

# Sperm Whales Have Culture Too: Strong Evidence That Clans, Culture, And Dialects Are Not Unique To Humans



*Hal Whitehead ~ Dalhousie University*

*02-13-2024 ~ The sperm whale is extreme.*

They have the largest brains and the largest noses on Earth.

The sperm whale's nose is a huge and sophisticated sonar device that produces the most powerful sounds of any animal--and we're only just starting to understand their communication methods and the spectacular complexity of their modes of life.

The facts about sperm whales rival in some ways the extreme capacities and behaviors that until recently we thought were uniquely human.

The sperm whale, for example, has the greatest geographical division between the sexes: The females live in tropical and subtropical waters all around the world, while the mature males, reaching three times the mass of the females, are mostly found in or near the Arctic or Antarctic. Sperm whales, particularly the females and young, are extremely social. They live in permanent family units of about 10 animals who move together over huge swaths of ocean. The females and young males babysit the infants while mothers make dives of 40 minutes to depths of up to a kilometer to catch the deep-water squid, which is their staple

food. Females also suckle each others' infants, and families defend themselves against predators communally. The family units form groups with others, but only limit creating these groups with other families in the area.

In 2002, fellow scientist [Luke Rendell](#) and I made our big discovery as we looked at the different dialects of the sperm whale family units that we had been studying off the Galápagos Islands. The sperm whales do much of their communication using patterns of clicks called codas. We noticed that nearly all the families made codas with one or other of two motifs: Regular codas such as "click-click-click-click-click," or Plus-one codas, "click-click-click-[pause]-click." They were consistent: the Regular families nearly always made regular codas. The Plus-one families similarly stuck to making their codas. And, although both types of families can be found in the Galápagos waters and formed groups with other families, we had never seen them group with each other. We called the collections of families with the same repertoire, clans.

The clans differ by more than patterns of clicks and grouping choices. They also tend to travel through the ocean differently. As we followed groups of sperm whales around the Galápagos Islands in our boat, those groups made up of Regular families wiggled this way and that, while groups of the Plus-one clan typically travelled in straight lines, making them much easier to follow. Groups of the Regular clan tended to all dive together, while the Plus-one groups staggered their dives, a cultural adaption that may provide for better babysitting. There is no sign of difference between clans in the nuclear genes that might code for behavior, so the differences between the clans comes down to culture. A young sperm whale learns the culture of her clan from her mother and the other females in her family and clan.

Following the discovery of different clans off the Galápagos, pairs of clans were also discovered in the waters off Chile, Japan, Mauritius, Brazil and in the Caribbean. A [2022 study of sperm whale codas](#) right across the Pacific found seven clans. One, the Short clan, was [recorded in parts of the world](#) ranging from Japan to Chile and from British Columbia to New Zealand. In contrast, the Plus-one was only recorded from our studies off the Galápagos and nearby waters off mainland Ecuador.

The clans have an average of about 20,000 members. These whales can tell, from dialects and other behavior, that they are clan mates. [As far as I can tell](#), the most

comparable large-scale societies are those of humans, our ethnicities and nations; each having their distinctive dialects, distinctive behavior, and social barriers. There are other parallels. Like nations, clans vary greatly in size—the Short clan likely has many more members than the Plus-one clan.

The clans in the Atlantic seem structured rather differently from those in the Pacific, with smaller ranges, less extensive movements, and different forms of dialect distinction.

Somewhat similarly, prehistoric and historic ethnicity and language varied considerably between humans on different continents. One of the most striking parallels between sperm whale clans and humans is symbolic marking. We use cultural artifacts, such as dialects, clothing, and art to symbolize our groups, and sometimes deliberately modify these symbols to distinguish groups. Different sports teams from the same city typically use contrasting colors. Previously, it was assumed that such symbolic marking was unique to humans. But the codas of sperm whale clans from the Pacific are more different if the clans overlap than if their core ranges are in different parts of the ocean.

These parallels between sperm whale clans and human societies can help us as we think about, and try to study, both sperm whales and humans. The extraordinary picture of human social evolution that archaeologists, anthropologists, and historians have built up over more than a century of study can indicate not only the patterns we might find in sperm whale clans but also how variable those patterns might be.

The parallels between these two unrelated species living in quite different environments suggest common environmental drivers for large-scale social structures.

This suggests that our ethnicities and nations, as well as sperm whale clans, may have arisen due to large brains, cooperative care of the young, wide-scale movements, or the capacity for culture. In contrast, attributes that are unique to humans such as fire and complex tools, and those that are unique to sperm whales, like the eating of deep-water squid, seem less likely to be important.

These discoveries and parallels help emphasize the need to protect sperm whales. The global population is heavily reduced by massive whaling and is struggling to survive in the face of new threats, including plastic pollution, fishing gear, and

ocean noise. For the sperm whale clans to survive, human groups need to change our behavior.

*By Hal Whitehead*

*Author Bio:*

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*Source:* Human Bridges

*Credit Line:* This article was produced by [Human Bridges](#).

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# **PVV Blog 4 ~ The Dutch Parliament, Allegedly Created By The Threat Of Islam**

*02-12-2024 ~ At the time of writing this episode of the series, the formation of a new Dutch government is in a sad state.*



Sad for the Party for Freedom, because with NSC (New Social Contract party) leader Pieter Omtzigt leaving the negotiating table, the Party for Freedom is still empty-handed. Obviously, not all is lost for Geert Wilders' party, but a right-wing majority cabinet with the liberal party VVD, the farmers' party BBB and NSC is

not possible.

This development is particularly unfortunate because, according to the brand-new Party for Freedom parliamentary chairman Martin Bosma, the Dutch parliament was established at the time in response to the threat of Islam. This episode of the series explains in more detail how that line of reasoning goes.

### *The Dutch Parliament not a fake parliament after all*

During his fight and victory for the chairmanship of the House of Representatives after the November 2023 elections, Party for Freedom parliamentarian Martin Bosma said, when asked, that the Dutch parliament is not a fake parliament, a claim that contradicts what party leader Wilders stated [at the time](#) (in 2015). I understood well why Martin Bosma made this statement, contradicting his leader in a certain sense, and that is because, in his view, the history of the Dutch parliament has everything to do with Islam. In his book [The False Elite of the Counterfeiters](#) (in Dutch), which was published in 2010, he writes: 'The States General (= formal name of the Dutch parliament) was founded to combat Islam'. In the Epilogue of his book he states that our National Assembly was created because 'our founder, Philip the Good, in response to the fall of Constantinople in 1453 (where the Islamic Turks managed to conquer this last stronghold of the Christian Byzantine Empire ) swears the *Oath by the Pheasant*, the solemn agreement to put an end to Islam and liberate the city from the yoke of Islam'. According to Bosma, Philip called together the most important citizens of his states and at the first meeting of the States General in Bruges in 1464 the defensive war against Islam was discussed. And with the arrival of the Party for Freedom in the Dutch parliament in 2005, according to Bosma, 'the fight against Islam is after centuries back at the heart of the States General'.

As far as Philip the Good is concerned, historian Han van der Horst writes in his book [The Netherlands. The national history from prehistory to the present](#) (in Dutch) that he indeed openly dreamed about a crusade against the Turks who were advancing in the Balkans. But first and foremost he was a monarch who, navigating between the great powers France, England and the German monarchs, strove to expand his Burgundian empire with countries such as Holland and Zeeland, to bring peace, to provide them with a central government and to bring prosperity. Something he has, according to Van der Horst, succeeded quite well in.

Moreover, the great powers England and France in particular were still busy with

each other in the aftermath of the 100 Years War and had little interest in going on a crusade again. Van der Horst concludes that Philip's crusade plans can hardly be taken seriously. They were more of a dream than a hard political goal.

### *The DNA of parliament: the fight against Islam*

There will be few people who know and share the 'Islamic view' of the Dutch parliament. But the Party for Freedom does see the parliament as such. And we will continue to notice this in the coming years. The Party for Freedom, whether it is in the opposition or it having government power, will always view all debates and legislation based on its belief that parliament was established at the time because of the need to fight Islam. After all, that is the core business of the parliament.

And given the party's vision on parliament, as expressed by Chairman Bosma, we will see that vision of Islam directly and perhaps especially indirectly back in any eventual government policy in the coming years. Party leader Wilders confirmed this in the election campaign when he said: ['Islam will never leave our DNA.'](#) (in Dutch - Paywall) He added that in the coming period of government the priority 'lies on other matters', but DNA determines a person's essence and that is why the 'old parliamentary Islam agenda' will assert itself in the future despite claims otherwise.

The history of Philip the Good teaches us that nothing came of his fight against the Muslim Turks; but at that time they were in the distant Balkans and now (the same Muslim) Turks and other Muslims live in our own country. Moreover, the Party for Freedom can now count on like-minded parties, especially in Germany, the Alternative für Deutschland, and France, the Rassemblement National. The new crusade against Islam could well be more successful than that of Philip the Good. I am holding my breath.

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## **SEC's Approval Of Bitcoin Markets**

# May Set The Stage For Financial Disaster



01-10-2024 ~ *Irresponsible banking and deregulation are putting the world economy at risk.*

Over the past several decades, there have been rapid and fundamental changes in the finance and banking sectors. The banking reforms of the New Deal, which endured up until about 1980 and provided a relative degree of banking and financial stability, were reversed by the neoliberal counterrevolution with an eye toward increasing profits and shredding social responsibility. A new book by world-renowned progressive economist Gerald Epstein, [\*Busting the Bankers' Club: Finance for the Rest of Us\*](#), shows us the result: a financial system dominated by megabanks and shadow financial institutions prone to instability and crises that at the same time rely on government bailouts.

The neoliberal financial system, controlled by what Epstein calls “The Bankers’ Club,” benefits exclusively powerful people and institutions, is linked to the growing inequality of wealth and income, and is a net drain to the U.S. economy. Nonetheless, bankers not only see themselves as “essential workers,” a view that Epstein shreds into pieces, but as former Goldman Sachs Chief Executive Lloyd Blankfein claimed, many think they do “God’s work.”

The latest development in the evolution of the modern financial system is the Securities and Exchange Commission’s approval of bitcoin exchange-traded funds last month, concluding a decade-long fight and marking a turning point for

cryptocurrency. This may be a game changer for the global money system but could also very well lead us to another financial crisis.

In this first of a three-part exclusive interview for *Truthout*, Epstein discusses the ascendance of financialization, the dangers of cryptocurrency and his pathbreaking book *Busting the Bankers' Club*. Epstein is professor of economics and co-director of the Political Economy Research Institute (PERI) at the University of Massachusetts Amherst.

*C. J. Polychroniou: Financialization, a process by which financial markets and financial incentive increasingly become the predominant forces in domestic and international economies, dates back to the early 20th century but has intensified over the past five decades. Your new book, Busting the Bankers' Club, explores virtually all the major features and aspects of financialization, divulges the staying power of finance while exposing at the same time the failures of the current banking and financial system, and offers concrete pathways toward building a system of finance that works for the average people. Let's start by asking you to talk about your description of the financial system as having a Jekyll-Hyde personality. What is good and what is bad about the financial system?*

*Gerald Epstein:* In the first chapter of *Busting the Bankers' Club* I refer back to the old Robert Louis Stevenson story, *Strange Case of Dr. Jekyll and Mr. Hyde*. In this tale Dr. Jekyll, an upstanding member of the community, also contains within himself a hidden other: the murderous criminal Mr. Hyde. Jekyll is sometimes tempted to turn himself into Hyde to indulge his perverse pleasures, but sometimes wants to resist the evil urges of the Hyde side of his personality in order to remain on the right side of society and the law. This is a good metaphor for finance. On the one hand, finance is a positive and even necessary force in our society: It facilitates the payment system so we can sell and buy things; it provides a safe place to hold and augment our savings; financial institutions can lend us money to enable us to buy important big-ticket items, like houses and educations, or to open businesses; and financial institutions provide us with insurance against accidents, health disasters and other life traumas. But the Hyde face of finance is always lurking in the background, driven by capitalist greed and excess. And if it is unchecked by laws and regulations (and, perhaps, moral fortitude), reckless and destructive finance can dominate our financial system, and at times, our economy. We saw the havoc that finance could create with the great financial crisis of 2008-2009. But such finance can also undermine our



economy on a daily basis: overcharging for basic financial services like asset management and payments services; excluding some groups from financial services altogether; and perhaps most dangerously, engaging in high-risk speculative ventures that, if they crash, the top financiers will expect to get bailed out by the government.

*Over the course of time, the world has witnessed virtually countless financial and banking crises, but there also have been periods with no such crises. For instance, you point out in your book that there was “a long period of financial tranquility” in the U.S. economy between World War II and 1980. What was different in the operations of the financial system during this period, and does the absence of financial and banking crises mean that the system had no failings and was in no need of reform?*

In the U.S., the big banks and highly speculative financial institutions were widely perceived as having greatly contributed to, if not caused, the Great Depression of the 1930s. The Roosevelt administration implemented a set of New Deal financial regulations that greatly helped to stabilize the U.S. financial system for more than 30 years. Since the U.S. economy was the biggest economy in the world following WWII, these — along with the Bretton Woods Institutions created in 1944 and other factors — helped stabilize the global economy as well. The New Deal financial reforms focused on cutting the financial institutions down to manageable sizes (the Glass-Steagall Act separated investment from commercial banking); limiting bank runs by implanting deposit insurance; restricting speculation and predation by limiting leverage and what assets financial institutions could buy and sell (including limiting obscure products such as complex derivatives); and imposing social missions on various segments of finance — e.g. commercial banks would take deposits and make short-term loans to business, savings and loans would offer mortgages, investment banks would underwrite securities for businesses and state and local governments, etc.

The financial structure has often been called a system of “boring banking.”

Of course, these regulations were not perfect. Far from it. The financial structure formally and informally embedded the highly discriminatory aspects of U.S. society. The financial system excluded people of color, especially Black Americans, from getting mortgages and other financial services; women were dependent on their husbands or fathers to obtain financial services; and the poor

and working class were generally underserved by these financial institutions or charged exorbitant prices. Still, this New Deal financial structure was relatively stable and did provide credit for businesses and some households, and did facilitate the economic growth of the early post-World War II period.

*The postwar financial regulatory regime, which had been created during the 1930s under the New Deal, begins to break down between the late 1960s and early 1970s. What caused the breakdown of the New Deal financial structure, and why do we end up with the full liberalization of the financial and banking system instead of improvements to the regulatory framework?*

The breakdown of the post-WWII New Deal monetary regime was due to both domestic and global financial, economic and political factors. Worldwide, there was increasing globalization and the revival of major economic and financial competitors to U.S. dominance, including Japan and some countries in Europe. U.S. banks and financial institutions wanted to break out of the strictures of the New Deal regulatory regime, including limitations on asset portfolios and on interest rates they could pay on deposits, in order to compete with foreign rivals, especially with respect to providing business services for U.S. and other multinational corporations. Second was the increasing inflation caused first by increased U.S. spending on the Vietnam War and military buildup connected with the Cold War and then by the OPEC oil price increases in the 1970s. This inflation harmed U.S. banks, which could not sufficiently increase interest rates on deposits to compete with new unregulated financial institutions like money market funds created by asset managers like Fidelity. In the face of these structural problems, the New Deal system had to be reformed in order to provide more flexibility for the banks subject to their strictures. It is very likely that such reforms could have been implemented. But the big banks such as Citibank, Bank of America and Chase Manhattan Bank used these disruptions as an opportunity to gather together their allies, both inside and outside of government, to push regulators, the Federal Reserve and Congress to destroy the old New Deal System entirely. I call this group "The Bankers' Club."

*You point out in the book that the changes that were brought about allowed the banks to create a new business model, which you label "roaring banking." How does roaring banking work, and who are the primary beneficiaries of this new business model?*

The current financial system is dominated by huge “universal” banks that combine deposit taking, lending, bond and derivatives trading, underwriting and even commodities trading. Banks like Citigroup, JPMorgan Chase, Bank of America, Goldman Sachs, etc. have virtually no financial boundaries and are so huge that if they get into serious trouble, they are too big to rescue, and their failures, like that of Lehman Brothers, might create a major panic. We saw these concerns in Spring of 2023 when even medium-sized banks were teetering. Their major business model is to use high levels of leverage to take risky bets on speculative assets of all kinds; and to use their quasi-monopoly power to intersperse themselves in order to capture business by municipalities, federal governments, companies, pension funds and households to take a slice of a huge percentage of financial transactions not only in the U.S. but also throughout much of the world.

But in addition to these behemoths are massive asset managers such as BlackRock and State Street. Then there are huge hedge funds, which “are alternative investments that use various methods such as leveraged derivatives, short-selling, and other speculative strategies to earn a return that outperforms the broader market,” according to Investopedia. The biggest of these include Citadel, Bridgewater Associates and D.E. Shaw. Also key players in the world of “roaring banking” are increasingly powerful private equity firms, which, according to the brilliant work of [Eileen Appelbaum and Rosemary Batt](#), employ enormous amounts of debt to take over important companies in retail, medical, real estate and nursing home industries, among others, as well as impose draconian work conditions on employees and saddle the companies with debt, so that the key owners of these private equity (PE) firms can extract maximum short-term profits. These PE firms include Blackstone; KKR, an infamous leveraged buyout company from the 1990s; and the Carlyle Group.

This nexus of financial behemoths has very little regulation and is able to extract enormous wealth from customers and employees. With favorable tax treatment and bailouts from government, it is able to garner such enormous wealth that they help generate the most unequal income and wealth distribution the U.S. has had since 1929.

*Bailouts have become the norm under the deregulatory financial and banking regime. Who should get bailed out and why?*

Government bailouts are one of the main forces that keeps this system of roaring banking going. The Dodd-Frank Financial Reform Act passed in 2010 and signed into law by President Obama was touted by the administration as ending “too big to fail” and bailouts. But in fact, the bailout problem has remained and possibly gotten worse. As we saw from the near-global financial market meltdown in March of 2020 when the World Health Organization declared the COVID pandemic, the Federal Reserve and the U.S. Treasury (as well as other major central banks) poured trillions of dollars into the financial markets to stabilize them, and even took measures to bail out some hedge funds and other non-bank institutions. And when Silicon Valley Bank went bankrupt and several other medium-sized banks trembled in the spring of 2023, again the Federal Reserve intervened to virtually guarantee the entire U.S. system of bank deposits. By doing this, a major run on the financial system was avoided, but the episode pointed to enormous regulatory problems still facing our financial system.

There are three major problems with these kinds of bailouts. One is that they eliminate the incentives for the financiers to stop taking excessive risks because these risks pay off for them, if not for the rest of us. Second, they keep the same elites in power, undermining chances for more democratic control of our economy. And third, people understand that these bailouts are unfair and undemocratic. It makes them angry and helps them fall prey to demagogues such as Donald Trump.

Should there ever be bailouts? And if so, of whom? Good question. The late economic historian Charles Kindleberger [surveyed](#) hundreds of years of capitalist financial markets and pointed out that lender of last resort actions, i.e. bailouts, were endemic and frequent. I tell my students: Even if we sometimes need to bailout the banks, we do not need to bailout the bankers. I think this is the important point. Sometimes we need to maintain the viability of institutions that by their nature are subject to risks. But we do not want to reward the bad behavior of those who will exploit them and us to keep their lofty status in the class hierarchy.

*During the COVID pandemic, we heard a lot about essential workers. Are bankers essential workers?*

Well, many of the top bankers think they are. Lloyd Blankfein, former chief executive of Goldman Sachs, [famously said](#) after Goldman helped crash the

economy in 2009 and received massive government bailouts that, “We’re very important. We help companies to grow by helping them to raise capital... This, in turn, allows people to have jobs that create more growth and more wealth. It’s a virtuous cycle.” In fact, he told [The Times](#) of London that as a banker, he is doing “God’s work.”

But as my former graduate student Juan Antonio Montecino and I show in *Busting the Bankers’ Club*, “roaring banking” is a net drain on the U.S. economy, compared to what a modern system of boring banking would be. Far from being essential workers, these mega bankers, hedge fund operators and private equity executives are reducing the rate of economic growth and extracting wealth from the majority of people in the economy.

*The Securities and Exchange Commission (SEC) recently gave a stamp of approval to bitcoin exchanged-traded funds. How significant is this development?*

This approval could be quite significant, especially if it sets legal and/or regulatory precedents that lubricate the downward slope of integrating crypto assets into that traditional financial architecture. In some ways, this event gives me a “déjà vu all over again” feeling, reminding me of some of the early decisions on deregulating derivatives and credit default swaps in incremental ways in the run-up to the Great Financial Crisis. A number of these dangers were highlighted in a detailed and passionate [dissent](#) to the decision written by SEC Commissioner Caroline A. Crenshaw. The core of Crenshaw’s critique is that these bitcoin exchange-traded funds are based on bitcoin assets, which themselves are largely unregulated and traded on dark platforms in many parts of the world. There is little transparency as to what determines the prices of bitcoins and there is a lot of evidence that they are manipulated and subject to fraudulent practices, often without recourse. This provides many opportunities for illegal activity such as money laundering as well as arms and drug financing and trade. The basic critique is that, like with predatory subprime mortgages and problematic asset-backed securities, you can dress them up with fancy packaging and complicated bells and whistles, but the underlying garbage still stinks. Crenshaw knows how precedents get set in the regulatory business. And just as derivatives and other complex securities were slowly but surely allowed to be sold in the run-up to the financial crisis by incremental [nose-under-the-tent](#) procedures (“Well, this new thing is just like the old thing that you already approved”) Crenshaw and other critics, such as those at [Americans for Financial Reform](#) and [Better Markets](#), are

rightly worried that once again we are headed down a slippery slope. Crenshaw rightly asks: “When FTX [Sam Bankman-Fried’s company] imploded ... many of us breathed a sigh of relief that the downfall of one of the most central players in the crypto market had little impact on global markets more broadly. Will approval of today’s products provide the previously attenuated nexus to traditional markets [that is, break down the previous barriers] that allows crises in largely non-compliant crypto markets to spill over? These questions are not considered in today’s Order.”

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# Prepared Learning: What Are Humans Hard-Wired For At Birth?



02-10-2024 ~ Do living beings learn and pass on to future generations some behaviors or predispositions more easily than others--and if so, how? So-called prepared learning is a question psychologists and other scientists have studied for decades, developing a series of new hypotheses about learning and experiments to test them.

The concept of prepared learning is also known as “biological preparedness” or “associative conditioning.” The basic idea is that living beings evolved a predisposition to more easily learn the kinds of behavior that help them survive and reproduce in their environment.

Thus, humans and other animals learn responses to some environmental stimuli, such as dangers, more readily.

These survival-favorable behaviors are thought to have been passed on to future generations by natural selection. This is the evolutionary process whereby organisms that adapt to environmental changes are the ones more likely to survive and reproduce successfully.

Just as humans gradually developed bipedalism to aid their survival, they have innate responses to circumstances and tendencies that guide their behavior. Exactly how the learned behavior becomes incorporated into the genome and thus heritable is a mostly unanswered question.

Because most of the research on prepared learning concerns fear and phobias, there is also the question of how other kinds of behavior evolved that are not related to fear reactions.

## *From Unicellular to Multicellular Organisms*

What is the mechanism of prepared learning, and can it be passed on?

Recent research has found that unicellular organisms such as amoebae can respond to associative conditioning and modify their behavior in response to specific changes in their environment. In [a set of laboratory experiments reported in \*Frontiers in Microbiology\* in 2021](#), three species of freshwater amoeba cells were conditioned to move in a new migratory pattern in response to environmental changes.

The researchers studied the movements of more than 2,000 different cells of *Amoeba proteus*, *Metamoeba leningradensis*, and *Amoeba borokensis* “under three external conditions.” All three species were able to develop a new migratory pattern that lasted about 40 minutes and was remembered for long periods of their cellular cycle, although it was ultimately forgotten.

The researchers suggest that their findings could represent an evolutionary mechanism for these organisms to increase their fitness to their environment, and [may](#) “have essential implications in the origin of primitive forms of cognition and the role of convergent evolution in biological cognition.”

Similar [experiments with fruit flies](#) demonstrated that prepared learning—in this case, responses associated with where eggs were deposited and reliably hatched—could be tracked over successive generations. In a 2014 paper published in the Proceedings of the National Academy of Sciences (PNAS), researchers describe how they modeled the evolution of prepared learning in different lines of *Drosophila*.

Female fruit flies were exposed to the color-quinine or the odor-quinine before being given a choice between two places to lay their eggs.

The researchers found that the fruit flies “learned” over 40 generations to lay their eggs in the places that were associated with pre-exposure to the odor-quinine or the color-quinine *and* egg survival. The flies laid their eggs in the place that proved most reliable for success.

Reliability is the key factor in prepared learning, the researchers suggest.

## *Pavlov's Influence on Preparedness Research*



These unicellular amoeba behavior studies and many multicellular experiments follow the experimental conditioning concepts established by the Russian-Soviet researcher Ivan Pavlov (1849-1936).

Pavlov's theory of learning, however, is broader than conditioned associations. He proposed that trial and error was also part of learning, and that behavior learned through this process was longer lasting. Pavlov thought that organisms follow innate instincts, such as hunger, stimulating neurons in the brain to form associations. These associations, between an action and its consequence, take shape over time to become knowledge.

Subsequent prepared learning research tried to test and quantify how this process of association works. Most experiments focused on fear and phobias, such as fear of snakes, wild animals, or heights, which are considered important in helping both animals and human beings survive in the world. They addressed two main questions: Are animals and humans prepared to learn some behaviors, particularly phobias, more readily than others, and what does this process have to do with evolution?

### *Phobias and Preparedness*

Theoretical and experimental work on phobias blossomed after a 1971 article by psychologist Martin E.P. Seligman titled "[Phobias and Preparedness](#)," which suggested that phobias connected to evolutionary survival, such as fear of dangerous predators, are more quickly learned in the laboratory, are very "resistant to extinction," and are noncognitive.

The laboratory tests of Seligman's theory over the years studied how quickly human subjects could be conditioned to fear spiders, snakes, and faces of angry men, and how these fears could be undone. For the most part, however, the results were not conclusive.

Harvard psychologist Richard J. McNally has a useful review of the prepared learning research in the decades after Seligman in a [2016 article in the journal Behavior Therapy](#). McNally reviews critical elaborations of prepared learning put forward by other researchers, such as selective sensitization, expectancy theory, and nonassociative theory, along with the experiments to test them.

The evolutionary aspect of how this learning might be inherited is also investigated. McNally describes the "evolved fear module" theory, which holds

that early on, primates developed a neurocircuitry in the brain's amygdala shaped by evolved fear of predators that was outside of "higher cognitive processes." In other words, fear is an automatic response.

Experiments to test all these theories are ongoing.

### *Research Beyond Fears and Phobias*

Providing an interesting perspective on human behavior is Stanford neurobiologist Robert Sapolsky, who is the author of the book *Determined: A Science of Life Without Free Will* (2023). Sapolsky [writes](#) that it is a result of "the cumulative biological and environmental luck, over which we had no control, that has brought us to any moment," according to an article on his work in [Stanford magazine](#).

Sapolsky says that we have no choice in how to react and respond to a situation. According to him, there is no such thing as free will, Sapolsky [argues](#) that "Put all the scientific results together from all the relevant scientific disciplines, and there's no room for free will."

The lack of free will, he says, means that people are not accountable for their good or bad behaviors, a perspective that has attracted some skepticism.

"If we 'freely' choose to do something but there was never a possibility of choosing something else, we're not free. And if we're not free, Sapolsky says, there is no more reason to castigate a killer than to punish a broken machine. Killers should receive medical and psychological treatment to address the larger issues that caused the problem," Stanford magazine [states](#) about Sapolsky's concept of the absence of free will in humans.

### *Human Responses That Challenge Prepared Learning*

Does this mean that humans have no control over their emotions and how and when we express love, anger, hate, etc? A 2017 research article in PNAS suggests [otherwise](#): "[E]motions aren't a response to what our brain takes in from our observations, but, rather, are intrinsic to our makeup."

Another interesting example that challenges the principles of prepared learning is of deaf children who have not learned sign language but have found a way to communicate using gestures. "The properties of language that we find in these gestures are just those properties that do not need to be handed down from

generation to generation, but can be reinvented by a child *de novo*," a 2010 [study](#) proposes.

### *What Does It All Mean?*

How humans learn--and unlearn-- is an important subject today in psychology and psychiatry, and all areas of education. Panic disorder, anxiety disorder, post-traumatic stress disorder (PTSD), and other crippling emotional conditions all require an understanding of how they developed in order to treat them. Making education effective and interesting for students is important for a functioning society. How are positive associations with school best fostered?

Outside of the clinical situation, the concept of prepared learning affects people in many ways. Advertising can use aspects of preparedness and association to promote a particular product or a person; it can target information to influence specific groups of people. Cults and political groups can use this kind of learning as a way of controlling a group of individuals. Brainwashing can also use conditioning methods for unsavory purposes.

In the laboratory, after decades of research, the jury is still out on why some behaviors are more easily learned than others, whether human beings have an inherited predisposition for certain phobias, and how much of human behavior is attributable to nature and how much to nurture.

Experiments are now more sophisticated than Pavlov's conditioning of dogs, but there is still wiggle room. We can see the experimental results, but much is still assumed and not yet proven. Human beings continue to surprise, despite prepared learning.

*By Marjorie Hecht*

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*Source:* Human Bridges

*Credit Line:* This article was produced by [Human Bridges](#).

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# For Crisis-Hit Pakistan, Elections May Not Lead To A Meaningful Alternative



Map of Pakistan - Source:  
[nl.wikipedia.org](http://nl.wikipedia.org)

02-09-2024 *The ongoing crisis in Pakistan cannot be resolved simply by swapping one political party for another. Whether it is the arrest and conviction of Imran Khan or economic issues, Pakistan has a long road to recovery.*

Scheduled for February 8, the upcoming elections for Pakistan's National Assembly and provincial assemblies hold significant importance against the backdrop of numerous upheavals in the country. Notably, the recent arrest and conviction of the former Prime Minister, Imran Khan, adds a layer of complexity. On January 31, Khan received a [14-year prison](#) sentence, adding to his existing [three-year jail term](#) for corruption. In addition, last month, he was handed a [10-year prison](#) sentence in a separate case filed against him, accusing him of leaking classified state documents.

The nation finds itself entangled in a complex web of economic difficulties, with

inflation, unemployment, and a pressing capital crisis casting a shadow over its prospects. The specter of poverty looms large, exacerbating social inequalities and hindering the overall well-being of the population.

### *How Are Representatives Elected in Pakistan?*

Under a parliamentary system of government, Pakistan operates with a two-chambered parliament, consisting of the National Assembly and the Senate. The upcoming elections will decide the composition of the National Assembly and the four provincial assemblies—Punjab, Sindh, Khyber Pakhtunkhwa, and Balochistan.

The National Assembly, comprising 336 seats, has 266 directly elected through single-member constituencies using the first-past-the-post system. Additionally, there are 60 seats reserved for women and 10 for minorities. The distribution of women's reserved seats among parties is proportional to their provincial seat tally, while minority seats are allocated based on each party's overall seat count.

Following this, members of the provincial assemblies elect 100 members of the Senate, which serves as the upper house of the Pakistani parliament.

The party or alliance securing the majority of seats in the National Assembly gains the privilege of electing its leader, who subsequently assumes the position of prime minister.

### *Key Parties*

The political landscape in Pakistan is marked by [several prominent parties](#), each led by influential figures. The Pakistan Muslim League (Nawaz) (PML-N) is under the leadership of former Prime Minister Nawaz Sharif, while the Pakistan People's Party (PPP) is headed by former Foreign Minister Bilawal Bhutto Zardari. Imran Khan leads the Pakistan Tehreek-e-Insaf (PTI), and Maulana Fazlul Haq leads the Jamiat Ulema-e-Islam Pakistan (Fazl).

The Election Commission of Pakistan (ECP) has refused to grant the Pakistan Tehreek-e-Insaf (PTI) its designated electoral symbol, the cricket bat. Consequently, a majority of its candidates are now compelled to participate in the election as independents. Imran Khan, the leader of PTI, has been disqualified from participating in the ongoing elections. He is barred from holding any public office for the next decade.

### *Military Has Its Role and History*

Once a figure endorsed by the Pakistan army, Imran Khan has transformed into their primary adversary. The discord originated with the military's appointment of Lieutenant General Nadeem Ahmed Anjum as the ISI chief against Khan's wishes along with Khan's visit to Russia. The latter showed Pakistan's aggressive neutral position at the beginning of the Ukraine-Russia war, which could have upset the US. Later, Khan's supporters vandalized one of the generals' residences after his arrest. The generals aimed to remove him, and now they have accomplished their objective.

However, Pakistan's political class and its military have historically experienced a complex relationship of collaboration and conflict. Throughout Pakistan's history, military interventions have been a recurring theme. A pivotal instance occurred in [1958 when President Iskander Mirza](#) declared martial law, nullified the constitution, and shuttered the national and provincial assemblies. General Mohammad Ayub Khan assumed control, marking the onset of military rule. Since then, Pakistan has experienced multiple military interventions.

According to the Pakistan Army Act, the armed forces' duties include protecting the nation from outside threats and aggression as well as supporting civil authority when necessary. On policy topics, however, differences between the civilian and military governments have frequently occurred. The military has taken power on several occasions by using opposition parties as tools.

Pakistan consistently spends a significant portion of its budget to defense, with the 2022 allocation reaching [17.9 percent of GDP](#). This is a significant figure, particularly for a country where the per capita income in 2022 stood at [\\$1588.9, equivalent to approximately \\$4.35 per day](#).

### *Key Concerns: Issues Shaping the Election Landscape*

In Pakistan, the current economic landscape is characterized by a stark reality as inflation has surged to unprecedented levels, exceeding [30 percent and reaching a 50-year high](#) in the year 2023. In January 2024, it stood at [28.3](#) percent. This economic turbulence is further underscored by the country's position in the region, where its GDP, per capita income, and GDP growth are among the lowest. Persistent challenges in terms of [high unemployment](#) and inflation rates contribute to the overall economic strain.

According to the UNDP's Human Development Index, Pakistan is positioned at [161st out of 191 countries](#), indicating low achievements in crucial areas such as health, knowledge, and living standards. This places Pakistan among the 31 countries globally with the lowest human development levels. The poverty rate in Pakistan was at [39.4](#) percent in the year 2022.

The situation was further aggravated by the devastating floods experienced in the country in 2022. The floods not only caused widespread damage to agricultural land and critical infrastructure but also had a cascading effect on the overall economy. The aftermath of the floods triggered a surge in inflation, particularly impacting food prices, and increasing the economic hardships faced by the people.

### *The Interconnected Challenges of Neoliberal Capitalism in Pakistan*

The escalating cost of living, rising unemployment, and the specter of stagflation—all intertwined with the limitations of growth—are symptoms of a larger crisis rooted in neoliberal capitalism. This predicament is not exclusive to a particular regime; rather, it stems from the overarching influence of a neoliberal framework that hinders effective crisis management by successive governments. The structural issues at play persist regardless of shifts between political parties or military dictatorships.

The challenges at hand are embedded in Pakistan's position within the global political economy of neoliberal capitalism. Pakistan finds itself struggling to compete, leading to a significant socio-economic toll.

Pakistan is increasingly becoming the working-class backyard of international capital, with its ability to produce a workforce destined to work abroad, making products that the domestic working class can barely afford. With an annual exodus of over [800,000 individuals](#) seeking employment abroad, a new underclass is emerging within the nation, comprised of individuals keen on obtaining employment that the country is not able to offer.

A significant aspect contributing to Pakistan's economic challenges is its heavy reliance on foreign loans, often acquired at high interest rates. The country currently operates on these loans, facing the formidable task of repaying a substantial debt amounting to [\\$80 billion within the next three years](#).

The ongoing crisis in Pakistan cannot be resolved simply by swapping one

political party for another. It is intricately tied to deep-seated issues of inequality, concentrated power in the hands of a few, and a lack of commitment from leaders to present a viable alternative. The ability of a new political entity to overcome these challenges remains uncertain. Nevertheless, these elections carry significant weight as the population is enduring hardship, skepticism towards the electoral process is widespread, and the nation appears to be spiraling into an uncertain future with no clear path of recovery.

*By Pranjali Pandey*

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*Source:* Globetrotter

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## Cashing In On Racist Bail



*Sonali Kolhatkar*

02-09-2024 ~ *Cash bail is racist. No wonder the GOP loves it and is relying on expanding it as a cynical election-year ploy.*



Most Americans have not considered “cash bail” as critical to equality and freedom. The term is an esoteric one but is increasingly central to the ongoing battle over racial capitalism, policing, and mass incarceration, especially in an election year as critical as 2024.

Here’s what cash bail means: When arrested by police on suspicion of committing a crime, everyone in the United States has the right to due process and to defend themselves in court. But in a cash bail system, when judges set bail amounts, those who cannot pay the full amount remain jailed indefinitely—a [clear violation of their due process rights](#)—while the rich pay their way out of jail.

Now, Republicans in cities and states around the nation are [rolling back efforts](#) to reform cash bail systems and Georgia’s GOP-dominated legislature is the latest to do so. The state [Senate](#) and [House](#) recently passed a bill expanding cash bail for 30 new crimes, some of which appear to be aimed at protesters, such as unlawful assembly. Further, it criminalizes charitable bail funds that have bailed people out when they cannot afford to do so, restricting such funds, and even individuals, to bailing out no more than three people per year or facing charges themselves.

In Georgia, this is especially significant because of [a mass movement](#) that has arisen to oppose Atlanta’s “Cop City,” a massive police training project that is symbolic of everything wrong with our systems of policing, courts, and incarceration.

Marlon Kautz, who runs the [Atlanta Solidarity Fund](#) called the system of cash bail “[a loophole](#)” in the criminal justice system, allowing courts to indefinitely jail people without charges if they cannot pay exorbitant bail amounts. Kautz, whose organization is a bail fund of the sort that Georgia is targeting, pointed out that the GOP-led bills to criminalize bail funds and expand cash bail “exposes that the loophole is not an accident, it’s the intended purpose of the bail system.”

Kautz added, “Police, prosecutors, and politicians want a bail system which allows them to punish their political enemies, poor people, and people of color without trial.” He’s right. A police officer could theoretically arrest anyone they wanted, and if a judge requires cash bail that is beyond their financial capacity, the person would remain detained indefinitely while awaiting charges and a trial. In fact, Kautz was one of three people affiliated with the Atlanta Solidarity fund to be arrested on what appear to be [clearly politicized charges](#) of fraud and money

laundering in June 2023.

Given how [racist](#) American policing is, the system of cash bail is intended to ensure that people of color who are disproportionately arrested are also disproportionately detained in jails without due process. A 2022 [report](#) by the U.S. Commission on Civil Rights examined the impact of cash bail and found that between 1970 and 2015, the number of people jailed before trial increased by a whopping 433 percent, and there are currently about 500,000 such people stuck in jails across the nation who have not been tried or convicted of any crimes.

The report also found “stark disparities with regards to race” in who is impacted. Unsurprisingly Black and Brown men were the group most subjected to higher bail amounts.

There is a growing movement to address such a systemically racist trend. In 2023, the state of Illinois became the first in the nation to [entirely abolish](#) cash bail. The state legislature initially passed its cash bail ban in 2021 but implementation was held up by lawsuits from county prosecutors and sheriffs. Now, having survived legal challenges, the cash bail era in Illinois is officially over.

Other states, such as New Mexico, New Jersey, and Kentucky, have [almost entirely ended cash bail](#) requirements in recent years. In California, [Los Angeles County](#) has also similarly eliminated cash bail for all crimes except the most serious ones. The trend has been a positive one in a nation that has one of the [most racist and punitive criminal justice systems](#) in the world.

And then came the Republicans’ regressive push-back. Reversing progress on bail reform is a new flashpoint in the GOP’s culture wars intended to scare voters into choosing them at the ballot. The [Associated Press](#) captured this in a single sentence near the end of an article about Georgia’s cash bail restrictions, saying that “it could be a sign that Republicans intend to bash their Democratic opponents as soft on crime as they did in 2022.”

That [same AP story](#) paraphrased Republican state representative Houston Gaines, of Athens, Georgia, as saying “people let out of jail without bail are less likely to show up for court than those who have paid to get out of jail.” But the AP added “national studies contradict that claim.” When in doubt, the GOP can be relied upon to lie its way into justifying harmful policies, and Gaines was adamant in falsely claiming that cash bail reforms in other states have been “an unmitigated

disaster.”

His Republican colleagues in states such as Indiana, Missouri, and Wisconsin have introduced numerous bills [expanding the use of cash bail](#). Expanding the racist criminal justice system is a cynical GOP election-era ploy, one that isn't even terribly original.

Recall George H. W. Bush's 1988 presidential election campaign ads centering on a Black man named [Willie Horton](#) who, a year before the election, was furloughed while being incarcerated, and escaped. He went on to rape a woman and stab her fiancé, offering Bush the perfect poster child for Democratic failures on crime. The Willie Horton ads are considered a quintessentially racist dog whistle that were intended to generate fear of Blackness among white voters. They helped Bush defeat his opponent.

Sharlyn Grace, an official at the Cook County Public Defender's office in Illinois [said](#), “It is exceedingly rare for someone who's released pretrial to be arrested and accused of a new offense that involves violence against another person,” and that “[f]ears about public safety are in many ways greatly overblown and misplaced.” But all that the tough-on-crime crowd needs in order to make the case of rampant crime is that single exception to the general trend.

Republicans in Wisconsin found their modern-day Willie Horton in a Black man named [Darrell Brooks Jr.](#) who drove a car into a 2021 parade in Waukesha, killing six people. Brooks had been arrested just prior to the fatal crash for domestic violence and released on a relatively low bail amount of \$1,000. The Wisconsin GOP [featured Brooks in 2022 campaign ads](#) showing how they are “tough on crime” compared to Democrats. It wasn't enough that Brooks was eventually sentenced to more than six consecutive life sentences although he says he didn't intend to drive his car into the parade. His example has served as the ideal foil for election-year fears of people of color and [Republican efforts](#) to expand cash bail and win political power.

Election years are a scary time for people of color in the U.S. They are marked by race-based voter suppression [efforts](#), a rise in [racist political rhetoric](#), and even a surge in [racist hate crimes](#). The expansion of cash bail laws is yet another attack on Black and Brown communities—one that must be exposed and confronted.

*By Sonali Kolhatkar*

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*Source:* Independent Media Institute

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