ProCredit

ACADEMY

The ProCredit Banker Academy

Contents

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The ProCredit Banker Academy is a key component of the phased ProCredit training programme, which begins with the ProCredit Onboarding Process, continues through advanced courses for a broadly diversified range of staff and – for a select few – culminates in attendance at the ProCredit Management Academy. As well as fostering the personal and professional development of promising employees who share our goals and want to advance, the Banker Academy also serves to identify ProCredit staff with strong management potential and prepare them for participation in the three-year intensive course at our Management Academy. For various middle management positions in the ProCredit banks, including deputy branch managers and heads of unit, completion of the Banker Academy programme is a requirement.

The ProCredit Banker Academy has developed and sustained a one-year training programme which, just like our banks, has had to adapt in response to the various challenges and changes – be they organisational, economic, political or social – in the environments in which we operate. With this in mind, the consistency of our development policy, which determines the form of our contribution to economic development in our countries of operation, is an important topic at the ProCredit Banker Academy. We are convinced that building long-term relationships with SMEs is the most effective method of promoting job creation and economic growth. Discussion of this business philosophy beyond the managerial level is essential. Within this context, the ProCredit Banker Academy plays a fundamental role in overseeing and pursuing this discussion on a broader basis and contributes to the creation of a common understanding of how our group defines ethical banking.

The Banker Academy offers a unique, comprehensive programme that radically sets it apart from typical management training programmes. The courses are designed and run by dedicated teaching staff and top managers from across the ProCredit group, with the aim of stimulating active dialogue and analysis of thought-provoking and relevant themes. Students pursue an ambitious 14-week programme, not just in banking and finance, but also in the humanities. They are encouraged to build on their existing knowledge and at the same time challenge their preconceptions of the world, human behaviour and their role in and responsibility to not just the company but society as a whole. In the banking and finance pillar of our programme, students further develop their understanding of our core identity, business model and our business strategy, and gain further insight into the complexity, breadth and depth of the challenges involved in banking and management. In the Humanities Curriculum they undertake an in-depth analysis of both the natural and the social sciences. In this way, the Academy hopes to inspire in students a lifelong commitment to learning and development, both personally and professionally. The advancement of independent-minded individuals who embrace critical thinking with a sharp awareness of the broader historical, economic, political and social aspects of society helps to build capable and informed managers and ProCredit bankers.

Teaching staff

Denise Griffey, born 1982, is the Course Director of the ProCredit Banker Academy, a role she assumed in 2016. Until then she was a lecturer in the Humanities department of the ProCredit Management Academy. She is involved in the selection of future candidates for the Management Academy. Prior to joining ProCredit, she gathered extensive teaching experience at the School of History and Archives at University College Dublin and obtained a BA in European Studies as well as a Master's in History from the University of Limerick in Ireland.

Elena García Vargas, born 1994, became a lecturer at the ProCredit Academy in October 2018. She received her BA in Archaeology from the University Complutense in Madrid in 2016. She was then awarded a scholarship to become Director of the Spanish House at Sewanee: The University of the South in Tennessee, USA, during 2016-2017, where she developed her teaching skills by tutoring and giving Spanish classes. She obtained her Master's in Human Evolution and Behaviour from University College London in 2018.

Mimoza Godanci, born 1976, joined the ProCredit group in 1999. Currently, she sits on the Management Board of ProCredit Bank N. Macedonia; prior to this, she was a manager of the ProCredit banks in Kosovo and Albania as well as the ProCredit Regional Academy for Eastern Europe. A co-founder and board member of the Kosovo Chamber for Women in Business, her wide-ranging teaching experience includes branch management and advising business and private clients. She completed her studies in Management and Informatics at the University of Prishtina and also holds an MA in Economics for Business Analysis from Staffordshire University in the U.K.

Paul Keast, born 1956, teaches Critical Thinking and Building Arguments at both the Management and the Banker Academy, with a focus on writing skills and presentation techniques. He also leads a similar course in the ProCredit Onboarding Programme. He has been with the ProCredit group since 1993. As leader of ProCredit Holding's Translation Team, his main responsibility is to assure the quality of English throughout the group. He conducts regular assessments of both spoken and written English at the ProCredit banks, and plays a leading role in the publication of a group-wide ProCredit Glossary. Mr Keast holds a Master's in German Studies from the University of Warwick.

ProCredit Banker Academy Programme

Block I

About Us and How We Do Business
Understanding the main principles of our way of doing business and identification of key differentiating aspects of our business model compared to a standard commercial bank.
Teachers: Igor Anic, Petar Slavov, Jovanka Joleska-Popovska, Viktor Ponomarenko, Alex Matua, Tania Patricia Montalvo Tejada, Rumyana Todorova

The Universe Around Us
Evidence and the nature of science; creation cosmologies and the history of Big Bang Cosmology. Hubble and the expanding universe, black holes, dark matter, dark energy and the creation of our solar system.
Teacher: Felipe Goicovic

Block II

Critical Thinking and Effective Arguments
How to build convincing arguments and present them in oral and written form; and how to analyse other people's arguments and identify the flaws in them.
Teacher: Paul Keast

Our Holistic Planet: Earth and Evolution
Earth systems science, origins of life on Earth and natural selection. Intersexual competition, intrasexual competition and dominance hierarchies. DNA: Genes and Inheritance. Proximate mechanisms and ultimate function in evolution.
Teachers: Denise Griffey, Elena García Vargas

Block III

The History of Banking
Dealing primarily with the systematic relationship between banks and states and exploring how and why the political landscape is instrumental in shaping the banking sector.
Teacher: Christian Edgardo Dagrosa

Meet the Family: Human Evolution
Hominin evolution, behaviour and culture. Our last common ancestor and morphological adaptations such as bipedalism. Symbolic thought and emotional adaptations in great apes and non-human hominins.
Teacher: Elena García Vargas

Block IV

Business Development
Practical overview of our approach to relationship management with business clients as well as understanding of key concepts of direct banking with regard to private clients.
Teachers: Martin Godemann, Mimoza Godanci, Olga Bulat

Cultural Evolution: Life in the Upper Paleolithic
Concepts of culture and theories of cultural evolution. Cultural evolution vs biological evolution. Language, social bonds and emergence of complex social groups. Transmission and mutation of ideas. Prehistoric beliefs and cargo cults. Idea of nature vs nurture – or nature via nature.
Teachers: Elena García Vargas

Block V

Foundations of Finance for Banking
Understanding the various elements of financial statements; developing tools and techniques to perform a financial analysis; evaluation of the performance of a financial institution using a wide variety of ratios derived from its financial statements.
Teacher: Amir Salkanovic, Ivan Dachev, Andreea Ichim

Cultural Transitions: From Hunter Gatherer to Agricultural Societies
Environmental shifts in the late Stone Age i.e. the Younger Dryas. Altering lifestyles of Homo Sapiens, foraging, sedentism and transition to farming. Violence as an adaptive strategy, social hierarchy, power structures and "egalitarianism". "Primitive" forms of trade and the concept of debt.
Teachers: Denise Griffey, Elena García Vargas

Block VI

Controlling Risk
Controlling main client-related risks through anti-money laundering and assessment of credit risk. Principles and practices related to client selection, assessing clients' financial capacity and monitoring relationships with them, performing data analysis and interpretation on the portfolio level.
Teachers: Janosch Witte, Biljana Hadji Janeva

Mosaic Brain: Evolution of the Human Brain, Mind and Behaviour
Evolutionary thinking regarding the relationship between brains and behaviour. Principles and patterns of brain evolution, including human neural and cognitive uniqueness. Human sociality and cooperation; cognitive neuroscience and consciousness.
Teachers: Denise Griffey, Elena García Vargas

Block VII

Environmental Management Systems
Concepts and standards of environmental management systems; improving the environmental and economic performance of a business with a systematic approach.
Teacher: Gonzalo Barrios IPC

ProCredit Ethics Course
Working out the concept of morality, moral desert and justice in all major European moral philosophies: Liberalism, Libertarianism, Utilitarianism, Kant's Rationalism and Aristotle's Empirical Rationalism.
Teachers: Rolf Kreitel, Rostyslav Ignatiev, Grygorii Bagniuk

Humanities

All theoretical models of human behaviour, whether historical, philosophical, anthropological, economic, or sociological, begin with a set of macro-assumptions about humanity in general. Are we inherently selfish, as many modern economic schools claim, or are we naturally selfless and caring? Are human beings political animals by nature, as Aristotle claimed, or are we naturally solitary, as Rousseau and Hobbes would later state? In order to decide where we stand on these questions, we need to gather as much relevant factual evidence as possible, and discuss the implications. This involves an in-depth analysis of both the natural and social sciences. The Humanities Curriculum takes a "big history" approach, rewinding our story back to the very beginnings of our universe and critically assessing the turning points which eventually gave rise to humanity. "Big history" is not an in-depth scientific analysis – we do not concern ourselves with formulas and technical matters – instead, we conduct a systematic survey of the most important theories and facts that help us understand our contemporary world.

The aim of the Humanities Curriculum is to provoke critical thinking about human nature, what drives us, our development, and our place in the universe. Throughout the year, students will embark on an ambitious programme covering seven different but interrelated topics. From the Big Bang, the emergence of life and the rise of our species to that defining trait of humanity, our brain – and subsequent questions about consciousness, theory of mind, justice and ethics – students will discuss key turning points in science, society and philosophy. We will attempt to understand the biological foundations for many of our most cherished human aspects – language, empathy, and beliefs – as well as our dark sides: war, genocide and racism. The story of humanity's rise from prey to predator, the emergence of settled societies and subsequent social and gender inequality provides a stable foundation on which we can construct models and hypotheses of human nature.

We believe that the curriculum on offer lays the foundation for an enriching and stimulating learning experience that will arouse students' curiosity, allowing them to construct an analytical framework which will provide them with the skills to approach complex ideas across disciplines. The Banker Academy seeks to create a varied, dynamic, competitive and free context in which participants can express themselves, criticise, analyse and help each other develop further. With this in mind, a discovery-based learning approach is taken, provoking active participation through discussion, presentations, simulations and group activities. The instructor takes on the role of a guide, challenging participants to take an active role in their own development. Students cannot sit back and take a "teach me" approach. Active participation is demanded of all Academy candidates. The goal is to encourage critically- and analytically-minded individuals who are eager to meet new challenges, both personally and professionally.

Block 1: The Universe Around Us

Since the dawn of human consciousness, we have gazed upon the night sky and wondered about the twinkling expanse looking back down upon us. For the vast majority of our existence, the answers to questions about this realm were impossible for us to know. However, this did not stop the human imagination from creating fantastical stories to satisfy our innate curiosity. To the ancients, the cosmos likely was the realm of their ancestors, long-dead chiefs, big men and kings – a divine place where the gods, often personified as planets, interacted with stellar constellations of mythological beasts. This idea of the cosmos as the realm of the divine was later codified by Greco-Roman philosophers such as Aristotle, who imagined sublime and unchanging heavens, with the planets and the sun being pushed in perfect circles around the Earth by divine beings, all suspended beneath an encompassing dome of stars.

This metaphysical conceptualisation was later given mathematical codification by the astronomer Claudius Ptolemy, a Greco-Roman polymath of Egyptian extraction. In the *Almagest*, Ptolemy laid out the mathematical framework for a geocentric cosmos, known as the Aristotelian/Ptolemaic model. This model included rather bizarre backwards loops in planetary orbits, in order to compensate for the observational problem that the inner planets do not move across the night sky in a line, but rather in a back-and-forth motion. We now know this phenomenon – known as retrograde motion – is due to the fact that the planets are not actually rotating around the Earth but the sun; however, Ptolemy's mathematics were highly accurate, an illusion of numbers. Although not all ancient philosophers supported this conception of the cosmos, in the West it held sway for nearly two thousand years.

It would take the Renaissance and the rediscovery of ancient philosophers other than Aristotle and Plato to call into question the idea of cosmic immutability. When ancient Roman and Greek texts like Lucretius's *On the Nature of Things* resurfaced during the 15th century, it began what Harvard professor Stephen Greenblatt has dubbed "the swerve" – a dramatic resurgence of rational and materialistic thought. Lucretius's text contained references to many forgotten Greek philosophers, such as Democritus, who spoke of a limitless universe composed of tiny indivisible material substances called *atomos*. Works such as these would have a great influence on subsequent generations of natural philosophers and scientists, who would challenge the simplistic and confined Aristotelian cosmology. Ideas of a sun-centred cosmos obeying natural laws were developed by thinkers such as Copernicus, Kepler and Galileo. Isaac Newton brought these ideas to their culmination when he published his description of universal gravity in *Philosophiæ Naturalis Principia Mathematica* in 1687. In fact, before Newton, we cannot even speak of the idea of a universe: the unification of both the heavens and Earth under one set of overarching

laws. Nor can we speak of science or physics; those who came before him are rather called "natural philosophers". After Newton there was no looking back, as scientific explanations of nature steadily began to supersede those of religion.

In the subsequent centuries, new planets were discovered, fundamental forces were described and unified, and stars and galaxies were observed. Eventually Newton's own theories were replaced by those of his successor, Albert Einstein, and his 1915 Theory of General Relativity. Where Newton saw gravity as an attractive force exerted between any two objects of mass, Einstein developed the notion of four-dimensional space-time – the three dimensions of space and one of time – existing as the very fabric of the universe. Gravity, then, is the name we give to distortions within this space-time fabric with more massive objects creating larger distortions and drawing less massive ones towards them. However, Einstein's theories had a problem: in order for space-time to exist, the universe had to be dynamic, either expanding or contracting – a static universe would be a dead universe. Even Einstein himself was not ready to fly in the face of thousands of years of received wisdom. He thought he must have made an error, and so he fudged the maths, creating a so-called "cosmological constant" in order to enable his theories to function within a static universe. He would later call this the greatest blunder of his life.

It would take the rest of the 20th century for the scientific community to develop an understanding of the problem which so perplexed Einstein. It began with Edwin Hubble, after whom the space telescope was named, who first observed galaxies outside our own Milky Way. Not only were the galaxies moving away from us, but the further into space he looked, the faster they were moving away. Hubble thought that if we calculated the rate of expansion, and then rewound the process, we would reach a moment where all matter and energy were concentrated in one infinitesimally small, hot, dense point – a singularity.

Serendipitously, Hubble's speculation was confirmed in 1963 by two radio engineers, Arno Penzias and David Wilson, who were working for an American phone company. They were simply trying to remove an annoying hiss from early mobile phone signals by creating a microwave receiver sensitive enough to block out all the stray electromagnetic interference coming from Earth. As it turned out, this was not possible: no matter where they pointed their receiver in the night sky, the hiss stayed. In fact, the noise was not coming from Earth at all; what Penzias and Wilson were listening to were the birth pangs of creation, the faint echo of microwave radiation left over from the massive explosion which gave rise to all the matter and energy in our universe: The Big Bang.

In the half-century since the discovery of this echo – or cosmic background radiation – our knowledge of the universe has expanded exponentially. We now know our universe is 13.8 billion years old – that is 184 million times longer than the average human lifespan – a time

scale so great it defies comprehension. Thanks to Einstein, we understand that the speed of light is a constant 300,000 kilometres per second; nothing in the universe can travel faster than this cosmic speed limit. Therefore, we can say our observable universe is also 13.8 billion light years across. However, this is just what we can see; since the speed of light is finite, we are limited in our cosmic horizon, and there has not been enough time for light from other parts of the universe to reach us – we simply do not know the full scale of our universe.

What do we do with this information? Is it too overwhelming for our brain to grasp? One of the goals of this course is to attempt to make sense of what we see when we look out into the universe. First and foremost, where are we humans located in space and time? Where did our universe come from? What is the nature of our universe and what laws govern it? Are we special? Are we alone? These are questions which have puzzled humans since time immemorial and it is only within the last half-century that we could hope to begin to answer them. That is not to say we know everything, have all the answers, or have formulated a complete picture of our universe. Like many fields in science, every answer we get raises two more questions. What caused the Big Bang and was there anything before it? We may never know. Many cosmologists are now speculating that our universe is not the only one, but may simply be one outcome, lost in an infinite and uncountable sea of possible universes – a multiverse – like water molecules flowing over Niagara Falls: universe upon universe, worlds without end. In some ways, this block will create more questions than answers. The primary objective is to lay the foundation for the study of human nature that we will undertake at the Academy. In order to begin our study of humanity, we must first gain an understanding of the universe in which we live.

Block 2: Our Holistic Planet: Earth and Evolution

Ever since the time of the ancient Greeks, humans have speculated about the capacity of living organisms to change and evolve into new life forms. However, the Aristotelian idea of fixed natural states, in which all things have a specific purpose in a grand ordered plan, survived into the Middle Ages and even beyond to form the basis of Christian thought. For example, the English naturalist John Ray in 1686 first defined the concept of "species", and then advocated that all species were designed by God, differing from each other as a result of environmental variations. Carl Linnaeus, the Swedish father of taxonomy (the categorisation of groups of living organisms), writing in the 18th century, also thought that species were fixed according to a divine plan.

However, this same Enlightenment and post-Enlightenment period saw several developments that questioned the established "divine plan" theory that the diversity of all life on Earth was created at the same time and that it has remained unchanged since its inception. Firstly, the sheer diversity of living organisms was perplexing. Why would God create such a variety of living things, many appearing to fulfil the same role in nature? The discovery of fossils of large animals that no longer existed anywhere on Earth provoked deep disquiet. Why would animals created by God with a specific role in his divine plan become extinct? The discovery of new lands and the increasing documentation of species only served to create more questions about the traditional account, and these questions were being asked more and more frequently by geologists, anatomists, naturalists and taxonomists.

Once cracks in the dogma began to be exposed, the emergence of alternative theories that could explain the variation of life on Earth became inevitable. One of the earliest of these, radical in its supposition, was put forward in 1809 by the naturalist Jean-Baptiste Lamarck. He explicitly stated in *Philosophie zoologiqu*e that humans had descended from apes. Perhaps more radically, he also postulated that life forms were not fixed but could change over time. He called this the "transmutation theory" and it represents the first attempt at a comprehensive theory of evolution. Lamarck theorised that life forms progressively evolved over time with a predisposition for developing greater complexity. He believed that these changes were motivated by organisms seeking to adapt themselves to their environment. Although his hypothesis regarding organisms "willing" themselves to have particular traits is now discredited, Lamarck's ideas in relation to changing life forms were an important stepping stone in the history of evolutionary thought.

Lamarck was not alone. Although his was the first comprehensive framing, already in ancient times a number of philosophers and naturalists put forward hypotheses that correctly match evolutionary theory as we understand it today. For example, the Greek philosopher Anaximander of Miletus (610-546 BCE) postulated that the first animals (including human

animals) lived in water; the Chinese philosopher Zhuang Zhou (369–286 BCE) wrote that animal species change and that therefore there is no such thing as fixed species; the medieval Abbasid theologian Al-Jahiz (776–868) explicitly described a process in humans and other animals that we would now understand as "survival of the fittest". And, although he believed that species (and organisms) were fixed and thus did not change, Carl Linnaeus himself classified humans with apes in *Systema Naturae* (1735) before he was forced by the Swedish church to change this "blasphemous" classification.

Other European pre-Darwinian Enlightenment-era thinkers had been chiming in, too. In 1744, the French naturalist George-Louis Leclerc wrote – albeit obliquely – that living things change through time, that the Earth was old, and that humans and apes were related. In England in 1784, Charles Darwin's own grandfather, the physician Erasmus Darwin, hypothesised that all organic life was derived from one source and that plants likely came before animals. Later theorists, including the Scots Robert Grant (1826) and Robert Chambers (1844), expanded upon these hypotheses and directly referred to species change and what we would now call evolution, including the evolution of humans from apes. The English economist Thomas Malthus, writing on the subject of overpopulation between 1798 and 1826, strongly influenced Charles Darwin and his co-discoverer Alfred Russel Wallace, inspiring both to develop a theory of natural selection based on Malthus's observations that there are natural "checks" on human populations. Of course, most of these "pre-evolutionary" thinkers – from Aristotle right down to Chambers and Malthus – also had suppositions regarding evolutionary thought that have long since been disproven (e.g. Lamarckian inheritance), but it is salient that many pre-Darwinian historical hypotheses and theories were on-point.

Thus, it could be argued that co-discoverers Wallace and Darwin were not the "first" discoverers of natural selection as a mechanism to explain species change. They were, however, the discoverers of the first working and falsifiable mechanism, and perhaps the most timely. Suffice it to say that there are multiple "co-discoverers" for an observed mechanism and not one sole stand-alone genius: like space science, evolutionary theory is also cumulative. Whatever the case, these amalgamated proto-evolutionary ideas culminated in Charles Darwin and Alfred Russel Wallace's "theory of evolution by means of natural selection". For five years, Darwin had travelled the globe as a gentleman companion aboard the HMS Beagle and it was there that he would adapt Malthus's framework of a competitive natural world (later, Wallace would undertake similar observational travels). In 1836, Darwin returned from this voyage, on which he had collected numerous specimens from various locations, notably the Galapagos Islands, and he began to cultivate a hypothesis. Advantageous variations would prevail in a population, while disadvantageous ones would perish. In nature, due to the scarcity of resources, the majority of offspring would be unable to reproduce.

In 1858, Darwin and Wallace co-published their mutually (if separately) discovered theory of natural selection. And then in 1859, Darwin expanded upon this by publishing his book *On the Origin of Species by Means of Natural Selection,* where he set out his theory in whole – a theory he had been developing for 21 years but was now urged to publish quickly due to the circumstances of Wallace's co-discovery. Unlike Lamarck, Darwin's (and by extension, Wallace's) idea of evolution was not based on the intentional desires of organisms to better adapt themselves to

their surroundings, but rather that organisms compete for survival against others, and those that are best suited to a particular environment survive to reproduce. That said, neither Darwin nor Wallace understood how adaptations or changes were inherited by offspring, as the Moravian monk Gregor Mendel's genetic work did not become widely known or accepted until the beginning of the 20th century. Although lacking the knowledge of this mechanism, Darwin understood the process that the environment dictated which variations enhance the chances of survival and therefore can be passed on to future generations. He surmised that all living organisms therefore were descended from one common ancestor. All the variation of life on Earth was caused by this combination of variation, competition for survival, and differing environmental conditions.

Darwin's ideas had serious ramifications for the world of religion. The implications of the theory were so radical that some even suggested Darwin had killed God. A paradigm shift in the way we saw the world had occurred. All life on Earth was not the result of a deliberate plan benevolently designed by some supreme being, humans were not special and the meaning of our existence and our whole conception of the universe began to fall away.

But how were characteristics inherited? For thousands of years, humans had been able to observe that different individuals shared similar characteristics to their parents and the concept of inheritance was already well founded. Farmers had been using knowledge gained from these simple observations to breed more desirable livestock for millennia. However, it was not until the late 19th century when the above-mentioned Moravian monk Gregor Mendel, following a series of experiments on pea plants, was able to shed light on the rules that governed inheritance, and thus the science of genetics was born. During his lifetime, his ideas were generally ignored, but 16 years after his death his work was "rediscovered" by scientists in 1900. It became widely understood then that favourable mutations increase the individual's chances of surviving and/or having greater reproductive success and therefore, over time, these mutations become dominant within the overall population. Mendel's discoveries are vital for understanding not only genetic inheritance but also evolutionary theory as a whole and also for finally laying to rest Lamarck's ideas regarding animals "willing" themselves to change. (However, in recent years the emergence of epigenetics has indicated that environmental factors cannot influence the genes themselves but rather how they are expressed, potentially resurrecting some of Lamarck's notions.)

Another huge leap forward in the field of genetics occurred in the 1950s. For decades, scientists had been examining cells attempting to discover what they called "the code of life", a single molecule responsible for providing living organisms with all the genetic instructions for functioning, growth and reproduction. Mendel's research had identified the laws that governed heredity, but how this actually happened at a cellular level was not yet understood. The discovery of the double-helix structure of DNA by Rosalind Franklin, Francis Crick and James

Watson brought a new understanding of how genes were inherited. Since then, new developments in the field have enabled us to understand how genetic mutations occur as errors in the reproduction process, as well as demonstrating the sheer amount of information living organisms have stored in their DNA. By assessing DNA of different species, it is possible to assess how closely related they are to each other and when exactly their evolutionary lineages split.

In order to understand evolution and the diversity of life on this planet, we need to put it within the context of the Earth's history. We will do this by exploring a way of thinking known as the Earth systems theory. This theory describes Earth as a self-regulating, dynamic system, composed of various spheres: the biosphere, atmosphere, hydrosphere and geosphere. It is the interaction of all four spheres – biosphere, atmosphere, hydrosphere, geosphere – that gives rise to what we call ecosystems, the habitats which living organisms populate. So integral are the interactions of living organisms and their environment that some view the entire Earth as a living organism. Earth, in that sense, has been "alive" for a very long time. The most ancient fossils that have been found so far are 3.55 billion years old, and there is evidence of life beginning even 4.1 billion years ago. Some of the earliest fossils from the Archean Eon are the remains of microscopic prokaryotes; others are structures made up, layer upon layer, of thin sheets of calcium carbonate that were precipitated as a result of certain bacteria (also prokaryotes) influencing the chemistry of seawater. The layered structures, called stromatolites, are not fossils of actual organisms, but they provide clear evidence of their presence because we can see and study similar structures being formed today by living organisms.

Thus, we will be addressing such exciting questions such as "When did life appear?" – and, more importantly, "Why and how did life first appear?". Delving further, we will discuss the earliest organisms, and the emergence of the first animals, and then the first land animals. We will get in touch with our "inner fish", an animal from which all humans alive today have descended. We will dive into general evolutionary theory and its nuances of sexual selection, genetic drift and intrasexual competition, and then we will apply these theories to animals ever closer to the human animal: to mammals, and to the ancient Miocene apes.

This block has enormous importance for this course as it lays the foundations, not only for the next block, which focuses more specifically on human evolution, but on all future study. A constant theme throughout the course is human nature, and viewing this through an evolutionary prism has obvious and profound implications. Therefore, it is vital to gain a solid grasp of these concepts. As we will discover later in the course, Darwin's theory is now being used to explain cultural as well as biological evolution. Indeed, the scope of evolution seems to be expanding every day. Darwinian evolution is, as the American philosopher and cognitive scientist Daniel Dennett put it, "the single best idea anyone ever had".

Block 3: Meet the Family: Human Evolution

The idea that we are a primate species, evolved from a single common ancestor, and an ape closely related to the other living modern apes (chimpanzees, bonobos, gorillas and orangutans), continues to provoke bitter resistance. In most traditional societies, humans have been regarded as a unique creation, separate from other living creatures and with a singular purpose in divine creation. Therefore, many were disgusted by the implication that humans were just another species of animal and dismissed it as either blasphemous, ludicrous or both. Although not a major part of his seminal work *On the Origin of Species,* Charles Darwin fleshed out his ideas regarding human evolution in a subsequent work, *The Descent of Man.* In this volume, Darwin laid out the hypothesis that humans evolved from an extinct species of African ape. The theory gained momentum and eventually became accepted by the majority of scientists.

Modern genetics has shown humans share 98.6% of their DNA with chimpanzees, and our evolutionary lineages only diverged sometime between 5 and 7 million years ago. In order to best understand our origins, in this block we will often focus on our two closest relatives, the common chimpanzee and the bonobo. We did not evolve from chimpanzees and bonobos, but we do share a common ancestor. We can most accurately call them our close cousins, with the common ancestor being our shared grandparent. Both of these fascinating species display impressive problem-solving abilities. They have empathy and abide by social rules, living in a structured community. How much of what we perceive to be uniquely human, both good and bad, has its foundations in our common ancestor and can be seen in these species today? Importantly, we must decide if there are traits that separate humans from our cousins and make us unique.

In the century following the publication of Darwin's theories, palaeontologists and archaeologists began a relentless search for what they called the "missing link" that would show the gradual transition from "ape" to "man". Over the years, several fossils were discovered that shed light on our origins and those of other extinct hominins. For the purposes of this block, hominins are defined here as living and extinct species from the human lineage after the split from our common ancestor with chimpanzees. One of the most significant of these is the hominin known as *Australopithecus afarensis.* This primate burst onto the scene spectacularly in 1974 with the finding of the remarkably complete fossil "Lucy", in the Afar region of Ethiopia. Named after the popular Beatles song "Lucy in the Sky with Diamonds", this fossil surprised the scientific community; her brain was only fractionally larger than that of a chimpanzee. The general consensus had been that the catalyst for human evolution must have been an increase in cognitive ability resulting from a larger brain. Instead, what was revolutionary about these apes was that despite having a brain little bigger than that of a chimpanzee, they walked upright. In this block we will

discuss the possible causes and consequences of bipedalism, revealing that this simple change in posture produced truly dramatic results over the following millions of years.

We will also debate whether or not the Australopithecines can be viewed as "human" and if so, why. As more fossil evidence began to be uncovered, it became clear that there was not just one species of Australopithecine, but several, some of which coexisted with *Australopithecus afarensis*. Delving into the Australopithecine genus more deeply and looking at the different species will help us to understand why certain species evolved differently from others and why some ultimately endured while most did not. Considering historical examples such as this, where our ancestors outlived their close relatives, may help us to identify key indicators of survival and therefore what made us successful as a species.

The most successful hominin ever, if the criterion is number of years on the planet, was *Homo erectus*, who emerged nearly 2 million years ago and survived up to 143,000 years ago (and survives today in a sense, since we are likely evolved from *erectus* ourselves). Many have theorised that *Homo erectus* was the first *Homo* species to leave Africa, colonising Central and Eastern Asia, and marks a significant development along the path towards what we consider human today, when our own modern human ancestors left Africa (according to the widely accepted "Out of Africa" theory, as it is popularly known). We certainly have a vested interest in studying Homo erectus: recent fossil tooth findings in Eurasia and Africa by Martinón-Torres *et al.* have added to evidence against a "pure" Out of Africa framing, and suggest an intriguing possibility that *Homo erectus* left Africa 1.8 million years ago for the Middle East, and then diverged into different hominin groups, some of which evolved into Neanderthals and Denisovans, and one of which returned to Africa and eventually evolved into modern human beings.

It is widely believed that *Homo erectus* domesticated fire and became proficient hunters, evolving from prey to predator. There is even some evidence that they had symbolic thought in the form of art. In addition, from evidence of healed broken bones in the fossil records, we can infer that *erectus* groups cared for injured or sick individuals, nursing them back to health. We will contemplate what enabled them to be so successful and why they eventually died out. Descendants of *erectus* developed differently in different locations; we will follow their development and assess what happened to them in Asia, Africa and elsewhere. Another closely related species, the diminutive *Homo floresiensis*, popularly known as the "Hobbit", was once thought to have evolved from *erectus* on the Indonesian island of Flores, but as of 2017 is now thought to be a relict population of an earlier hominin species known as *Homo habilis*, an older lineage likely descended from the Australopithecines. *Homo floresiensis* survived until 50,000 years ago and represents an interesting example not only of isolated relict populations but also of island dwarfism, demonstrating the evolutionary impact of specific environmental factors.

Another hominin we put under the microscope – and macroscope – is *Homo neanderthalensis*, previously classified as *Homo sapiens neanderthalensis*. More commonly known as Neanderthals, this species was heavier and had a larger brain than *Homo sapiens*, with whom they coexisted for thousands of years before disappearing. Originating from the same species as modern humans, *Homo heidelbergensis*, Neanderthals evolved in the harsh cold of Ice Age Europe, while *Homo sapiens* evolved in the drier landscapes of eastern Africa, and each were uniquely adapted to these environments – though both species made art, buried their dead, used advanced tools and cared for weaker group members. Most palaeontologists agree that evidence suggests that Neanderthals had language capacities at similar levels to modern humans. As the climate became milder, *Homo sapiens* migrated north, through the Middle East and into Eurasia, and came into contact with these very similar Neanderthals. We will look at the effects of this contact and the extinction of the Neanderthal species, as well as consider recent DNA analysis that confirms that modern European humans inherited between one and four percent of their genes from Neanderthals, indicating a degree of interbreeding between the two species. We look too at newly discovered species such as Denisovans (an Asia-based Neanderthal-like species living at the same time as the Neanderthals, discovered in 2010).

Today there is only one species of human, not accounting for the small amounts of Neanderthal, Denisovan and possibly *erectus* admixture still present in modern populations. These three previously successful species fell into rapid decline following the arrival of modern humans in their territory. The causes of these declines are still unknown, but it seems plausible that they simply could not compete with the newcomer. The speculation behind this will make up the final chapter of this block, as we turn the spotlight onto ourselves. *Homo sapiens*, previously called

Homo sapiens sapiens, is a young species that emerged roughly 300,000 years ago in Africa. All scientific evidence shows that, like our sibling species the Neanderthals, we had the modern capacities for cooperation, cognition, symbolic thought and, less savoury, violence. And yet for all these capacities, for around 260,000 years we behaved much as other Stone Age humans did, and so we cannot speak of humans being a "unique" species in terms of modern behaviour in evolutionary terms, as the greatest portion of our time on Earth as a species lacks any evidence of art, city-states, etc. That said, 40,000 years ago the Upper Palaeolithic descendants of anatomically modern humans began a journey that eventually developed religious institutions, agriculture, society, nuclear war and interplanetary exploration.

Block 4: Cultural Evolution: Life in the Upper Paleolithic

When we use the term "culture" we evoke images of art galleries and concert halls, of what some might consider humanity's greatest achievements: the stunning art and architecture of the Aztec Empire and the Italian Renaissance; Chinese philosophers such as Confucius; the classical age of music of the 18th century, which reached its fullest expression in the German-speaking lands; the timeless words of the Bard, William Shakespeare, or indeed the other great writers of their time and place, from Cervantes to Tolstoy, from Goethe and Schiller to Joyce, Wilde and Atwood. "Culture" might also evoke thoughts of what it means to be us: our language, our food, our dress, our values. In truth, culture is all these things. In this block we will examine some of humanity's most important traits – traits that are vital for understanding our world.

This block builds on what has gone before it: in previous blocks you have journeyed through the history of our planet and the history of our species. You have learned about the theories explaining the origins of the universe and how life evolved on this planet through the ages. You have learned how our species evolved into what we are today and how our brain developed. In essence, it is about understanding what we are. We now turn our attention to what the human mind has created, seeking to understand not just what we are, but who we are. We will examine some fundamental themes: language, art, and theories about how culture changes and evolves over time. You will be exposed to new ideas and asked to make sense of these quickly, to engage in thoughtful class discussions and to prepare high quality presentations to help your fellow students come to grips with these challenging and exciting topics.

We will begin this course of study by asking a question we all think we know the answer to: What is culture? It might be an obvious question, but the answer is all too elusive. We can describe aspects of culture, as I have above: language, dress, art, music. But can we define it? In order to have a meaningful discussion about culture and to explore its manifold expressions, we must first come to an understanding of what it is we are contemplating. In attempting to create a working framework of what can be considered culture, we will touch on a multitude of topics and cultural expressions. Our goal is to create a stable platform from which to launch further discussions and explorations and to consider some pertinent questions: Is culture a defining feature of humanity? Do other animals have culture too? In tackling these questions, we might find ourselves forced to reassess our definition or indeed to reconsider our preconceived notions of what culture is. When considering the case for non-human culture, we will be forced to think in new ways and this will help us deepen our understanding of what culture is and what it can tell us about humanity and about ourselves.

Having laid the foundations for the rest of the block, we will move on to consider one of the most fundamental traits of humanity: language. Language is often seen as vital to our success as a species. It was the development of language that allowed us to form stronger social bonds and develop ever more complex social groups. But just how important was it for humanity? Is language one of the traits that differentiates us from our cousins in the animal kingdom? We will learn about and discuss the communication methods of other animals and question whether these can be called languages. Washoe the chimpanzee, Kanzi the bonobo and Koko the gorilla have all learned to communicate with humans using sign-language or a computer keyboard. While the scientific world still debates the significance of these examples, there is certainly enough to make us wonder if language is something that other species are capable of developing, if they have not developed it already.

Not only is language an expression of human culture, but it is also the key means by which culture is transmitted. Without language, it is hard to imagine how ideas would spread, how shared beliefs would grow and develop into complex ideologies, and how states would form. This leads us to the issue of the transmission of culture and how it changes over time. In the 1970s, a new theory was developed to explain how culture evolved. In his book, *The Selfish Gene* (1976), renowned evolutionary biologist Richard Dawkins introduced the idea of "memes". The term meme comes from the Greek *mimeme*, meaning something that is copied. It

was shortened to "meme" in order to echo the term "gene". Dawkins had become frustrated that people sought to find explanations for everything in genes and wanted to refocus our attention on the power of ideas. This theory, known as memetics, describes how ideas (memes) spread among people and how, like genes, they can "mutate", with the most popular ones surviving and the rest dying off. This evolutionary view of the spread of ideas helps explain how cultures change over time, as ideas are transmitted and mutated. But this view also raises a number of questions, most notably: Is cultural evolution overtaking or even overpowering biological evolution? In other words, how important is cultural evolution for understanding the world we live in today? Further, is cultural evolution already part and parcel of biological evolution since it is, technically speaking, our environment (albeit a self-created one)? Are memes as powerful, or perhaps even more powerful, than genes? These are complex issues and difficult questions, but in addressing them, we will be engaging in a valuable and rewarding pursuit. Whether or not you find the theory convincing, it will help you gain a greater understanding of the world around you and perhaps give a new appreciation for the power of culture.

As we saw at the beginning, art is one of the first things that come to mind when we think of culture. We will explore prehistoric art as a concept and as an extension of symbolic thought, as it is perhaps the most enduring aspect of human culture, one we can identify from times long past. Whereas music, body-paint, storytelling, dance and poetry might be lost to time, cave paintings and sculptures have survived and will continue to do so for future generations. It is, then, a window into cultures past and can help us to not only understand distant societies but to see the roots of our own cultures and gain perspective on humanity in general and prehistoric art in particular. We will look at ancient sculptures such as the voluptuous Venus figurines, as well as the spectacular cave art at famous sites like Lascaux in France and Altamira in Spain. We will examine this art and see what it can tell us about the culture that created it: our ancestors, who lived and died during this long-ago time.

In the final instalment of this block, we will examine one of the most important and influential aspects of human culture: prehistoric beliefs. Religious belief relies upon the complex human mind and is a uniquely human phenomenon. The world has seen thousands of religious belief systems and new ones appear every day. A huge number of the world's people live their lives in accordance with religious teachings – are these people enslaved by ideas or are they on the road to salvation? We will move away from familiar discussions of what it means to be religious and instead look at beliefs as an abstract concept. How do we define beliefs? We will investigate the biological and psychological underpinnings of religious belief. We will look back and explore the roots of prehistoric beliefs and investigate how beliefs emerge and grow. Useful in this regard are the "cargo cults": new religious movements that emerged over

recent centuries and that have been well documented and studied. The most notable examples come from Pacific islands in the 20th century, where modern anthropologists have made studies and films giving us a glimpse of the creation and spread of new beliefs. They can also help us to address the question of what role beliefs play in human society. Why have humans – both prehistoric and historic – developed countless beliefs over the ages, and do beliefs still have a place in modern human culture? Our study of beliefs will remind us of the power of human culture and ideas – ideas that people live their lives by, ideas that drive people to kill, to oppress others and to suppress themselves. Regardless of whether or not you believe in a "divine" power, beliefs are one of the most potent creations of the human mind and, as such, it is highly important to take stock of its role in our world, particularly in terms of it being one of the hallmarks of our own species.

By the end of this block, as we learn about humans struggling through the ice age, we will have gained deep insight into culture. We will have considered some important questions regarding the role of culture in creating the world we live in today: How does culture – and its manifestations via beliefs – control our behaviour and explain our world? We will have considered how it interacts with biological evolution: Has it challenged it? This course of study will allow you to reflect thoughtfully upon the question: to what degree are we born pre-programmed with our future written in our DNA, and to what extent are we a blank slate upon which culture can inscribe its norms and dictate who we become? In essence, then, this block will help you to think profoundly about the very nature (and nurture) of humanity.

Block 5: Cultural Transitions: From Hunter Gatherer to Agricultural Societies

In the previous block, we began our study of culture by considering it on an abstract level. We sought to develop a working definition of what is meant by the term "culture" and we discussed some of its more positive expressions, such as language and art, and the perhaps more mixed concept of religion. Now, we turn our attention to some more ambiguous and darker expressions of human nature.

In this block, we will look at those aspects of culture which have had the most dramatic impact on our world today and will examine some key turning points in human history. We will take a critical look at things that play such an intrinsic role in our world that we have perhaps never even taken the time to step back and question them: agriculture, for example. We will seek to understand the extent to which these concepts are products of "culture" or to what degree they are a part of human nature. This block will follow a similar pattern to the last and will use the same methods of class presentations and discussions.

The last block closed with our human ancestors struggling through the ice age. We pick up where we left off and start by looking at life at the end of the last ice age. By the end of this period, archaeology shows us that hunter-gatherer societies were becoming more sedentary – they spent more time at a smaller number of seasonal camps, exploiting the more abundant resources that resulted from a warming environment.

In Europe, the ice sheets retreated, leaving huge glacial lakes that later became the Baltic Sea, and what had been the barren steppes of Western and Central Europe became populated with forests. People increasingly settled in favourable areas, such as forest clearings, along rivers or in coastal ecosystems where food supplies were more predictable. They hunted, fished and gathered wild foods. These favourable conditions led to population growth and there is some evidence of increased conflict as different groups became more settled, marking out territory and fighting over more resource-rich zones.

In South Western Asia, some sites were favourable and bountiful enough to allow for permanent settlements to emerge. These people, the Natufians, developed an increasingly complex society; as they were more sedentary, they had cemeteries where burials show clear signs of a social hierarchy. These early settled societies were eventually faced with great challenges as a result of the changing climate. The Natufians increasingly experienced drought conditions, resulting in less wild foods to harvest and less water at their disposal. Meanwhile, in the north, a sudden climate event, called the Younger Dryas, caused a rapid cooling of the climate in Europe, plunging its peoples back into arctic conditions. It was against this backdrop of a challenging environment that agriculture first began to emerge.

The Younger Dryas event, which took place about 13,000 years ago, brought about cold and dry conditions. The Natufians, and others, adapted to the changed conditions by concentrating on the remaining water resources, relying more heavily on harvesting wild grasses, and developing much more effective grain storage methods. Grain was an ideal food source for storage over long periods – a valuable quality as the seasons became more pronounced and the winters grew leaner.

Over time, a symbiotic relationship with wild grasses developed and led to the planting and eventual domestication of these grains. We will examine this process of domestication and the emergence of the first farming communities. This was a watershed in human history, as it brought dramatic changes to the human way of life.

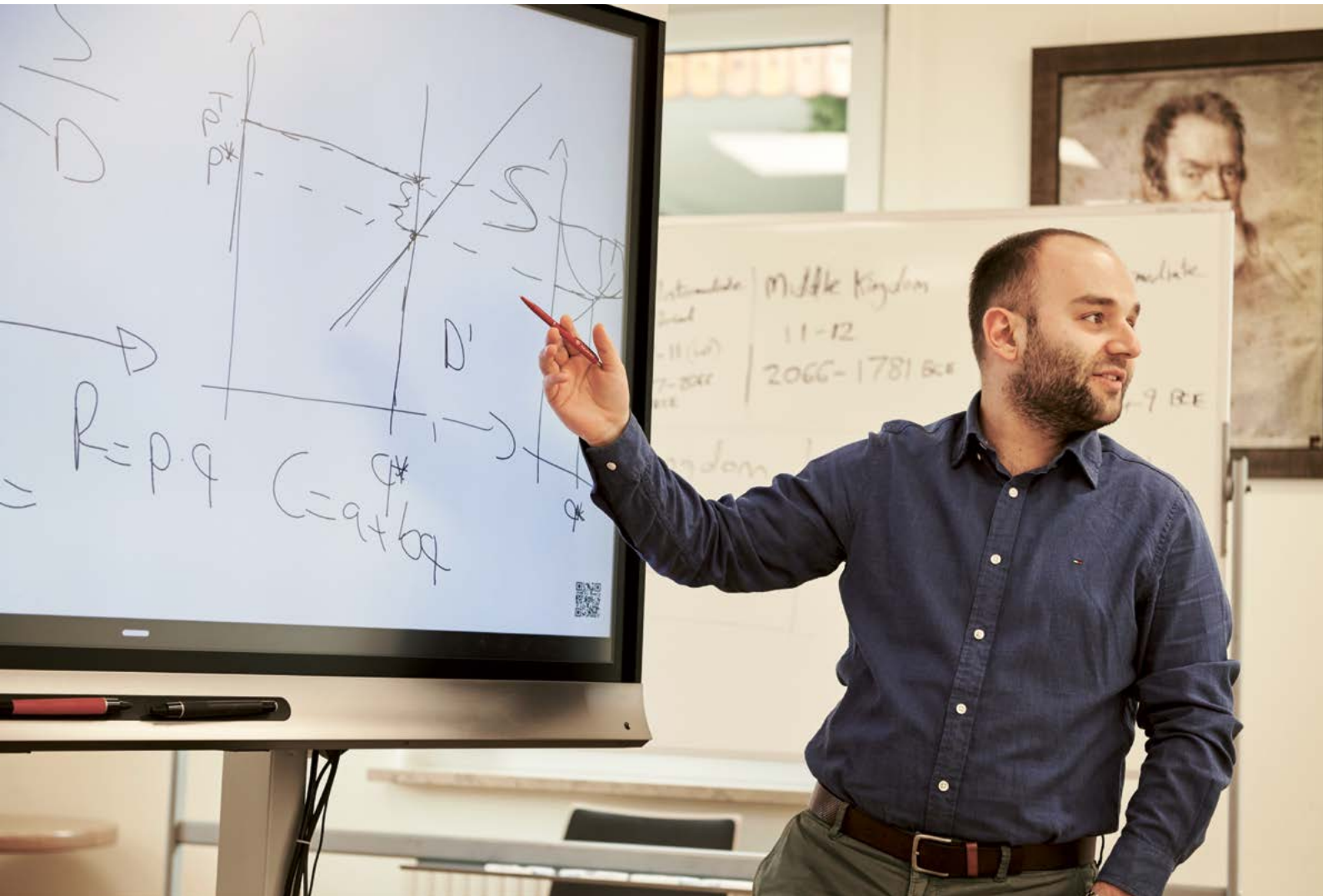
We will dig deeper into the question of why farming emerged in the places it did, at the time it did, and how and why it spread. We will, of course, also consider the implications of this new way of life. How did it impact communities in terms of population growth, health and life expectancy, as well as social order and hierarchy? Agriculture had an impact in all of these areas and not always for the better. Therefore, we will cast a critical eye over agriculture and its mixed blessings.

The cultural implications and consequences of agriculture are of enormous proportions. The course has chosen three areas to explore them:

- The mode of production created a new socio-economic order and changed the predominantly egalitarian social order into extreme patterns of inequality. We will explore the social and economic organisation of villages in the Neolithic.
- We also look at the organisation of these new societies with regard to their collective decision making and power structures through the study of Megalithic Societies.
- Finally, the course takes the role of collective violence into account and analyses its new dominant form: war.

Having reached the end of this block, you will have touched upon a wide array of topics stretching across vast periods of time, all of them focusing to some extent on the interactions between power, hierarchy and inequality. While this might seem a daunting task, it in fact allows us to step back and question some everyday aspects of culture.

In this block, we seek to understand how culture and society – both creations of the human mind – can have such significant power over our lives and the world we inhabit. We will engage with some very challenging subjects and you will be forced to let go of received wisdom and look afresh at familiar ideas and concepts. While we might struggle to find satisfactory answers to some, or even many, of the questions raised, it is the discussions generated by these topics that are so fundamental to this block, and indeed, to our entire study of human nature.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Block 6: Mosaic Brain: Evolution of the Human Brain, Mind and Behaviour

This course will study the one phenomenon of nature about which we *Homo sapiens* know least: our own mind. As we have learned in previous blocks, science does not have all the answers concerning the universe and the world around us, yet it can provide an amazingly in-depth understanding of many natural phenomena. We have pushed our understanding of the universe back to milliseconds after the moment of creation; we have a surprisingly good understanding of the evolutionary history of life on Earth, including humanity, and we have used science to cure many previously devastating diseases. Although every day brings ever more refinement, it is highly unlikely that the macro theories and hypotheses which make up Big Bang cosmology or evolutionary theory will be overturned. However, despite this in-depth knowledge, we know surprisingly little about that which allowed *Homo sapiens* to understand these phenomena: our own conscious minds.

If the human mind is still relatively uncharted territory for science, for most lay people it is truly *terra incognita*. However, despite the fact that very few of us have even a basic understanding of how our brain and mind work, we all still make statements based on unfounded assumptions and folk tales. A prime example of this is the old adage that we use only 10% of our brain. This "fact" is widespread (and perpetuated by popular Hollywood movies!); how many times have we heard someone say, "Can you imagine if we used all of our brain?". This is patently untrue: we use all of our brain. The human brain is a complex structure evolved by natural selection and its energy demands upon our metabolism are immense. The brain itself only accounts for around 2% of the average human's total body mass, yet it consumes 20% of our energy supply. In the evolutionary story, we learned that all life exists on a knife edge; every day is a struggle for survival, and in a Malthusian world of regular starvation, every single calorie counts. There is simply no way we would ever have evolved such an energy-hungry organ if all parts of it were not useful. Neurological studies clearly confirm this – we use all of our brain.

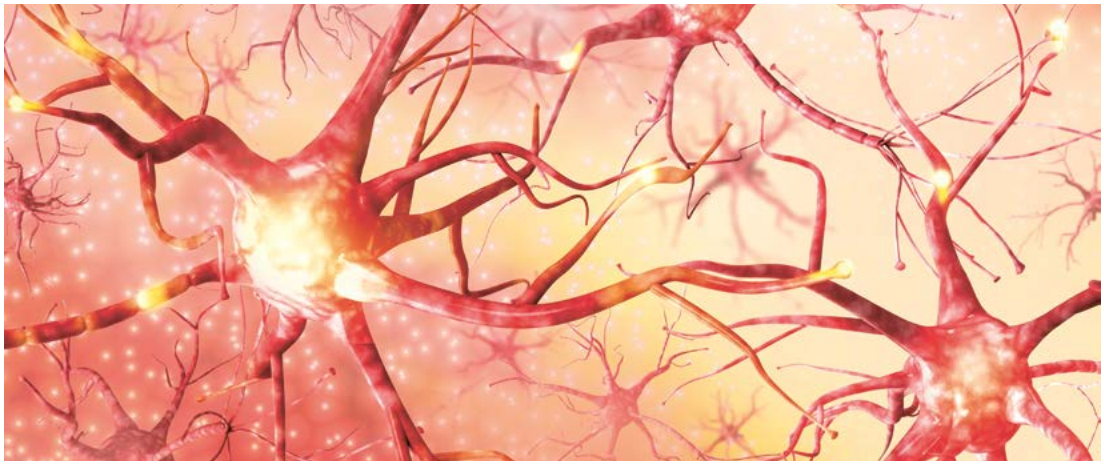
This course begins with a biological and neurological analysis of the brain, and once we have a sound physiological framework in place, we begin to study that intangible expression of the brain: the mind. We start with neurons, the specialised cells that make up our brain and nervous system. On average, we have 86 billion of them in our nervous system. These cells transmit information from the external world into our brain and from our brain back out through our body, controlling all of our motions, thoughts and functions. Chemicals and hormones created within our endocrine system (the various glands of the body) function as neuro-transmitters and neuro-inhibitors, speeding up or slowing down certain neurological connections, causing the sensations we call emotions. All of our most powerful emotions – fear, love, hate, happiness, sadness – are regulated by the release of specific chemicals, triggered by either environmental or biological stimuli. The challenge for us is to explain how this combination of electrical impulses

and neuro-chemicals gives rise to the complexities of human thought and behaviour.

Building upon our understanding of the nervous system, we explore the various regions of the brain. We will realise that the human brain is an evolutionary mishmash; each layer represents a different epoch of our ancestral heritage. The deepest layer of what used to be called (rather simplistically) the "old" brain, or reptile brain, contains structures such as the brain stem and the cerebellum. These control the automatic functions of our body such as breathing, heart rate, reflexes and balance. We share both of these structures with modern reptiles. We have no control over these basic functions: they are part of our automatic brain, and for the most part, thankfully so. Yet if you have ever tried to read in a car and ended up feeling sick, you have your rigid inner reptile to thank. Your cerebellum has interpreted the discrepancy between your visual perception, the stationary book, and the balance mechanism in your inner ear in the only way it knows – as poison – and the only way your body can respond to suspected poisoning is to evacuate the stomach.

The next layer is the limbic system, also called the mid-brain or mammalian brain, as we share it with all other mammals (and birds). Consisting of several small structures such as the hippocampus, the thalamus and the tiny amygdala, the limbic system is responsible for what we call emotions. Of particular interest is the amygdala. This small structure, about the size of an almond, regulates emotions, decision-making and memory. Although many other parts of the brain also play a role in these functions, the amygdala serves as the primary combination point for all three. Understanding the amygdala provides insight into decision-making and emotional responses. Why, for instance, does a certain perfume trigger memories of your dead grandmother and make you cry? The answer is the amygdala and studying it will show that we are much less rational than we, or many economists, would like to believe.

Finally, we come to the top layer of the brain, the neocortex. Divided into four lobes (frontal, parietal, temporary, and occipital) as well as other substructures involving language and motor functions, the neocortex is the most recent addition to our brain. It is something we share with



other high-cognition animals such as whales, elephants and primates. Made up of both white and the now famous "grey" matter, the neocortex plays a fundamental role in language, movement, attention, problem-solving, personality and consciousness. The last four are primarily the domain of the frontal lobe, the CEO of the brain. However, even a passing study of the brain makes one aware of the frontal lobe's limitations. Yes, it functions as a CEO, relaying orders to the various substructures of the brain. However, much like the CEO of any organisation, its plans are only as good as the information relayed to it, and decisions are not always implemented as it would like.

Based on this information, we can now discuss theories of mind developed by psychologists. We begin by exploring the nature of consciousness, trying to create a definition of what exactly it means to be self-aware and whether or not other animals possess such faculties. We then challenge the extent to which our conscious mind is in control. Finally, we conclude with a journey into social psychology. Some evolutionary biologists such as Robin Dunbar argue that the complexity of the human brain is directly linked to the social world our ancestors had to navigate, and he suggests that the larger the social group, the more successful the individuals. However, Dunbar would argue, this came at a cost: social conformity, violence towards strangers, and obedience to authority all seem to be bred into our genes. Other studies such as the now infamous Milgram electroshock experiment and Zimbardo's Stanford prison experiment force us to take a long, hard look in the mirror and reflect upon the violent actions we seem so capable of.

This course will look deeply into the inner workings of our brain and mind. It will present technical challenges, as neuroscience is a demanding subject. It will become more abstract as we move away from the physiological workings of the brain and begin studying psychological concepts. However, it will also open new perspectives on ourselves. Ultimately, it should make us more reflective and less absolute. Understanding why we get angry, fall in love and make decisions does not mean we will suddenly have the power to alter our personal realities, but this knowledge should make us better managers, employees, and friends.

Block 7: ProCredit Ethics Course

Since its introduction, the ProCredit Ethics Course has been an integral component of the Focus Session, which leads into the ProCredit Onboarding Programme. Additionally, all Academy students, as well as seminar participants from all of the banks in the group, are confronted by questions of how to do the right thing and indeed what is the right thing to do. The key idea behind this course follows a principle which was developed and spread particularly during the European Enlightenment: the individual responsibility of rational beings to act morally. This requires both the freedom to take decisions and the will to exercise that freedom. In other words, it is about a person's self-emancipation. Needless to say, this course also serves to explain and validate the values and principles underpinning ProCredit's corporate identity. However, experience has shown that participants go beyond this: they take the ethical questions, dilemmas and new perspectives home with them. Their engagement with personal and political ethics does not end when the course is over. On the contrary, it really only begins when, on a day-to-day basis, they address the contradictions that inevitably arise between their role in the company and society and their own ideals. For most participants this course provides an arena where they are able to awaken from their self-imposed ignorance, arm themselves with ideas and responses, and rediscover values they may have thought were extinct.

The slow process of detachment from God, organised as a Christian institution that had been divided several times since the Reformation and had become increasingly fragmented, laid the groundwork for an emancipation of the individual during the period of the European Enlightenment. At least, that was – and still is – true for an enlightened, progressive, critically-thinking minority in all societies. If the state and the Church are no longer able to offer satisfactory answers, if the legitimacy of the traditional elites' claim to power is increasingly called into question, if industry and commerce create wealth, and some of that wealth is invested in education and culture, if students have time to discuss, then it is valid to describe such a period as a phase of societal reflection and also renewal. This was the case, for example, in 1789 in France, in 1848 throughout Europe, in 1917 in Russia, in 1968 in the Western Hemisphere and 1989 in the East.

This kind of situation creates space for an optimistic yet in its convictions profoundly humane vision of self-determined individuals who, at least in the decisive moments, act in the right way. Immanuel Kant's trust in human reason may have been partly derived from his lack of empirical impressions of society and politics as they are actually lived. But is it not true that this idea of an individual freedom that is constrained only by mutual and thus universal respect for the dignity of others is at the core of our own convictions and our own way of life? Freedom,

self-determination, dignity and respect are not just empty phrases after all, even though reality does not always live up to the perfection of the ideas. The frustration that this gap between ideal and reality may cause, however, should not drive people to mythical-religious escapism or totalitarian experimentation; on the contrary, these issues must continue to be addressed in the finest Sophist tradition.

The ProCredit Ethics Course does precisely that. It sees itself as part of the Enlightenment tradition, with the vision of human freedom and reason, translated into five days of discourse, almost completely free from hierarchical control. The backbone consists of individual lectures taken from the introductory course on moral philosophy delivered by Harvard professor Michael Sandel, which is freely available on the Internet. This approach has been chosen because of Sandel's unique ability to succinctly construct a complex edifice of ideas for the debate. This experienced, charismatic lecturer even succeeds in turning an explanation of Kant into something exciting as well as convincing. Our own course uses his structure and his explanations as a basis, but also as a stimulus for participants to pursue their own questions and acquire additional knowledge. Furthermore, emancipation in this context means taking a stance, explaining oneself and one's reasons. Participants are invited, and indeed compelled, to participate and thus to make the course their own.

Based on the fundamental dualism of results-oriented and principles-oriented approaches, the course begins with Jeremy Bentham's Utilitarianism. Both Bentham's motivation and his method are tied to specific historical conditions in the industrialised England of the 19th century. In order to overcome the miserable social conditions of the vast majority of the English population, he applied a strictly rational, calculative and materialist approach to guaranteeing a better life for the majority. Bentham rejected as quasi-religious fantasies the idea that individuals have natural rights, even considering such ideas to be counterproductive to the aim of enhancing

the pleasure of the greatest number of people. His fundamental idea is quite simple: All human actions are hedonistically motivated and focused on consequences. Humans try to avoid pain and seek pleasure, and decisions are based on the calculation of individual costs and benefits. Society should reflect these preferences and act accordingly by law. The result must necessarily produce the greatest good for the greatest number of individuals and therefore maximise utility, the balance of pleasure over pain. This is an attractive and rather intuitive account, especially when confronted with moral dilemmas like the "trolley problem", but it is dangerous as well. Increasing the pleasure of the majority might also increase pain for minorities. The common good prevails and the individual becomes a negligible figure in a statistical calculation. Would we trade off our basic human rights if it meant running the risk of ending up as part of a minority one day?

The fundamental provocation posed by the Utilitarian's view of human rights as religious doctrine is answered by the two main theories of rights, Liberalism or Libertarianism, and Kant's idea of human reason. The Libertarians represent an extreme position even within Liberal thinking. Liberalism basically evolved as an umbrella ideology during the 18th century, developed and exercised by bourgeois layers of European societies. Liberal ideas were also used by sections of the English and French nobility to justify their political claims against the monarchical ambitions of centralisation and absolutism. But the nobility were playing with fire, because at the heart of Liberalism lay the notion of the natural equality of all individuals and their natural right to liberty and property. Especially in the urban centres of Europe, a new class of people emerged, empowered by profits from colonial and domestic trade and the increasing demand for bureaucratic skills both in business and in the public administration. In their struggle against the "old corruption" of the nobility and the clergy, bourgeois self-made men, supported by philosophers, emphasised the importance of personal merits, democratic participation and economic freedom as an agenda in times of feudalistic privileges based on birth and ancient traditions. The real experience of urban life and commercial capitalism consequently led to the development of new perspectives on human nature, according to which autonomous rational individuals form the basis of society and state. The reasoning of John Locke, explained in detail during the course, exemplifies mainstream Liberal thought, which had a formative influence on the English Glorious Revolution of 1688, the American Constitution of 1789, and the Declaration of the Rights of Man and of the Citizen in the French Revolution of the same year. Therefore, the classical Liberalism of John Locke, Adam Smith, Denis Diderot, Baron d'Holbach or John Stuart Mill became the ideological foundation for modern institutions, such as human rights, democratic representation, legal equality and private property.

Later, especially during the 19th century, Liberalism changed significantly by adopting notions of nationalism and fighting off socialist claims to redistributive justice. The lines of confrontation shifted from the classical struggle between the bourgeoisie and nobility to the

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Our Holistic Planet: Earth and Evolution

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Meet the Family: Human Evolution

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Cultural Evolution: Life in the Upper Paleolithic

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Block 7
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Block 7
ProCredit Ethics Course

socio-economic conflicts between the propertied classes and the vast majority of a deprived and exploited population. After a century of laissez-faire capitalism, states took measures towards redistribution and economic regulation in order to provide social and political stability. It was in the interest of the states and some elites to redistribute wealth on a limited scale in order to avoid unrest and revolution. Libertarianism as a school of thought and ideology of the 20th century must be understood in this context: as a defence and justification of the highly unequal distribution of property and social power with a fundamentalist claim on the absolute rights of individuals to liberty and property. This extreme individualism is based on the idea of self-ownership liberating the individual from any type of coercion, be it moral, political or financial. But do we own ourselves after all? Is everything that individuals achieve based solely on their successfully applying their talents? Does anyone deserve a specific share of social goods such as wealth, status and power? Is there a debt we owe to our ancestors, nation or state?

Kant's defence of universal humanity is free of any allegiance to social classes or political castes, and it does not rest on religious assumptions like Locke's notion of natural rights endowed by the creator: it rests solely on humans' capacity for reason. The freedom to make decisions is, according to Kant, a human being's most valuable possession and the true definition of humanity. In other words, freedom is what makes us human. Because of the possibility of free will, and the rational capacity to recognise and accept categorical imperatives, a human being exists as an end in itself and not only as an instrument to be used for the purpose of achieving specific ends. That is why human individuals must enjoy rights and freedoms and why humans have dignity. The Utilitarian challenge is met, but does the categorical imperative present a real alternative in a complex world full of grey areas? Can this world be organised on the basis of two commandments?

Participants are forced to draw their own, differentiated conclusions from intense debates and discussions. The challenge of the course is to define a valid and feasible combination of categorical and consequentialist thinking against the background of real situations and concrete questions that are relevant for the ProCredit reality; to apply these general ideas and concepts; and to translate them into a framework of values and principles that is our own yet is nevertheless consistent, while still conforming to our shared *Menschenbild* (view of humanity) and the *res publica* of the ProCredit group. Based on their reflections during the course, participants gain new insights into the key ethical principles underlying the group's Code of Conduct, finding a deeper meaning behind the statement in the Code of Conduct that avoiding any form of discrimination is a "categorical imperative". They should be able to identify more strongly, and at a more personal level with ProCredit's ethos of building peer-to-peer relationships with colleagues, clients and third parties, based on transparent communication, individual responsibility and mutual respect.


lenovo

Banking and Finance

For our way of doing business, it is crucial that all our staff understand our core identity, our business model and our business strategy. We consider our staff not as people who merely carry out instructions, but rather as important guarantors of continuous improvement in our business performance while preserving our core values. Thus, who we are and what we do is at the core of courses offered in the Banking and Finance Curriculum of the Academy programme, as only on this basis will participants be able to plan and drive business, as well as measure, understand and interpret performance indicators. Needless to say, merely understanding who we are and what needs to be done does not itself translate into the kind of impact we want to have; rather, our business also calls for action rooted in that understanding. Consequently, we expect our staff to have the technical skills needed to perform their tasks, the confidence to make decisions, the ability and willingness to reflect and learn from experience and the imagination to go beyond experience. The courses in this section will help participants learn how to test and question business decisions in light of our business strategy, and to test and question our business strategy in light of our core identity. We also expect them to improve their banking and communication skills through practical exercises, role-plays, simulations and experience sharing. Last but not least, we expect them to develop ideas for improvements in our policies, processes, standards and organisation by questioning their practical experience and looking at it from a new perspective.

The Banking and Finance Curriculum covers different aspects of bank operations and management, with the aim of giving participants an overview of the complexity, breadth and depth of the business we run, and the opportunities and challenges in doing so. Subjects covered in the courses range from defining corporate identity and business strategy, and implementing that strategy, to controlling and measuring results. The courses are designed to accommodate participants from different backgrounds, ensuring that they are able to follow and benefit from the information received. Though the implementation of the business strategy may vary slightly from bank to bank (depending on the nature of their respective markets, our positioning in those markets and the regulatory environment), key principles are shared and standardised across the group, and it is on these aspects that the Banking and Finance courses focus. Thanks to a highly coherent strategy, the already high level of standardisation is expected to continue to grow, resulting in a homogeneous approach to customer selection and observed similarities in their needs and demands across the group.

The nature of the courses requires that participants have a solid understanding of basic accounting and financial mathematics, and they will therefore receive refresher training on these subjects in the Academy. Although the courses offer models to assist participants' thinking processes, one should not expect definite answers or solutions to problems: rather, we pro-

vide a platform for discussion and dialogue that stress-tests our business practices and looks for opportunities for improvement. The questions envisaged in each course, the heterogeneous composition of the teams, and the opportunity to detach oneself from daily operations – all these factors provide an ideal platform for ensuring that motivated participants can achieve the learning objectives.

Block 1: About Us and How We Do Business

"What we achieve is a product of who we are and what we do." Of course, this is only partially true, as circumstances also matter, but the fact is that we cannot control circumstances; we can only adjust or not adjust to them. That is why understanding who we are and what we do is a good place to start any activity and thus forms the basis of Academy learning. This course lays the foundations for all other banking and finance courses, as all of our banking activities reflect our identity. Understanding who we are requires a little retrospection, so participants will have a chance to discuss where we came from before moving on to our current position, and then beyond to our envisaged future. In this journey through time they will come to realise how we have evolved, taking note of the non-negotiable core at the centre of our rapidly adapting external form.

Nowadays it is hard to find a bank that does not claim to be ethical or sustainable, and banks that claim to put clients first and strive for long-term relationships are even more common. Some of them will also claim to promote development or consider themselves to be contributing to a better society. Such claims became especially popular after the financial crisis, and represent a kind of a response to it, but in most cases, they sound more like a denial of their past rather than a real commitment to effecting change in the present and the future. That is why it is important to take a historical perspective, to see how our development orientation, our responsible and ethical business practices, and our care for the environment have defined us right from the beginning, and to see how and what we have learned over time. Next, we will assess our current position: our strategic focus, our competitive strengths, our way of doing business, our defining policies and standards, and our key performance indicators. Finally, we will discuss our plans and expectations for the future: expected developments, key areas of focus, and expected results.

This course does not aim to give a chronology of our development, but rather to show how market developments, changes in the societies in which we operate and our own self-reflection on where we can contribute best have reshaped us, given us a clearer focus and consequently a better positioning. "Contribute" is a key word here: the only way to transform plans into results is through activity, which is why the first step in our transformation was to assess our capacity to act, i.e. the quality of our staff and management, our services, our processes, our funding sources and our network. This assessment made it clear to us that we did not have the capacity to be a neighbourhood bank for everyone, and that we could make a greater contribution to development by aiming to be a more exclusive type of bank with a clearer client focus. In addition, precisely because of our lack of capacity to control mass-scale operations, we were

running the risk of being counterproductive, engaging in excessive consumer lending or having an adverse impact on development in other ways, such as financing tax evasion or causing businesses to become overindebted by lending to them without fully understanding them or giving them proper advice.

Logically speaking, the next question is "Who should we cater to, then?" To answer this question, we went back to our aim – to be a development-oriented bank – and started to look for clients who are contributing most to the development of the societies in which we operate. That is how we came to be a "bank for the middle class" as opposed to a "bank for everyone"; in other words, a bank for small and medium businesses and for individuals saving up for future investments. Now that we have a smaller number of clients, we are able to understand them better, and have come to realise that we need to be more than a mere provider of funds to them, which has led us to shift from our narrow lending focus towards offering them a full range of services. This realisation calls for a thorough revision of our processes, network and services, and has led us towards new technologies and modernisation to meet the needs of clients who are willing to learn from and contribute to such progressive developments.

In light of these changes, we now find ourselves competing in a different league: our clients are desired by many other banks, and our relationship with them is taking a different form. Our clients assess their partners carefully, the scope of their negotiations is broader, they are cautious in changing partners and they weigh up their options before making decisions. In other words, our clients are not "virgins" in the sense that they already have a bank, and often it is a bank that cares for them. Acquiring these clients requires another approach, different communication techniques, better preparation, a lot of persistence, and above all, more patience. When they come to us, they behave like experienced partners; they do not require "parenting" over trivial issues and they expect open and constructive dialogue when it comes to their financial planning and structuring. Our online services give our clients the control and comfort they want for minor day-to-day banking transactions, and at the same time they give our Business Client Advisers (BCAs) time to prepare and conduct in-depth analysis and discussions. Needless to say, our clients expect fair pricing, i.e. within market norms, and we can only offer this if we request their "reciprocity" in return, in terms of turnover through accounts with us, as well as by offering our account services to middle-income depositors looking for a safe place for their savings.

Our new strategy also impacts on the way we manage risk, the way we collateralise our loans and the way we document our decisions. Bigger clients mean bigger individual risks, which need better assessment and management. This calls for differently trained people, different processes and different policies. It also calls for different performance metrics: if we wait

for the portfolio at risk (PAR) ratio to indicate a problem in this category of clients, we may be too late. Bank account movements should serve as an early warning indicator that gives us and our clients time to take measures before it is too late. Bigger amounts also tend to attract more sophisticated fraud schemes, so we need to stay continuously alert, informed and updated to ensure that we do not get outsmarted by wrong-doers. This calls for redesigned processes, enhanced training, thorough assessment of staff, and software upgrades.

Our position as a leading business bank in the countries where we operate is illustrated via a comparative analysis of the respective banking sectors, where it is clearly visible that none of our competitors is as concentrated in its activity with SMEs as we are. Nonetheless, our SME focus does not stop our banks from seeking to do business with private clients; on the contrary, we see our private client operations as a complement to our business banking strategy. The role of private clients in supporting our funding, positioning and profitability, as well as current development in this segment is discussed and shared with the group. Understanding new retail banking trends, finding a balance between a relationship bank and a direct bank, and the imperative to continuously optimise resources are topics covered in this section of the course.

Our "green character", another of our defining features, is growing stronger. We see this as a natural part of our development aim, our long-term commitment and our generally responsible approach. In the markets where we operate, we are often pioneers in seriously doing something about the environment, and in this sense, we get both the advantages and the costs associated with being the first-movers. Despite an increased level of debate in some of our countries of operation, the environment has not yet taken its deserved place in national policies. This is reflected in the fact that not only our clients but also our staff and sometimes even our management lack the necessary awareness, let alone the motivation, to do something about it. Ongoing efforts to increase our awareness and our impact on environmental protection and promoting measures to contain climate change will continue to gain momentum, and we expect our clients to be among the first to join the drive for a cleaner environment. Above all, we are defined by our culture of questioning our activities and our decisions, by our openness to self-reflection, our curiosity to test our hypotheses, and our willingness to learn. This Academy course serves as a prime example of this culture by encouraging open discussions, critical thinking and a lot of reflection.

Block 2: Critical Thinking and Effective Arguments

This block is an oddity. Based on its subject matter, it is not part of the Humanities Curriculum, yet nor is it strictly part of the Banking and Finance Curriculum, despite the blue colour assigned to it in the overview. Rather, it lays the foundations for both curricula. To do well at the Banker Academy, participants will need to become skilful at assimilating, processing and communicating the information they acquire here. Moreover, these skills are essential for all ProCredit staff members: you need to be able to critically analyse information in order to take well-founded, logical decisions. And you need to be able to communicate effectively in order to convince colleagues and clients that your decisions are correct and your recommendations are worth following. Critical thinking and effective argumentation can be learned, and the purpose of the week is to show participants how. The rest of the Banker Academy course could be seen as a practice ground for developing and fine-tuning those skills.

Never before has so much information been so easily available as it is today. By the same token, there has never been so much false or misleading information. The city of Veles in North Macedonia, near the Banker Academy's former location, has achieved notoriety as one of the many breeding grounds for people who deliberately spread fake news for money. We therefore need to heighten our sensitivity to incorrect or biased information, and use our critical abilities to filter it out.

One way to achieve this is to develop fact-checking habits and a healthy degree of scepticism. However, we also need to ask ourselves what psychological mechanisms make us so vulnerable to unreliable information. Why are we so easily swayed by emotionally charged arguments? Why do we tend to attach disproportionate importance to unrepresentative facts? Why do we find it hard to make rational decisions when presented with more than two choices? Why do we tend to invent links between phenomena that may be totally unrelated? And why do we put so much faith in self-professed experts? Giving a foretaste of the later blocks on the human brain, we look at certain cognitive biases that have evolved over the millennia of human development. By making ourselves aware of these barriers to logical thinking, we can minimise their adverse effect.

Exploiting the weaknesses in our thinking caused by these cognitive biases, people may try to mislead us by applying logical fallacies. With practice, we become more skilful at exposing these fallacies for what they are, and countering them with superior logic. For example, we learn to realise when someone is presenting us with false alternatives, i.e. trying to convince us that something must be either black or white, when it could be various shades of grey in between. We can also learn to identify the false – and often hidden – assumptions behind


11-12
13-17
2066-1781 BCE
549-1064 BCE
18-20

alarmist predictions. In this part of the block, participants learn to dodge the bullets of a "Texas sharpshooter", how to fight real opponents instead of "straw men", and how to stand firm on a "slippery slope".

If we become aware of the logical fallacies that others may use in their arguments, we will also be able to avoid committing them ourselves. This is one aspect of effective argumentation. Another is an awareness of the need to clearly structure your communication in order to guide your audience in the direction you wish to take them. Throughout the Banker Academy programme, participants will be expected to write essays. Why? Because, among its other functions, an essay is an excellent exercise in structuring one's thoughts. Consequently, the essay-writing part of this block is aimed at laying the foundations for good essay-writing habits. And a key aspect of structuring involves creating a space for addressing counterarguments. Participants learn to play devil's advocate by consistently asking themselves: "Why might someone disagree with me? What can I say to change that person's mind? How can I say it in such a way that they are sure to hear it?"

Once these two disciplines – logical rigour and structure – have been learned in the context of an essay, they can be applied to other contexts in which the careful organisation of ideas is crucial, such as presentations, which are also frequently assigned at the Banker Academy. When delivering presentations, further elements enter into the equation, such as tone of voice, body language, choreography, audience management – not to mention the visual elements, which may or may not be generated in PowerPoint. There are many published guidelines on presentation skills, but none is more effective than "learning by doing", followed by peer review and self-review, which is the approach taken in this block. This reciprocal critique provides another good opportunity for critical thinking.

Towards the end of the week, having developed written and spoken arguments, the participants take the process a step further by conducting formal debates. They apply all the critical thinking skills learned so far, but with the additional challenge of having to think quickly in order to address counterarguments as and when they arise. This means that they need to consider possible counterarguments in advance and have answers at their fingertips. All's fair in love and... debates. Participants can try to confuse the opposing side by using some of the fallacies they have learned, and by applying the persuasive rhetorical techniques that will also be examined during the week. Learning to defend one's position in a controlled but possibly hostile environment will stand the participants in good stead for the lively discussions that will follow during the rest of the Banker Academy course.

Block 3: The History of Banking

This course deals primarily with the systematic relationship between banks and states and requires participants to explore how and why the political landscape is instrumental in shaping the banking sector.

Without the explicit efforts of political institutions, neither banks nor advanced states could exist. The relation between states and banks is complex, as they strongly rely on each other: States cannot exist for long without immediate access to capital, which can only be provided by functioning banks. Banks, on the other hand, rely on the strict application of the rule of law to ensure the incontestability of contracts that allows them to do banking business. In fact, in order for there to be a functioning banking system, the government has to ensure three major property rights issues:

1. Shareholders and depositors must be protected from expropriation by the government
2. Depositors and minority shareholders must be protected from expropriation by majority shareholders
3. Shareholders and depositors must be protected from expropriation by debtors

Within the banking system, conflicting interests naturally arise between the different key players: banks, depositors, borrowers, shareholders, political institutions and various fringe players.

Each of these players naturally wishes to shape the political-institutional environment to suit their particular interests. By design, governments can therefore use the banking system to gain support from groups upon whom their political power is based. The degree to which the banking sector is shaped or misshaped for these political purposes can greatly determine its long-term stability.

The relation between the state and the banking system is the subject of Calomiris' and Haber's *Fragile by Design: The Political Origins of Banking Crises and Scarce Credit*. This provocative book blends economic history and theory to illuminate banking and financial history with

special reference to the recent collapse in American banking. It provides profound analysis on how banking in the United States, Canada, the United Kingdom, Brazil and Mexico has been shaped by the political landscape and by interest groups in these countries.

Course participants will analyse different sections of this book, particularly those that deal with country-specific examples, and present their findings to the entire group. The take-aways from these discussions should equip participants with the right mindset to scrutinise other banking sectors in the context of their political and historical background.

Block 4: Business Development

This block is about developing our business, i.e. about growing and putting our business strategy into practice. While growth is not a value in itself, we want and need to grow our loan portfolio, our deposits, and our services. We want to grow, as we believe that our business approach positively contributes to the socio-economic development of our countries of operation. We need to grow, because banking industry trends require us to generate more business volume in order to remain profitable.

The implementation of our business strategy is built on communicating convincingly with clients, based on a sound understanding of banking trends and our positioning. The block is built on three pillars: 1) Current banking industry dynamics, 2) PCB's positioning from the clients' perspective and 3) Effective communication.

Dynamics in the banking industry: We first look at the changing environment in which we want to grow, i.e. at the current trends in banking and ProCredit's positioning. Understanding these trends will help us to "get our message across" in our daily communication both within our banks and with clients. Key words to describe these trends are digitalisation, direct banking, a low interest rate environment, regulation, and the emergence of new players in banking. We will not look at these trends in the abstract, but study concrete examples, both positive and negative.

PCB's positioning with SMEs and private clients: The dominant perspective in analysing our positioning will be that of our clients: What matters in a banking relationship to SMEs? What matters to private clients? Why do they choose one bank over another? Starting from the clients' perspective, we will discuss both ProCredit's positioning as a bank for SMEs and our positioning as a bank for middle-income private clients.

Our SME strategy is built on the Hausbank concept. We aim at having a banking relationship that is as "complete" as possible with our clients, as we are convinced that this is in the long-term interest of both the client and ProCredit. This approach implies values like trust, transparency and professionalism. We will try to draw a line from banking trends to client needs, and from ProCredit's positioning and services to these values.

Growth needs to be financed, and this is mainly achieved via deposits: from our SME clients, from business owners, and from other private clients. We use the Hausbank concept to attract funds from businesses, as well as from business owners and their families. At the same

time, we target private clients who also value a Hausbank relationship through our "ProCredit Direct" concept. We aim at balancing a digital approach with keeping a personal relationship at the core of our value proposition.

Effective communication: We have a strong track record in growing our loan portfolio with SMEs, and we are confident that we will continue to do so. Our challenge is rather how to grow it in a profitable manner. Therefore, we will not only engage in practical exercises to simulate the acquisition of clients via telephone calls and first meetings, but we will also examine how to position our business proposals with clients in a confident manner during the negotiation phase. These exercises, on which we will spend quite a bit of time, should also be useful for participants who do not deal directly with clients: the activities reinforce general principles of communication. Everyone can benefit from practising the art of listening and communicating effectively as well as the "first bake, then cut the cake" approach in negotiation situations.

The participants will learn not only through performing various role-plays, but also by giving presentations, doing written exercises and developing marketing materials, in which we will examine how messages are formulated, adapted and tailored to different channels. By the end of the course, participants will be able to identify the possibilities and limits of the individual channels as well as to employ key elements to ensure a greater chance of achieving satisfactory results.

Block 1
About Us and How We Do Business

Block 2
Critical Thinking and Effective Arguments

Block 3
The History of Banking

Block 4
Business Development

Block 5
Foundations of Finance for Banking

Block 6
Controlling Risk

Block 7
Environmental Management Systems

Block 5: Foundations of Finance for Banking

This course builds upon basic knowledge of accounting concepts. The participants will learn how to read and understand financial data and be presented with a structured approach for bank analysis. They will review and evaluate financial statements (such as the balance sheet and the profit and loss statement), thereby gaining an understanding of how to assess the financial health of institutions. This in turn enables them to identify the strengths and weaknesses of financial institutions. The focus of this course is on banks rather than other businesses.

As a first step, basic accounting knowledge will be reinforced by going through the basic structure of financial statements. The participants will further apply their knowledge to elaborate the key differences between the financial statements of banks and other businesses, taking into account that particularly Business Client Advisers in the course will already have a sound understanding of the financial statements of non-banks. By learning how banks' financial statements are compiled and what the individual financial captions mean and entail, participants will gain a deeper understanding of the major drivers of financial performance. At the same time, they will learn that approaches to financial analysis can vary with respect to the purpose of the analysis and/or the perspective of the analyst.

The participants will learn the basic steps of applying the CAMEL approach – an analysis methodology commonly applied by rating agencies. Based on this approach, they will learn about five different angles on financial performance and health: Capitalisation, Asset Quality, Management, Earnings and Liquidity. Participants will acquire knowledge about the major drivers of each of these elements and understand the extent to which they are interconnected with each other. Based on this newly acquired understanding, they will be able to develop meaningful ratios that can help assess financial performance.

Finally, participants will evaluate the financial performance of a bank and identify its strengths and weaknesses based on the CAMEL approach. By the end of the course, they will have learned how to read and evaluate financial data and provide an assessment of the financial health of financial institutions.

Block 6: Controlling Risk

The core business of a commercial bank is risk management, and as such controlling risks is an intrinsic part of banking activity. Our banks manage a variety of risks, ranging from credit risk and market risk to operational risk and liquidity risk, and within these categories, risks can arise from clients, the environment or internal process failures. Although one cannot afford to underestimate the importance of any one area, in terms of frequency of incidents, controlling activity and general bank exposure, client-related risks represent the most important category. This is the risk that clients default on their obligations to the bank, and the risk of banking with clients engaged in any form of criminal activity leading to reputation loss and/or regulatory noncompliance. In this respect, we are no different from any other commercial bank, but when we add to this our commitment to economic development and the environment, our efforts to control risk take on another dimension. Namely, we go beyond mere regulatory requirements or short-term financial concerns, instead choosing to take a long-term approach when dealing with commercial projections, adhering to strict self-imposed ethical standards and striving to minimise our ecological footprint. It is precisely this long-term perspective that makes our two objectives, commercial and developmental success, converge, as we are aware that we can only have sustainable commercial success if we ensure that our market (our clients and the environment in which they operate) progresses.

Under the topic of controlling risks, we will address the principles and practices involved in selecting clients, such as assessing their financial capacity and monitoring our relationship with them (on an individual basis), as well as performing data analysis and interpretation on the portfolio level. The course addresses the anti-money laundering (AML) principles and practices deployed in our banks in the initial phase of our client selection process before moving on to credit risk. By the time participants have finished this course, they are expected to have a good understanding of our client profile and how it ties in with our identity and business strategy; the course will therefore focus on client selection and risk screening practices and tools for identifying and monitoring client-related risks, rather than on discussing the rationale behind this approach. Nonetheless, participants are reminded that the first line of defence against client-related risks is a staff who are not only aware of the risks, but also have a strong sense of commitment to the principles of responsibility and personal integrity set forth in the Code of Conduct. It is emphasised that compliance with risk-controlling procedures is not just a mechanical process.

The course does not aim at developing risk assessment skills, but rather offers concepts and raises awareness about important aspects of AML and credit risk, how these risks are practically

assessed and addressed in our banks, and what our group stance is in this regard. Below you will find more details on the content and composition of each aspect of controlling risks.

Prevention of Money Laundering and Financial Crime

Vast sums of money, acquired from a wide range of highly questionable or illegal activities, are in circulation around the globe. This illicit or illegal money can cause great damage, not only to financial markets but to entire economies and societies. Particularly in smaller economies and countries where the legal systems and law enforcement authorities are insufficiently prepared or unable to defend the integrity of financial markets, techniques to disguise illicit or illegal financial flows can easily be deployed by corrupt officials, organised criminal groups and those seeking to commit organised tax fraud.

ProCredit banks aim to help create transparent, inclusive financial sectors in developing countries and transition economies. We believe that a functioning and fair financial system must not lend itself to criminal activities. Money laundering is not only detrimental to free competition, but we also think that it supports loss-making economic structures with negative impacts that go above and beyond the financial markets. Money laundering promotes the criminal infiltration of entire business sectors and increases the dependence of economically weak countries on organised crime and corruption.

Less stable economies are attractive to those who seek to cover the tracks of their illegal activities, because for money launderers, the determining factor is not the most profitable investment, but rather the lowest risk of being detected and the greatest availability of money. In order to make funds or assets acquired from criminal activities appear legitimate and thereby make them fully useable, corrupt officials, criminals and especially organised crime operatives employ certain concealment and deception methods that facilitate money laundering.

Even though banks and other financial institutions have been used by criminals and others involved in corruption and bribery since the dawn of modern commerce for hiding and transferring money and disguising their source of wealth, the emergence of money laundering and terrorism financing as a bank risk in its own right is relatively recent. One can distinguish between money laundering and terrorism financing risk on the one hand, and Know Your Customer (KYC) and regulatory risk on the other. The first is the risk that a financial institution will actually be used as a conduit for criminally derived money or for money that turns out to have been destined for a terrorist purpose. The second is the risk that without having actually handled criminal funds or the money of terrorists, a financial institution will nevertheless be deemed to have been negligent in its adoption and enforcement of adequate policies and procedures designed to prevent

the actual misuse of its facilities for criminal or terrorism financing purposes. Both aspects have an impact on the risk management processes of financial institutions and underline the fact that knowing their customers is essential in managing these risks.

The course will highlight the significance of financial crime phenomena with particular regard to the consequences that they have for developing and transitional economies, and outlines the risk management obligations for ProCredit banks stemming from them. Participants will acquire knowledge about the three stages of the money laundering process and examine global illicit financial flows. They will learn about the possibilities for identifying the risk and proceed to develop a risk profile for ProCredit banks before they look at the organisational framework and the different tools for managing the risk of money laundering and terrorism financing. In this context, the importance of customer due diligence, the KYC principle, the role of identifying beneficial ownership and the implications for business relationships with Politically Exposed Persons (PEP) will be discussed.

Credit Risk

Our responsible approach to banking entails taking a conservative approach to risk management; this requires a high degree of awareness among all managers and staff and consistent efforts to diversify risk. Of all the types of risk our bank faces, credit risk plays a central role, and thus a solid understanding of it is an important prerequisite for implementing our business strategy. Our banks' balance sheets are dominated by exposures to small and medium enterprises, which reflects our focus and our expertise. Thanks to our commitment to understanding our clients, our strict adherence to key risk management principles and continuous improvements to our risk management processes, we have managed to consistently outperform our competitors in all risk management indicators. Understanding the key to this success as well as any areas for further improvement is the only way to maintain our well-established track record and to prepare ourselves for any uncertainty the future might hold.

In broader terms, our success in managing credit risk can be attributed to strict adherence to the following principles: a) a strong focus on our core business; b) a high degree of transparency, simplicity and diversity; and c) careful staff selection and training. These principles underpin our business processes from the moment we decide on our client profile to the moment we begin monitoring our relationship with clients in our portfolio. Therefore, every position in the bank has a role to play in credit risk management, be it BCAs or Credit Analysts directly involved in getting to know our clients and assessing individual risks, or specialists responsible for the collateral valuation process and for measuring risk on the portfolio level.

The course will cover different aspects of our risk strategy, explaining our key principles related to credit risk assessment, mitigation and acceptance as well as presenting the organisational set-up that ensures that we adhere to these principles. Participants will be able to connect our risk management approach to the overall culture of our organisation and will be able to better understand the rationale behind our set-up. As for practical implementation, we will examine credit risk both on the individual client level and on the portfolio level. By assessing individual credit risks in class, participants will learn the core principles of individual case assessment and management. In addition, they will learn how to combine qualitative assessment of a business and its management with quantitative analysis of its performance. They will become aware of the importance of understanding a business model as a whole so as to be able to assess the current situation and anticipate future business performance. We will also evaluate business cases together, so that participants will have the chance to experience the process of credit risk decision-making. Finally, we will learn how to measure portfolio quality, covering the various techniques used to measure and manage credit risk within a portfolio. Key performance indicators of portfolio quality include a set of asset quality and early warning indicators, indicators for credit risk concentration, collateral coverage and coverage with loan loss provisions as well as connections between credit risk and market risk.

Block 7: Environmental Management Systems

Human activities are having an increasingly severe impact on the environment: they have contributed to air and water pollution, land degradation, loss of biodiversity, and the depletion of natural resources. Last but certainly not least, human activities also constitute the main cause of global warming. Both locally and globally, these environmental problems represent one of the most urgent and challenging issues of our time, because they not only harm the natural environment, but also endanger our health, economic development, and even society and political stability.
Humans are inextricably linked with and vulnerable to the environment: whatever we do to the environment will come back to us, be it in a positive or negative way, in the near or distant future, directly or indirectly.

It is against this backdrop that ProCredit has established environmental protection as one of its core values. Responsible banking is not limited to social responsibility, but also includes environmentally responsible banking. To achieve this goal, ProCredit has implemented an environmental management system (EMS) to reduce the environmental impact of the activities of its employees, clients, and suppliers. This approach does not only confer benefits to the natural environment, however: by reducing their environmental impact, banks also improve their business performance. Examples of positive economic impacts linked with environmentally responsible banking include reduced energy and resource consumption; greater operational efficiency; consolidation of new, sustainable markets by acquiring eco-minded and energy-conscious clients; lower levels of credit risk, financial risk and reputational risk; and reinforcement of the banks' credibility as "green" institutions.

In order to firmly anchor the environmental management system in all ProCredit departments and operations, staff must be aware of and well informed about environmental topics and the vital role they play in economic issues. This course is designed to provide a sound theoretical base with respect to the means of environmental management systems and the requirements of international standards. On the basis of case studies – related to the different core sectors the participants' banks are financing – practical insights into the complex interrelationship between environmental issues and the competitiveness of businesses will be elaborated.

An additional goal of this course is to motivate participants to apply their newly acquired knowledge and awareness of the importance of environmental protection in their daily work at their respective institutions by integrating this knowledge into their own personal behaviour.

Learning objectives

- Acquire basic knowledge about environment management systems, their means and standards
- Understand the ProCredit approach to environmental management
- Learn how to analyse a business model with respect to its environmental aspects and impacts
- Learn how to develop an environmental strategy and a plan for businesses to improve their environmental performance

Course content

The one-week course consists of an introductory part (one day) to transfer knowledge to the participants and a practical part (four days) so that they can apply the new knowledge to a case study. At the end of this course, participants will have a basic but sound understanding of environmental management systems and how to apply them, not only to their banks, but also to clients from different business sectors.

The introductory part defines the concept of environmental management systems, clarifies the terminology and introduces international standards and certifications for environmental management. With respect to ProCredit's approach to environmental management it will be emphasised how an EMS can serve to continuously improve the environmental and financial performance of the institution and lead to additional strategic benefits, such as new markets or investors.

During the practical part, students apply their knowledge by analysing the activities of businesses from various economic sectors operating with different present and future environmental challenges. They will develop appropriate strategies and plans to improve environmental performance and competitiveness. In particular, participants are required to follow the EMS approach in order to identify specific impacts, risks and best practices in businesses from an environmental point of view. Based on their findings, they will develop an environmental strategy in order to manage the environmental aspects and incorporate them into the business model, e.g. by investigating new markets and target groups for "greener" products.

Finally, participants will present their case study in plenary sessions and discuss the feasibility of their proposed plan for their business with a focus on the positive impact of environmental management on economic performance and competitiveness.

Block 1
About Us and How We Do Business

Block 2
Critical Thinking and Effective Arguments

Block 3
The History of Banking

Block 4
Business Development

Block 5
Foundations of Finance for Banking

Block 6
Controlling Risk

Block 7
Environmental Management Systems

The Campus

The Infrastructure of the ProCredit Academy

The Academy is situated in beautiful, tranquil surroundings in the heart of Germany's Odenwald region and is a one-hour drive from Frankfurt Airport and ProCredit Holding's headquarters.

The Academy welcomed its first group of participants in January 2006; it now has a total of 100 bedrooms (all en-suite), seven seminar rooms and a large dining hall. In addition, there are two lounges with fireplaces where informal conversations take place. A computer room offers access to the Internet, and extensive common areas provide space in which to spend free time. Sport and leisure activities are also offered. The newly built pool offers you the opportunity to unwind after a busy day.

The entire hotel team strives to make the participants' stay a pleasant one and to take guests' individual wishes into account.

Melanie Schmitt and her team cook fresh, well-balanced meals every day. The dishes are placed on a self-service buffet and salad bar, allowing participants to pick and choose as they like.

The service area is the responsibility of Beata Janusz. Together with her team, she looks after the guests' well-being and ensures that every guest feels at home from check-in to departure.

Tomasz Pikul is responsible for technical and administrative support. As well as dealing with all major and minor technical issues, he doubles as the Academy's health and safety officer and fire protection officer.

Every day, Mina Kukavica and her team of cleaners see to it that everything is sparkling clean and ready to use again.

Pelin Uyar and Miriam Bastmeijer are the Office Managers at the ProCredit Academy. They are responsible for the smooth running of all matters connected with the Academy's accommodation service and seminar operations. As go-to contact persons for students, seminar-participants and employees, they always take care of the individual needs and concerns of all parties. They are also the direct link to the Academy for colleagues at the ProCredit banks.

ProCredit

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