entertaining the fiction of completeness. Up or down is such a code. For the simplicity of expression, codes will be written with a slash (/) as dividing mark: Up/down. In codes, "[t]he two values can be translated into each other to negate calls for a positive operation of the system, and the position is logically equivalent to the negation of its negation." (Luhmann 2012: 134).

In short: if the distinction can easily be extended by another distinction, adding another value, it is the beginning of a list. If it is stable and coherent in its dispersed use across society, then it is a code. Codes can also be converted into lists. If this happens, they cease to be codes: from up/down to top/down/center. The functional relevance of codes in communication is defined by their transformation from generalized expression – i.e. the code being widely present and adaptable to a sheer unending context of possibilities – to concrete, relatable situations, such as a guard at the city entrance observing the two *missi dominici* approaching the gates from a distance. As Luhmann has it, "[C]odes such as good/bad, true/false, and property/nonproperty also perform the schematization function. In using

schemata, communication presupposes that every participating consciousness understands what is meant, but also that this does not determine how consciousness systems handle the schema, let alone what follow-up communications result from the use of schemata”, where “...[t]hey serve as reductions of *structural* complexity in the development of *operational* complexity” (Luhman 2012: 61).

From the medieval managerial-political perspective, four codes are inscribed in the *missi*. The first code is the distinction between political and ecclesiastic powers, represented by the appointment of a worldly, secular nobleman as the emissary of the king. The second code is the distinction between the written text and the oral witness. In a society based on oral communication, swearing oaths and bearing witness are deeply ingrained in the social structure. The third code is the distinction between the king and his subjects. The *missi* represent the king’s presence in his absence. And finally, the fourth code is the distinction between holding council and preparing for the next council, that is: between now and then.

What binds the four codes together and makes them immediately “operational” for the guard to see, is the presence of horses. In the medieval period, both law and economic hardship ensured that only aristocratic knights, the king’s court, and – to some extent wealthy members of the ecclesiastic noble classes – had access to horses. In an age of sumptuary law which laid down a clear visual code of hierarchy and status, were the *missi* to arrive by foot, without an entourage, they would not have been discernible at a distance, nor would they have been accorded the elevated status they had on horseback. Claims of nobility and credentials were immediately visible, as any man (or woman) could instinctively discern a trained horseman from an imposter. It was as much the horses, however, as the men, and the role that both played in contributing to a unified whole that provided the key for validating ‘operational complexity’ (Fig. 1).

Contemporaries and modern-day researchers alike are able to extend the list(!) of suggested codes to a multitude. To test the viability of a given code, it has to conform to the criterion of binarity, set forth by Luhmann, where a given value of the code “is logically equivalent to the negation of its negation” (Luhmann 2012: 134). The other test is to see whether it is compatible with the predominant form of societal differentiation present in the very location and period in which it is used. For example, physical/ ‘digital’ presence is invalid in the case of the *missi*, as communication while absent needed emissaries to relay whatever content the sender wished to present in the communication situation, and digital code in the modern sense did not apply then. This perspective is contested by recent research into the social function of the Holy Ghost as the arbiter of synchronized understanding across vast distances; in essence, enjoying the performance of a medieval internet (see Jensen 2020).

#### ILLUSTRATION 1: CODES OF LEADERSHIP IN THE *MISSI DOMINICI*

Code 1: Political and ecclesiastic powers

Code 2: Text and witness

Code 3: King and subjects (horses)

Code 4: Now and then

**Fig. 1** Codes of leadership in the *missi dominici*

Shortly before his death, Luhmann suggested the notion of a ‘supercode’ of inclusion/exclusion for a next society in the twenty-first century (1995). A code of all codes, to include all codes. The prefix ‘super-’ was used in his concept of self-recursive theories: theories that were able to “relate the relations of objects” (Luhmann 2008: 74), generating the “circular closure” (Luhmann 2008: 94) of the given theoretical proposition. Demanding a “theory that would be of universal relevance” (Moeller 2006: 200) would evolve towards the proposition of “autological” element[s]” of self-recursivity (Luhmann 2012: 1) in the very cathedral of theoretical architecture. Dorschel (1986: 16) suggests a similar ‘autologic’ conception of codes in operative use, identifying the ‘code of all codes’ as transcendence/immanence, the coding most prominently attributed to religion in modernity. For the *missis* in the society of Charlemagne approaching the guard at the city gate, it was not a question of theory, but rather of coded communication in practice.

## ILLUSTRATION 2: SUGGESTIONS FOR SUPERCODING\*

### Code 1: Political powers and ecclesiastic powers

V: Delegation of powers

H: Presence of absent princes and cleric

### Code 2: Text and witness

V: Hierarchy of trust

H: Dissemination techniques

### Code 3: Kings and subjects

V: Taxation and spending

H: Jurisdiction and protection

### Code 4: Now and then

V: Divine glory or misery

H: Church calendar

**Fig. 2** Suggestions for supercoding\*

The stratified societies of Medieval Europe and of the Byzantine Empire were divided according to a system of dissimilar and unequal differentiation (Roth 2014). The disparate strata of peasants, city burghers, men of the church, and finally the nobility each had their individual “full” set of functions and services. Just enter any medieval city and find a list of the churches and private chapels then in operation. The merchants had one, the guilds, the commoners, and the noble families had one too. After the tenth century, monasteries and royal chapels or churches stretched their steeples and pointed arches higher and higher in competition with one another. Distinguishing affiliation was done by dress, specific artifacts displayed by the wearer, and, in many cases, the possession of horses and/or carriages. The distinguishing markers were not conceptualized checklists of membership and affiliation, but rather a situational decoding of present and absent objects, as well as a relation of relations coded in objects present/absent. As Shakespeare noted, a king without his horse – at least in the midst of a raging battle – is a king in name only. The horse of Richard III and the horses of the *missis* are the icons of the supercode. Iconic coding. What was the code of codes? Following the recent suggestion by Michel Serres, we propose the supercode to be vertical/horizontal (Serres 2021). The suggested supercode is compatible with the self-descriptive and differentiated form of the stratified medieval age from the rise of the Roman Empire to the implosion of the *ancien regime* at the hands and musket balls of the Napoleonic wars (Clausen 2021b; Luhmann 1980). Neither vertical nor horizontal is directional – or even geometrical – without further distinctions. An architect of gothic cathedrals implements geometric distinctions of down/not-down and here/not-here to span a 2-dimensional plane and can easily create three dimensions by subdividing the horizontal into two concurrent distinctions of here/not-here and there/not-there.

Let’s take the codes from Fig. 1 and test if they are indeed able to be supercoded by the proposal vertical/horizontal.

To re-code, or rather in-scribe the code in the supercode, it needs to be compatible with both values of the supercode. Inscribing the first code of political power/ecclesiastic power into the vertical category, condenses the issue of delegation of power to the monarchy and the papacy. This is an issue that infested society in the investiture struggle (1076–1122) (cf. Berman 1983) and again in the aftermath of the Protestant Revolutions (Kaufmann 2009; MacCulloch 2005). In the horizontal category, it condenses the complications of the presence of city administrators, courts and churches served by lower clergy, while kings, bishops and popes were present elsewhere, and –in many cases – would never enter the city gates.

Corresponding suggestions are possible for codes two to four. The reader is invited to test ideas, such as whether text/witness can be inscribed into both vertical and horizontal categories, e.g., as markers of trustworthiness or of dissemination techniques (Fig. 2).

The supercoding occurring with the equestrian *missi dominici* condensates (Luhmann 2017: 71) disparate codes into a stable aggregate. When the supercoding emerges, it does so as a *hotspot* (Serres). The *hotspot* is fundamentally visible *primarily* as an act of iconic communication through the observation of the (noble) horses, and only *secondarily* by means of calling out names, crossing the city gates, or through the textual (re-)presentation of signed Instructions by the court administration. The horses *are* the hotspots; yet the usual reading of Luhmannian theory leaves no room for the horses in the act of communication – so who communicates? It begs the question, if the notions of meaning-producing systems and recent developments in the field of inter-species communication challenges the approach and rather considers horses in their own capability of meaning-creation, intrinsically linked to communication related to humans. Written language delivers a radical expansion of the abilities of communication to disseminate and store language. Horses, it seems, are inherently linked to non-written communication amongst those present. As

language expanded into writing, empires emerged with their administration relying on written texts (Eisenstadt 2002). The latest transition into a widespread written administration occurred in Europe under the rule of Charlemagne.

Charlemagne must have been acutely aware of the distinction between alphabetic and iconic communication. As was typical of the warrior kings of the medieval age, he had a very limited comprehension of reading and writing alphabetic texts. His patronage of production, collection and multiplication of written sources (books – in fact, scrolls) was divided in two sections: lavishly illustrated ones fit for royal libraries, and unassuming practical copies disseminated to monasteries, administration centers and clerics. Sumptuous books such as “the *Godescalc Evangelistary* (...) written on purple dyed parchment using gold and silver ink” and other books bound in silver and decorated with gold and jewels, were “made for the emperor to present to loyal dignitaries, much as they would offer him gifts of jewelry, horses or land” (Pettegree and Weduwen 2021: 39). The alphabetic writings were invaluable for lower clergy and courtly managers – not unlike modern-day computer-coding languages seldom permeating the higher echelons of corporations or the ivory towers of social researchers. Charlemagne and his successors from the ninth century to the nineteenth century, albeit changing societal circumstances with the advent of the mass dissemination of texts, growing literacy, and mechano-technological developments, continued to invest in the ‘iconics’ of equine communication, even after it had relegated its ceremonial, agricultural and military functions to cars, airplanes, and tanks. ‘Iconics’ marks the communication part of the tradition icon. The iconics of horses or otherwise is a relational category, defined by the limits of communication.

And so posterity awarded him with the moniker “the Great” – Carolus Magnus in Latin and Charlemagne in medieval French. The spell continues: A recent biography even declared him “Father of a Continent” (Barbero 2004).

It had taken more than two millennia for the horse to turn into an icon of might and power. The ancient Greeks developed their *hippeis* in response to the ever-raging conflicts between Persia and the Greek city states. These cavalry horsemen did indeed use their horses for transportation, processions and ceremonies, but they seldom used them in battle. Rather, they used them for quick maneuvers and skirmishes, where they would dismount and fight on foot. The Egyptians continued to use chariots long after their pursuit of Moses across the Red Sea. The Macedonian king Alexander the Great invited the horse into battle itself with his massive use of mounted warriors. We shall return to Alexander the Great and his horse Bucephalus below.

## Iconic Communication

The perspective in this article is the present in the first quarter of the twenty-first century. For the first time, it seems that humanity is embarking on a journey of social transformation, limiting the horse to select use in restricted functions of economic investment, sport, and the emotional regulation of pubescent female teenagers (Raulff 2018) and war-torn veterans (Shelef et al. 2019).

The story of the long transformation—and deepening—of the equine-human relation from prehistoric times until the present is well researched by others (Raulff 2018; Forrest 2017; Kelekna 2009; Friis 1932). They inform our work but are otherwise out of scope; not least since the communicative turn in cultural theory from the 1970s onwards. Since then, it is not so much the (im-)material object itself which structures the reality it inhabits,

but rather how language creates and structures that reality. From then on, social research has focused on what words and expressions, categories and qualities have been ascribed to horses in the different use-cases of language. This is by no means an unproductive perspective, but it struggles with problems of delineation: where does the horse end and the linguistic expression ‘horse’ begin?

Amongst others, Niklas Luhmann reframed the theory of society as a theory of communication (Luhmann 2012, 2013). Combining the theoretical strands of social evolution, social differentiation, and aspects of medium theory, Luhmann developed a coherent and stringent theory of the modern, functionally differentiated society, filled with organizations that criss-cross the different categories of economy, religion, education, politics, warfare, art, science, mass media, sickness, legal matters, and sports (Roth 2014; Harste 2016a). Luhmann did away with any uncertainty regarding boundaries. Society is conceptualized as the sum of all communication. The boundaries – the limits of communication in outreach, in topics, and finally in dissemination and storage – are the limits of society. “Humans cannot communicate; not even their brains can communicate; not even their conscious minds can communicate. Only communications can communicate” (Luhmann 2002: 169). For Luhmann, humans, gods and even horses are relegated to the outside of society, conceptualized as systems of diverging types (Clausen 2021a).

Contrary to Koselleck (Raulff 2018: 72), and the founding father of cybernetics, Norbert Wiener (Andrews 1991), Luhmann did not entertain training as cavalry officer, nor are there references to hippological aspects of courtmanship or equine aspects of transportation and iconography in his works. In his analysis of art as a social system, horses are only mentioned once. Commenting on the higher levels of freedom gained by art depictions, given the modern day decoupling from reality, he gives the example of “blue horses, talking cats, dogs with nine tails... [and] other “psychedelic” realities” (Luhmann 2000a: 147). There are no further references to saddles, bridles, trots, galloping or other equine and hippological aspects either literally or figuratively,

Coherency is key in Luhmannian works. In his major work on religion, the situation is identical. No equine references are to be found in the magnum opus *Theory of Society I+II*, originally published in 1997. he only two references to be found is in relation to protest movements, where “the temptation (...)[is] strong to ride the other side’s moral high horse” (Luhmann 2013: 159), a commonplace term in the German language, while the other relates reins to power in politics.

The trope is suspiciously absent.

The same goes for the notion of icons and iconic communication. There are few references to iconography in *Art as a Social System*; none at all in his *Theory of Society I+II*; and only 5 references in *A Systems Theory of Religion* (Luhmann 2003). We are nevertheless lucky. According to a note by the translator, the German “Chiffre”, a term occasionally used by Luhmann in his *Soziale Systeme* from 1984, and to be found in his publication on religion, has a very specific meaning in the Luhmannian oeuvre: “A cipher [Chiffre] for Luhmann is not simply a symbol, nor does it simply refer to something else. Instead, it is a linguistic device whose function is more indexical than indicative (or iconic).—Trans.” Luhmann 2013: 24, Footnote 3). The paragraph which relates directly to the comment by the translator specifies the function of the “Chiffre” in religious communication, where every act of communication is embedded in the code of the inclusion of the absent: “Religion has to do this with the inclusion of the excluded, the presence of an absence that is first objectified then localized and universalized. But everything thought and said about these issues here and elsewhere, in religion and in its sociological analysis, can only be a cipher [Chiffre] for what is intended.” (Luhmann 2013: 24).



Iconic communication in religious matters seems close to being identical to the function which we identified (a) in relation to horses in the case of Charlemagne's *missi dominici*, (b) in relation to the equine statue in Aachen (which was not from Ravenna and did not depict Theodoric, even though both were promulgated), and (c) in relation to the lavish books as artifacts in Charlemagne library. All three examples represent the inclusion of the excluded. They mark the presence of an absence and finally objectified, transforming the structural complexity into localized, operational complexity in the factual interaction between the emissaries and city administrators, re-framing and re-charging the structural complexity with the experiences of their presence. Once interaction commences, the iconic form retreats, much in the way that horses retreat to barns and stables. Once again, the iconic element is attached to the horse, rather than to the emissaries in person. The same was valid for books, as the book itself iconified importance, and aggregate of books in libraries, iconified aggregate importance in monasteries, ducal administrations and in the emerging modern universities. This explains why equestrian statues were toppled and overthrown during revolutionary wars in central and southern Europe, as these kinds of statues were iconic reminders of an absent or deceased king's presence, and it befitted proponents of the new regime to destroy both the king *and* his mount. They were more than symbols of royal power. They were a cipher of the citizen's exclusion. Luhmann's description of the religious cipher applies equally to equestrian statues: "the presence of an absence [of the revolting citizens from the governing bodies (author)] that is first objectified then localized and universalized". The simultaneous presence and absence of the protesting citizens was cast in bronze and could only be understood as a cipher. The cipher is the encryption of the symbol of power. For Luhmann, "[s]ymbols are not signs, pointing to something else. They presuppose the difference between familiar and unfamiliar and they operate in such a way as to enable the re-entry of this difference into the familiar. In other words, symbols represent the distinction between familiar and unfamiliar within the familiar world. They are forms of self-reference using the self-reference of form. In fact, symbols have developed as the successors of myth, replacing it first by symbolic interpretation and later by pure symbolism" (Luhmann 2000b: 96). The evolution of the symbol follows the evolution of the centaurian form: at first, Centaurs were a myth. Afterwards, they became a symbol of man-horse unity, strength and violence, the centaurian pact.

A detailed study of the lost equestrian monument by Bouchardin of Louis XV in Paris, published by McClellan (2000) is worth quoting extensively:

*Once consecrated by an elaborate inauguration ceremony, the royal monument simultaneously bodied forth the absent king and represented the dignities and hereditary claims of the French monarchy which he carried with him during his reign. The real body and the symbolic body, the 'king's two bodies' of French political theory – these the royal monument fused and presented in a tangible, opulent, and public form. Owing to the potency of this double function of representation, the fusion of image and prototype coupled with the symbolism of monarchy, these royal monuments were systematically destroyed in 1792. Born and sustained by ritual, they were ritually demolished, paving the way for the execution of Louis XVI next to where Bouchardon's statue once stood – an event 'as close to a ritual sacrifice as anything in modern history', in the words of Lynn Hunt.*

It became another nail in the coffin of the *centaurian pact*.

We have one last theoretical issue to contend with: the limits of society and the relation between horses and communication. The hitherto performed analysis has not strayed much

from the paths of research and the analytical perspective proposed by Schramm et al. in *Herrschaftszeichen und Staatssymbolik* (1954-1978) and *Die Macht der Rituale: Symbolik und Herrschaft im Mittelalter* by Althoff (2012), albeit that the method of semantic analysis from historical sociology applied has been different.

Above, we asked the question of where the horse ends and where the linguistic expression 'horse' begins. Based on the conceptional work on the empirical example of the *missis dominicae*, a placeholder for innumerable examples from Roman rulers to the rise of their absolutist successors across Europe in the seventeenth century, the answer is linked to the linguistic device that marks an index of finite codings iconified by the figure of the horse, indivisibly related to a mounted knight, prince, nobleman or—by proxy—pulling a carriage with bishops and cardinals. It is the icon of the *centaurian pact*, indexing the multitude of codes and codeshifts from ancient Greece to the advent of steam powered trains, cars, airplanes and finally: tanks and machineguns. Throughout the ages, the centaurian pact has reinvented itself, investing in new means of coding, to support the leaders and managers of emerging organizations and corporations.

No horses for the founders of religions, though. Laozi, Siddartha, and Jesus all strayed away not from the horse itself, but from the icon of the horse, thereby breaking free from the spell of the centaurian pact and rejecting the codes of worldly power and nobility. Religion needs a footing based on fundamentally anything but equine hooves. Donkeys, elephants or carts pulled by oxen carried no burden of equivalent iconic coding; thus, the emerging religions were free to construct their own *Chiffres*, their own icons of communication. The Byzantian and Roman evolutions of Christianity settled on the cross. The rest is history (Müller 2022).

The last theoretical issue raises the level of abstraction from specific values in codes to more formal considerations of (a) code specificity and structural coupling in the operationally closed systems of communication (society), (b) psychic systems in horses and humans and finally, (c) couplings between the animate bodies of horse and man.

The beautiful prince mounts his white stallion in full ornament. Off he goes into the sunset, in the quest for a princess to bring home to his parents' royal castle. Once again, the horse is the messenger, the iconic device by which the prince appears as – and is known to be – a prince. Were our prince to ride a goat, and have mud in his pockets, as the youngest boy, Clumsy Hans, does in the fairy tale published 1855 by Hans Christian Andersen, there wouldn't be much princeliness about him – which is the exact motive applied by Andersen. He knew only too well the waning spell of the Centaurian pact. To protect the integrity of the reader and the pact, Andersen put in a gentle reminder of the grotesqueness unfolding in the fairy tale at the very end: "So Clumsy Hans was made a king, with a wife and a crown, and sat on a throne. And we had this story straight from the alderman's newspaper – but that is one you can't always depend upon" (Andersen 2022).

Our imaginary prince on his white stallion learned to ride on the training grounds close to the castles he frequented. The young nobles in early modernity were taught the art of the Haute École, the high school of riding at academies for knights [Ritterakademien] across the German, Austrian and Danish territories, including Academies or Colleges in the Baltic States, Kaliningrad and western parts of modern day Poland (Conrads 1982). In the territories of present-day Netherlands, Belgium, France and Spain, young noblemen were taught at the Haute Écoles. Those wereregional, specialized riding schools, increasingly converted into princely or state institutions during the second half of the seventeenth century and at a heightened pace throughout the eighteenth century.

Simultaneously, cavalry became part of the ever-growing standing armies of Italian condottieri and the emerging states across the European continent during the Thirty Years'

War. Notably, the horses of the cavalry (and other military horses) were horses owned by the state. Slowly but surely, the ways of riding that cavalry officer used and the ways of riding that were taught in the princely Haute Écoles split; cavalry riding won the competition for the dominance of the nobles in the officer corps as it adapted to the changing battlefield of guns, cannonballs, and heightened mobility throughout the eighteenth century (cf. Black 2001: 194), incorporating the swiftness and agility of the horse people from the Mongolian steppes (Keegan 1994: 188–90). The heavy battle horses used by knights performing what came to be known as the levades, pirouettes and terre-à-terres in the Haute École of the royal manège were only useful in close combat with frightened infantry armed with bows and spears standing in close formation. For the cavalry horse and his lancer, cuirassier or any other of the branches of mounted arms, training the (much lighter) horse in the art of princely riding was seen as an act of superfluous expenditure, putting stress on both the horse and his rider to perform unnecessary tasks. The search for efficiency has always pushed warfare towards a maximum use of available energy and resources before it nevertheless succumbs to the friction of war, as Clausewitz noted in his breathtaking work with the unpretentious title ‘On War’, first published posthumously in 1832 (Clausewitz 1909).

We are slowly picking our way towards the final theoretical issue of abstraction. The religions or philosophies of Daoism, Buddhism, and Christianity sidestepped the Centaurian pact. The tormenting storms of the Napoleonic wars ripped the iconic communication of horses as the caring mother rips the band-aid off her boy’s healing wound with dread. At home in their ceremonial uniforms and duties, the riders of winds, be they on horses or on naval vessels, still carried the iconic sign of centaurian legacy with them. But in battle, and in the writings of the Prussian officer Clausewitz, an unsentimental attitude towards horses emerges: absent are the praise and care for good horses from the sprawling literature of hippological training of young noblemen in the manège, decried in its loss by the first Earl of Newcastle in his exile from the Cromwellian regime. A distant scholar of Kant, a man with able powers of critique, reason and willpower enters onto the historical scene and contests the horse as an iconic device. The *ancien régime* and its iconic forms of communication wane on the Prussian side while it stirs in a final absurd manner in the glorification of Wellington’s stallion Copenhagen and Bonaparte’s Marengo. It took just a century from the operational disconnection from horses as nothing other than a means to an end, providing valuable kinetic energy to armies and their entourage advancing into Russia and retreating after the first weeks of cavalry attacks on the western front of the industrialized First World War made “...it clear, to all except some of their own commanders, that heavy cavalry was now an expensive anachronism” (Howard 1976: 104).

Napoleon was considered a horseman notoriously lacking in technique and training. As a trained artillery officer, his instructions were light during his training as an officer. As contemporaries of both allied and opposing forces noted, there was a clear disparity between the promise of the magnificent horses he rode into battle on and the weak riding performance he showed. The icon and the expected coding didn’t match up – the iconic link transforming the *structural* complexity of imperial horsemanship failed in compliance with the experiences of *operational* complexity. Instead, something either just seemed off – or worse still: turned comical.

People who observed Napoleon when he was on horseback were acutely aware of the communicative couplings between the mind and body of horse and rider, as most if not all of these observers would have been in the saddle themselves. As any experienced rider immediately senses when confronted with limited excellence in beginner riding, there is a difference between ‘correct’ bodily muscular movements and feedback from the horse on the one hand, while the beginner seems dis-connected from their mount on the other. The

situation is completely analogous to experienced leaders and managers observing new and inexperienced ones taking their first steps in the early days of entering new leadership or managerial positions. In these new situations, leaders need to re-calibrate their feedback channels and reconstruct an innate understanding of the inner workings of the tasks, duties, employees, customers and markets at hand. In the case of the human-animal relation, we can find inspiration in the discipline of bio-semiotics.

The acts of managing multiple codings inside organizations—a daily challenge for managers and executives alike—or the supercoded codes embedded in the iconic device of the horse or cross, have – until now – been anchored solely in the realm of societal communication. Luhmann ventured into limited endeavors of structural coupling of mind and communication. Language is the most common coupling technology. One doesn't learn to ride a bike by being told how to do so. It might be that the learner learns how to describe and perform a future presentation to other learners on how to ride a bike, but riding a bike is an embodied activity which demands structural coupling between the mind and the body in which it resides. Hoffmeyer and Emmeche suggest understanding the organism as an integration of “substance and information into a unitary relationship unfolding at different levels of complexity” (Hoffmeyer and Emmeche 1991: 122), with language being the digital code of human culture and DNA the digital code of life in organisms. Coupling the two digital codes along the lines of presence or absence of the code, leads to a matrix with four possibilities (Fig. 3).

From a biosemiotic standpoint, where language is seen as an emanation of living organisms, the dual coding of organisms and language seems valid (Barbieri 2008). Conversely, a systems-theoretical approach sets communication first and projects conscious and living systems in the environment – that is – the outer side of the realm of communication. The environment needs a further introduction of “two environmental concepts, namely (1) which is relevant to the system, determined by it or yet determinable, for the phenomenal environment from one side and (2) the further ‘ecological’ environment, which offers the possibilities of relevance and determination system-independently conditioned and can only be understood from the system as world, as a

<b>Secondary digital system</b> / <b>Primary digital system</b>	<b>DNA</b>	
	-	+
-	1 Inanimate nature	2 Life sphere
+	3 A.I. ?	4 Human sphere

Fig. 3 Illustration from Hoffmeyer & Emmeche 1991

horizon for further exploration” (Luhmann 2017: 76). Observers keen on identifying digital codes in the relevant environment to the system of communication have verified the plausibility of doing so; thus, the world offers possibilities of determining digital coding in living organisms, and the approach has been validated (Hoffmeyer 2002). From the discipline of inter-species communication, Jones (2020) argues, that the non-verbal communication between rider and horse is a double-contingent expression through miniscule sensory actions, which through intensive MRI-scans show a mutual offloading of cognitive capacities to the other part of the horse-rider partnership. Situational awareness becomes the task of the horse, while the human engages in goal setting, providing a mutual offloading of task-based cognition.

The matrix above follows the structural argument of identifying four possibilities to any (logical) proposition. In its completeness of expressions, it ignores the excluded outside of its argumentative boundary. As Roth et al. (2021) have shown, in relation to the dismantling the empirical-normative distinction in CSR theory, the method of the tetralemma negates all four valid possibilities and asks: What emerges?

What emerges are non-digital coding formats, which Xia conveniently defines as analog coding: “Language is featured by both analog and digital communication”. The analog mode of coding, we suggest, is the backdrop against which the binary form of communication codes scans its values, a proposal set forth by Hoffmeyer in 1998 (Tønnessen et al. 2019: 357). “The development of the writing system from images or icons to alphabets is the development of an analog communication to a digital communication” (Xia 2007), leaving the Luhmannian concept of *Chiffre*, or as we call it, ‘iconic communication’, as a remnant of pre-binary coding which arose in segmented societies of empires at the ascent of the early, non-alphabetic forms of iconic writing in Egypt, Mesopotamia, India and China during the so-called axial age (Assmann 2018) used the analog coding of writing (or low-digitized, to use the classification from Xia 2007, cf. Robinson 2007: 44). Characters could stand for both sounds and concepts. You could ‘ride’ a character and you could look at it as a fellow creature.

Karl Jaspers accepts the suggestion by Alfred Weber on the advent of mounted horses: “When asked: why the simultaneity? So far there is only one hypothesis that is methodologically debatable, that of Alfred Weber. The incursion of the chariot and then the equestrian peoples from Central Asia—which in fact reached China, India and the West—it brought the horse to the ancient high cultures—has, as he says, analogous consequences in the three areas: Thanks to their horses, these equestrian peoples macould experience the vastness of the world. They seize the ancient high cultures by conquering them. With the ventures and catastrophes, they experience the dubiousness of existence, develop as masters a heroic-tragic consciousness that finds expression in the epic.” (Jaspers 2007: 29, trans. by the author; cf. Weber 1943: 54–71).

It is this incursion of horse cultures from approx. twentieth century BCE, introducing war chariots (cf. the Exodus-myth for their application by the Egyptians), and—even more revolutionary, the mounted horse warriors of the twelfth century BCE—that shook the bronze-age cultures to their core; raising and appropriating the horse as the analog-coded icon of wealth, might and power (Weber 1943: 208–212). These transformations from 1200 BCE to the time of Homer, with the invention of the ancient Greek hero, shared widely, lyre in hand, fueling the epics of the Iliad and the Odyssey attributed to Homer. He was the vessel that, in due time, made it possible to transform the oral tradition of storytelling – the analog language – into the new and digitally coded Phoenician Alphabet, now in use by the Greeks. The beauty of the Iliad with its heroes: Agamemnon, Ajax, Hector, Paris, Achilles and Odysseus, with all their faults and limitations, arguably lies in

its ability to transcode the iconic horse in written, digital language. The well-known motif of the Trojan horse alludes to it through the highly complex setting of Odysseus' warriors riding into battle *inside* the wooden—that is, man-made—horse. Many of the heroes of the Trojan wars in Hellenic Lore were, according to the mythological framework, taught by Chiron, the great Centaur, expert in the arts of civic life: of archery and sports, prophecy and music, as well as medicine and herbs. The horseman Chiron was guardian of—and taught—what he himself had been taught by his foster father Apollon, the god of wisdom, knowledge and insight in all things, worshipped by the virgin priests at the many temples across Hellas, including the Oracle at Delphi.

At the other end of the great Hellenic period of Greek city states with their political, philosophical, scientific, culinary, and musical inventions stood Alexander the Great, the king-to-be in the small kingdom to the north of Hellas: Macedonia. The historian Plutarch, a trained priest at a temple of Apollo, recounts the history of Alexander more than 3 centuries after the event in his *Life of Alexander*, in which he describes a prophetic 'centaurian' moment in Alexander's youth (Plutarch 1919: 6,1–5). An impressive horse was bought by Phillip II, King of Macedonia and father to Alexander, to be trained at the court. Bucephalus was untrainable, jolting and kicking to no avail. Alexander challenged the trainers, and in front of his father, got to work. Alexander saw that Bucephalus was scared of his own shadow (a phenomenon not unknown to trainers and riders today); Alexander turned the horse so it was facing the sun. As a result, Bucephalus could no longer see his own—or Alexander's—shadow. Swiftly, Alexander jumped on his back, and Bucephalus accepted him right away. After giving Bucephalus a few moments to adjust, Alexander paraded his mount in front of his father. Plutarch continues: "Philip and his company were speechless with anxiety at first; but when Alexander made the turn in proper fashion and came back towards them proud and exultant, all the rest broke into loud cries, but his father, as we are told, actually shed tears of joy, and when Alexander had dismounted, kissed him, saying: 'My son, seek thee out a kingdom equal to thyself; Macedonia has not room for thee'" (Plutarch 1919: 6,5).

Plutarch's narrative demonstrates the elegance of heroic leadership: not submission and violence, but use of superior insight to succeed. It is a story of seizing the right moment, understanding the context, and working with—not against—the animal (or organizational beast) in a fusion of analog and digital coding. Above all, it is a story of perfect *timing*. By then, the time of mythical transformations had long disappeared in the murky dark of pre-Homeric bards. Alexander didn't need to convert into a centaur; it was enough for Plutarch to let Phillip II implicitly mention the centaurian pact: 'seek thee out a kingdom equal to thyself; Macedonia has not room for thee.' It inscribed itself in the supercode of the *iconic device* that is the well-mounted horse.

It is a far cry from Clausewitz' assessment of young men: "If a young man to show his skill in horsemanship leaps across a deep cleft, then he is bold; if he makes the same leap pursued by a troop of head-chopping Janissaries he is only resolute." (Book III, chap 6). The difference lies in the conceptual use of the horse. For Alexander, taming Bucephalus was a goal in and of itself, the achievement of which allowed him to demonstrate his mastery of the *centaurian pact*, preparing him for the heroic tasks in the future. For Clausewitz, the leaping horse is assessed neither by leadership nor mastery, but by the inherent dangers of damage and costs to the mounted soldier and his horse. The issue of timing is thus vitally important in performing and excelling in leadership, whether it be heroic or otherwise.

## Conclusion

We set out to answer the question, How the relationship between humans and horses evolved in the context of leadership dynamics between heroic and post-heroic forms over time. The centaur Chiron acts as the key to unlock the mystery of the interlocking of the motives of practices and challenges for leaders from antiquity to modernity. The centaur Chiron represents a mythological, yet personalized ‘icon’ which fuses the analog codes of animate life to the increasingly digital coding of (written) language, appealing to young men, soon to be heroes in life and – what made them human after all – tragic figures in the tragedies of Aeschylus, Sophocles and Euripides, so famed and circulated in the Hellenic world and imported into the vast Roman universe of artistic circulation. From Rome, and from the archives of the Byzantine empire, Renaissance scholars and early humanists rediscovered the origins of the ancient fabric of the iconic fusion of analog and digital coding: the *centaurian pact*.

The evolution of what we in this article have named as the centaurian pact follows a trajectory from the dusk of ancient Hellenic myths to the waning of the Ancien Régime and Napoleonic Wars, from when on it was ridiculed as an increasing anachronism for gallant officers and easily unmasked as propaganda for political uses (Fig. 4).

The analysis has identified the four steps of the centaurian pact.

While equestrian statues were willfully destroyed, our argument has not been that deliberate acts of human willpower destroyed the centaurian pact, removing it purposefully from the heroic narrative. It was an effect of societal transformations in the societies which emerged in Hellas with the advent of writing, which went through a process of transformation to become large empires with vast administrative and economic resources, as the Roman Empire had, only to be split between Western and Eastern Christianity. Western Europe suffered a near-loss of literacy and a most devastating loss of access to the knowledge and semantics of Rome after the fall of the Carolingian Empire. The centaurian pact was reframed in Germanic stories of Roland, of Crusades and the warrior class of knights and higher nobility. From the twelfth century CE onwards, a renewed iconic communication of horses stabilized the centaurian pact, as

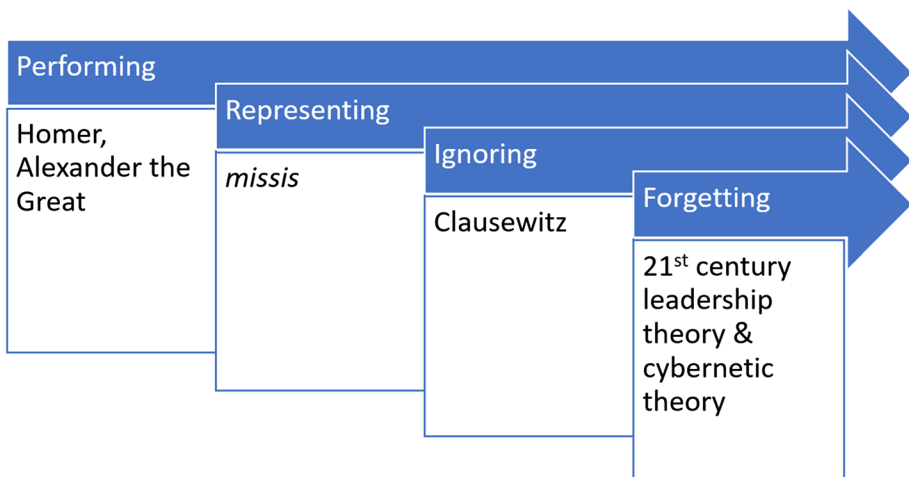


Fig. 4 The four steps of the centaurian pact

kings and princes joined the vanguard to lead their armies into battle – only to retreat to the rear in the sixteenth and seventeenth centuries, finally staying away in the 19th and 20th, delegating leadership to princes and field marshals who could sometimes be seen mounted on their own horses. At the same time, the population of horses grew tremendously and provided energy for transportation, for machines, and for meat to try to satiate an ever-growing demand for brute power. Cavalry equipped with state-owned horses resulted in country boys and city dwellers being conscripted into the army for cavalry duty. Horses, and with them the trade and expertise of practical horsemanship, sprung up across Europe and the colonies of Southern and Northern America. Horse riding – and indeed making use of horse power to drive machines, pulling barges and plowing fields – became a common experience. In a sense, it was the horse itself who freed itself from the pact with humans, and, in turn, invested in engines powered by fossil fuels, relinquishing the horses to near extinction in Europe after mass mechanization emerged after the trauma of the Second World War.

The challenge of leadership of organizations, corporations and institutions did not wane. As society grew in complexity, so did the demand for administrators, managers and effective leadership. The advent of the propagation of ‘post-heroic leadership’ started in 1924, when Mary Parker Follett wrote: “Leadership is not defined by the exercise of power but by the capacity to increase the sense of power among those led. The most essential work of the leader is to create more leaders.” (Follett 2013), repeating an earlier assessment by Manz & Sims: “In many modern situations, *the most appropriate leader is one who can lead others to lead themselves*” (Sims and Manz 1991: 18) Campbell, in 1949, well into the mechanized age of airplanes and individual motoring, popularized the motif of a ‘Hero’s Quest’ through the centuries (Campbell 1973). A generation later, Roth laid the foundation for the popularity of the term post-heroic leadership in a small. Afterwards, the very conception of ‘hero’ was quickly lost in the murky waters where consultancy and academia meet, prompting the conclusion that “post-heroic leadership is an unnecessary, misleading, derivative catchall phrase of negligible academic value” (Harter and Heuvel 2020: 12), in which only common denominator is the supposed fixation of an “outdated emphasis on individual agency” (Harter and Heuvel 2020: 11). Even as they reference Alexander the Great, any dimension of an iconic communication—not of force, but timing, setting goals and understanding the animal, human and societal factors and agencies in which the heroic leader is intertwined in—is nowhere to be found. The loss of the iconic communication of the *centaurian pact* in the twenty-first century is once again demonstrated as being lost. After all: the word leader itself “conjures visions of a striking figure on a wearing white horse who is crying “Follow me!”” (Sims and Manz 1991: 18).

In a recent article on post-heroic leadership by Sobral and Furtado, the authors identify three perspectives and three challenges in the new paradigm of post-heroic leadership. The first perspective states that leadership is a relational process. The second perspective established leadership as an other-centered process and the third perspective frames leadership as a collective process (Sobral and Furtado 2019).

The three ‘perspectives’ are in full compliance with all literature from Pluvinel in the sixteenth century, Gueriniere and William Cavendish in the seventeenth century on training noble princes and noble horses, further developed into the art of the Haute École by Comte d’Aure and Steinbrecht at the Academy of Equestrian Art and Cavalry at the French city of Naumur and the Spanish Riding School in Vienna. The details of the identical ‘perspectives’ from the trainers of princes at knightly academies and royal manèges of



centuries past will be saved for another article. It seems, as society has shed itself of the training grounds for the *centaurian pact*, contemporary research in post-heroic management and leadership is poised to relearn the lost art of heroic leadership, all the while when management theory and managers are amid a universal social transformation into an elusive *Next Society*. This time, managers and scholars must cope as best as they can, without the helping hoof of their equine partners. It serves as a stark reminder, that the leadership practice and challenges are dying. It does hark the ‘Death of Leadership’ (Martini 2014); rather, that whatever new forms of heroic and post-heroic leadership evolves, will have to cope with a post-centaurian society. And that is the real challenge for leadership research!

In more than a mere metaphorical meaning, it seems that sociological theories and scholars have quit the saddle of reciprocal (transactional) leadership dynamics. and so, too, has the highly influential theory of cybernetics and diverse strands of leadership theory left the saddle and instead opted for conceptualizing animals such as horses solely as ‘machines’. As demonstrated above, not only have horses left theory; so has analog coding disappeared into the realms of animal studies. Living organisms, in the words of Norbert Wiener, are ready to be reconceptualized: “Now that the concept of learning machines is applicable to those machines which we have made ourselves, it is also relevant to those living machines which we call animals, so that we have the possibility of throwing a new light on biological cybernetics” (Wiener 1948: XIV-XV), where the nervous systems are “capable of the work of a computation system, [and] contain elements which are ideally suited to act as relays” (Wiener 1948: 120). Men and horses, we learn, are “...social animals”, and they may have acquired “an active, intelligent, flexible means of communication long before the development of language” (Wiener 1948: 157). But the language is digital, binary and conceptualized without the iconic capacities of analog and digital coding. Sociological and leadership theory, in conjunction with partnering disciplines in management and organizational studies, are in urgent need of developing and testing concepts understanding human-animal relations. As machines develop further, both human society and animals will find themselves in the society of computers; how to ensure effective leadership in such a condition is a task yet mostly untested. Luckily, there’s precedent to be found, if research is willing to delve into the plethora of historical sources and semantic figures engages with the iconography of power within the age of the centaurian pact.

We end – not on a sad note, but with a clear task at hand: getting theories and scholars back in the saddle to understand the intrinsic heritage hidden beneath the frozen semantics of nearly four millennia of heroic and post-heroic leadership lessons, inscribed in iconic devices of equestrian forms. Theory needs neither Mark Zuckerberg nor Putin riding into the sun; nor do we need the digital battles of the Next Society, while the centaurian pact is left in the rear-view mirror of progress.

In a sense, Zuckerberg and Putin are placed in the same situation as the artist from the caves of Lascaux. One assumes that both know horses primarily from indirect media, even though Putin is known to perform some propaganda stunts on the back of a horse. Perhaps the Lascaux artists did as well. Nevertheless, we do not see either figure as a mounted rider. Both figures look towards a future with an uncertain outcome of massive transformations. The Lascaux artist sees the emerging fields of the new agricultural transformation. Societal observers of today see the rise of ‘dataculture’ everywhere. With a contemporary society both interested and weary of their own shadow, as Bucephalus was, the hunters from the plains beneath the caves of Lascaux and the observers of today have stepped out of the shadow of the centaurian pact and are now on their own. Literally!

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