

#### **COVER TEXT (backside):**

This book presents a new view of how we humans developed from apes and how in the course of this primary means of communication.

Until now, paleo-anthropologists (with their emphasis on physical aspects) used to focus one-sidedly on the *biological* evolution of man. The newness of this book lies especially in its wider, coherent scope: here, we offer an overview of the *mental* evolution of our species, with emphasis on the exchange and accumulation of individual ingenuity.

This wider overview of human evolution can also serve as the foundation of a new and more complete awareness of human identity. In this sense, it might function as modern, science-based alternative for the old religious Adam and Eve stories: as a universal and humanist perspective that might very well provide a new foundation for morality and a global sense of human togetherness and happiness.

In modern society, the classic Biblical creation stories have lost much of their authority. Our free market situation is slowly but inevitably eroding traditional (for example tribal, religious or class-based) models of human identity, without offering new alternatives other than a "consumer identity". Because of this, the need for a new shared basis is ever more strongly felt.

#### THE COVER ILLUSTRATION EXPLAINED:

Free to Michelangelo's fresco on the Sistine Chapel in Rome.

With God as Darwin (1809-1882), who was the first to point to Africa, the continent with the great apes which, according to Linaeus' *Systema Natura*, we as 'family' belong to and where therefore must be the cradle of the first people.

Darwin is surrounded by angels, in which we under recognize Jane Goodall (\* 1933) who imitates the greeting group of the chimpanzees, and Frans de Waal (\* 1948) who described the characteristics we share with these 'family members'.

Above, respectively Frans Couwenbergh (\* 1933) and his comrade Dr. Henk van Setten (\* 1950) who managed to make good English from the original coal-English of www.humanosophy.org

The Wikipedia globe emblem symbolizes that we humans all mentally live in a virtual world made with and defined by words. The chimpanzees - and all other creatures including us- live in a more natural and less complicated world.

#### **DEDICATION:**

This book is dedicated to the memory of the late historian and essayist Tony Judt (1948-2010).

#### summary

This book serves three purposes: (1) it tells why mankind needs a new "story" to provide (and restore) a shared sense of nature and morality; (2) at the same time, it also already provides the core of that new story itself, based on the history of humanity; and (3) it provides some ideas on how to promote that new vision on our common identity.

Today's philosophy desists from what ought to be its core business: providing us with the answers on our big questions such as: Who am I? What is all about? Where did we come from?<sup>1</sup> With the last question even the paleo-anthropologists cannot help us: they provide us with a chronicle of our biological past, but they don't have a complete picture of our mental evolution<sup>2</sup>. Nevertheless the need for a more complete story of our origins, a modern science-based alternative for the ancient Adam-and-Eve-story, is obvious: for without sharing a basic and universal story of humanity, our public morality lacks foundation and our feeling of human togetherness will be inadequate.

Part One offers the basic elements of such new, more complete origin story. Due to climate-cooling, the cradle of our bonobo-like earliest ancestors changed from rainforest through woodland to savannah. Together with other kinds of ape, they successfully adapted to this. We would still be ape-men in Africa today if not in one of their groups did not have arisen the habit of enriching the normal group animal communication with *names for things*.

This new level of communication enabled them to, knowledge and skills. It changed their way of communicating and thinking, enabled them to transfer accumulated knowledge to next generations, to consult each other and to exchange individual ingenuity. It gave them a feeling of power over their environment and enabled them to tame and use fire. The last was a crucial achievement: it accelerated the development of linguistic communication from proto-language to language. They became *linguistic creatures*, mentally living in a word-world, entering the path to ever better understanding things.

All this led to the development of cultural traditions and religious practices such as dancing and singing the creation story of their world.

Part Two presents the idea of how to introduce - without imposing - a new basic Story in our society, a common, shareable story of humanity: a story that is founded on scientific knowledge and that has the power to serve as a new foundation of social values.

<sup>&</sup>lt;sup>1</sup> For the German philosopher Immanuel Kant in his most important book *Critique of Practical Reason* (1788) was "What is Human?" the most fundamental question (the core problem) of philosophy.

<sup>&</sup>lt;sup>2</sup> The Dutch paleo John de Vos: "What is lacking is the big story, a model to which you can test new finds".

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#### PREFACE

First of all we need to explain why we call ourselves *humanosophers*. It is sort of protest name because neither humanists nor academic philosophers do what is their basic mission: to provide the free world with its science-based genesis story. The humanosopher studies mankind as Pliocene ape-men who enriched their normal group animal communication with *names for things*. Which made them mentally different from all other species.

Currently we are the only humanosophers in the world... Of course we hope that you, reading this, will join us.

We see humans as good natured. As (in essence) 'noble savages': a mindset that was shaped in the *gatherer/hunter* (GH) *phase* (from about 5,000,000 to about 10,000 years ago). In that very long phase wherein our nature has been formed, our ancestors lived in small, necessarily harmonious and peaceful bands, dominated by the females. In the subsequent *agricultural* (AGR) *phase* (since about 10,000 years ago) and especially in historical times (since the invention of script, about 5,000 years ago) this original human good nature became increasingly violated and frustrated by the competitive effects of *overpopulation*.

But the tendency to harmony (part of human nature) keeps emerging like an floating cork wherever it gets the chance.

Studying human prehistory and human social behavior is at the heart of humanosophy.

Humanosophy integrates the work of all kinds of scientists that are important here: (paleo-) anthropologists, archaeologists, taxonomists, geologists, primatologists, etcetera. In this book we will refer to all such scientists as *paleos*.

#### ABBREVIATIONS

We need to use some abbreviations in our text. We will explain them where they crop up, but for your convenience here are the most important ones:

GHs :	gatherers/hunters (the phase from 2 million years ago to 10.000 years
ago)	
AGRs :	agriculturers (the phase from 10.000 years ago till now)
<b>NT(s)</b> :	Neanderthal people
MSA(s) :	Middle Stone Age people (African NTs)
<b>AMH(s)</b> :	Anatomical Modern Humans (H sapiens people), like we are
(m)ya:	(million) years ago
ANBOs	Ancestor Bonobos (ape-men), our earliest human ancestors
Paleos	all scientists that are important for our story.

# **INTRODUCTION**

#### why a new view on human nature?

Everybody has moments of thought and musing, asking himself: Who am I? What is all about? Where do we come from and where we are going to? Big Questions. People are entitled to answers; they need firm ground under their mental feet. Especially young people need answers in order to establish their identity. Those who have access to big money, without a shared Story no longer feel that they have anything to do with someone else. Big Questions are philosophical stuff. It ought to be the core business of philosophers to generate those answers.

However, today's philosophers remain silent. When it comes to Big Questions, they don't offer relevant answers. Philosophical schooling didn't include any actual study of human nature. This is a consequence of the many centuries when it was the privilege of the churches to define human identity from the pulpit. When in the past philosophers tried to formulate a more scientific alternative, they skated on thin ice: it could be dangerous to speculate in a way that deviated from the ecclesiastic doctrine.

When in the end the churches lost their grip on people's minds, philosophy just wandered into the desert of postmodernism, with its pessimistic and relativistic view on knowledge as being prejudiced, culturally and gender-biased. And ... with a phobia for Big Stories. Unaware that it had been the new economy of the free market that had put an end to the oppressive Great Stories of history and had brought the free West into a new situation, that of consumerism. But that consumers were still people and so needed a bearing story to live together well.

This is why you still don't know how humans became humans from apes and what is the essence of our human nature. But we are sure that sooner or later, with or without the help of humanosophy, philosophy will rediscover itself and remember the commission that the patriarch Kant at the end of his life had given to philosophy: mapping man.

Bookstores offer many good books about human evolution. The internet has the Smithsonian Human Origins Project<sup>3</sup>, and much more. They all tell the same story about human origins. Wouldn't that be enough for us?

These sources are nice indeed, but too limited in scope<sup>4</sup> to generate the answers for the Big Questions. They tell us what kind of fossils and stone tools have been found from various periods in human history. They tell us about the evolutionary development of the hominid species, from *australopiths* till *Homo sapiens*. They tell us about the increasing size of brains (based on researching humanoid fossil skulls)

<sup>&</sup>lt;sup>3</sup> http://humanorigins.si.edu/

<sup>&</sup>lt;sup>4</sup> One only has to look at this conventional image, which depicts only iconic *men. Even white* men. Our ancestors would be surprised!

but they don't ask themselves what was going on inside that skulls. They don't ask why our ancestors started making stone tools, while the ancestors of other species did not. Paleos offer no answers on questions such as: What made those apes into humans? They don't have a coherent story of what made the behavioral evolution of our earliest *australopithic* ancestors deviate from the behavioral patterns of all other species. So that even today many people think that we were conjured up on Earth by a Higher Power.

The scientific approach most close to the humanosophic approach is *Evolutionary psychology* (EP). Evolutionary psychologists argue that much of human behavior is "the output of psychological adaptations that evolved to solve recurrent problems in human ancestral environments". The EP approach is increasingly influential in the general field of psychology and according to Steven Pinker, one of the most important adepts<sup>5</sup>, EP may become foundational to the entire field. But even Pinker's approach remains that of a linguist, in simply assuming that our species developed from other ape-men by a blind *variation-selection-reproduction* mechanism, like in all living species. Of course basically they are right. But the course of events that played a role in this physical, behavioral an mental evolution of mankind can be told far more specifically, as we hope to prove here.

If we google "what made us into humans?", we will find mainly articles that describe some *consequences* of early human development, instead of searching for the root *causes* of that development<sup>6</sup>. For example, a popular explanation is "we became humans because we developed ever larger brains". But it is evidently a two-ways effect: larger brains can just as well have been the consequence of changing behavior, as a cause. As an explanation by itself this is remains unsatisfactory, because it still does not answer the question what triggered the development.

Where did this innovative behavior of our ancestors (making stone tools, using fire, and so on) come from, and why didn't the other apes do those things? Why religion, why agriculture, why civilization, why God?

If we try to really answer that question, we need to combine very different sources – not just paleo-anthropologic sources from millions of years ago. One can also infer a

- 6. the plasticity of our brains
- 7. starch (Perry, Dominy, e.a.)
- 8. animals (ecologist Paul Shephard)

<sup>&</sup>lt;sup>5</sup> Steven Pinker *The Language instinct* (1994), *How the Mind Works* (1997), *Language as a Window to Human Nature* (2007), *Stuff of Thought*(2007)

<sup>&</sup>lt;sup>6</sup> Here are ten of the most popular explanations from such a Google search:

<sup>1.</sup> turning-over genes much faster than chimps and other mammals

<sup>2.</sup> evolutionary changes in the regulation of a gene implicated in perception, behavior, and memory 3. the diet

<sup>4.</sup> cooking (Wrangham) (luckily most of the hits!)

<sup>5.</sup> dogs and other pets (anthropologist Pat Shipman)

<sup>9.</sup> business innovation (Mat Ridley)

<sup>10</sup> schizophrenia (D.F. Morrobin)

lot from our behavior of today: people are walking archives. Especially babies and their mothers. Typical male or female behavior implies inclinations and reactions that are only explicable from our prehistoric past.

Another source today are the most 'primitive' populations, either those few that still exist, or those that became extinct over the last centuries, but were described by anthropologists, missionaries, or other travelers.

The third source are our next of kin: the bonobos and the chimpanzees. They can serve as a source because basically, these highly evolved apes are group animals just like we ourselves once were and still are. Consequently we share several characteristics of our behavior, such as compassion and altruism, with these apes.

Combined with insights based on paleo-anthropologic research, a global picture arises of our past and of the crucial driving force behind human development.

It yields a story, a 'creation story' that can finally be the western alternative to the backward Adam and Eva story that has not been challenged by science so far and thus retains its control in large parts of mankind.

As we will see, the most important of these driving forces was the invention of enriching our group animal communication with *names for things*.

It is important to realize what having *names for things* does with an animal. It does five things and we will list them for you. This ability to use symbolic language made our ancestors to a *linguistic* species. Acquiring this communication tool, new in the animal world, enabled our species to exchange individual ingenuity, ideas, skills and goods.

We will try to make it plausible when this happened in our cultural evolution and that it must have been a female expression.

#### do we need a shared account of human nature?

Humanity longs for a coherent, science-based, universally valid creation story in the form of a philosophical project that only ends when mankind ends. After all, until then science will never stop.

One of the famous public intellectuals of the past decennia has been the late Tony Judt, British-American historian. In the last year of his life, imprisoned in the evermore narrow cocoon of the illness ALS, he dictated *Ill fares the land* (2010). He expounded that for the past thirty years, our Western societies have been frittering away post-war achievements such as reducing the inequality between poor and rich through welfare facilities and social opportunities for everyone. As the cause of this, he saw the loss of a common narrative as the foundation of everybody's decisions and conscience.

Judt had not yet a solution to offer, but one could feel his anxiety and commitment.

We try to contribute what he was missing in Part One, and in Part Two a scenario according to which the common narrative can be introduced without imposing it on anyone.

So here it comes: the humanosophic mapping of

# human nature.

Yes, in the Introduction. Because it is an important notion in both Part one and in Part Two while it does not fit organically in either.

We see *human nature* as a 'three stage rocket'. And it should be noted that **each of these stages is still active in all of us.** 

The **first stage** (*mode*, *state of mind*, *tendency*, *drive*, *instinct*) we share with all living creatures, even with bacteria and plants. It is the individual drive to take as much energy as possible from the environment (nearly all energy origins from the Sun) to stay alive and procreate. It is this self-centered survival drive, this *me-myself-and-I* behavior, that still gets the upper hand in real or imagined panic situations. [It is notable that the situation of **power** or **big money** throws us back in this most primitive mode, being a situation contrary to our third stage, so of real or imagined panic.]

The **second stage**: our ancestors were group animals such as elephants, hyenas, dolphins and apes. For this second stage we especially have to look to the bonobos and chimpanzees: our next of kin.

In the permanent survival fight between their groups, chimpanzees have an individual interest in being a member of the strongest group. To keep their group strong, they must minimize the internal fights. When two chimpanzee males do have a fight, then afterwards they try desperately to reconcile.

Bonobos on the other hand use sex for minimizing internal group tensions. So these group animals (to which also humans belong) are driven by two contradictory impulses: **egoism** (the *me-myself-and-I* drive), and **altruism** (you have more chances to survive and to pass on your DNA in an harmonious group, so you must curb your egoism).

These two impulses, being at right angles to each other, would condemn individuals to a paralyzing indecision if they did not have a calming mechanism in their *culture*: rules for social intercourse, manners, 'norms and values', the characteristics Frans de Waal has described so well in his *Good Natured* (1996).

This 'norms and values culture' does not hamper aggression and violence against any **other** groups. In overpopulation situation other groups are food competitors, so enemies.

This *mode, instinct,* is still working in us as xenophobia (aversion to people of other color, language, belief, sexual orientation, whatsoever, and populists like to call on it.

#### Now the third stage.

Chimpanzees and bonobos, our 'next of kin', never lost their rain forest environment. Our ancestral ape ancestors, however, lost their rainforest and ended up in a savannah environment. In those harsh environments, groups with harmony flourished more than quarreling groups. After thousands of generations, our species built a third stage on our group nature: inclination to harmony as an innate tendency. Purely as the result of natural selection.

For humans, harmony is **good**. We still long for harmony, we still feel that being kind to each other is the most livable basis for society. However, we still are products of a whole evolution of *life*. So all three drives are working in us, and it depends on circumstances (such as upbringing, living environment, faith) which of the three

tendencies prevails in our behavior and it depends of the situation in which we are in which mode we end up.

Since we became AMHs<sup>7</sup> (the last 100.000 years after 5 million years of being gatherer-scavenger/hunters) this basic inclination to harmony got already somewhat frustrated when larger groups of 150-200 individuals evolved. It got really frustrated when we became *horticulturalists*, with all the warfare and machismo that this recent lifestyle implied. The lowest point was reached in the class-based societies since 5000 years ago, with slavery, mass cruelties and despotism.

But the innate longing for harmony is like a cork: jumping op wherever it gets a chance. The unique quality of humanity is that we are capable of *reflection*. This capability may be seen as a further refining step on the path of extracting energy. Since the lowest point we see a slow but steady decline in warfare.

Our recent Western free market economy can only flourish with democracy and harmony, and it is globalizing, slow but steady. It is *the end of history* of the lowest point since 5000 ya and the beginning of the way back to harmony.

	Early Humans								AMH	
GH	GH	GH	GH	GH	GH	GH	GH	GH	AGR	
	2mya		1500	1250	I 1mya	750	500	250	100 0	

People think in accordance with their prevailing economy.

Gatherers/hunters (GHs) stand accepting in life, taking things it as it comes. Food growers (AGRs) such as horticulturists and farmers feel themselves in control of nature and want to effectuate it by magic and shamanism. Later farmers live in a society dominated by despots and think in accordance with their imposed religion. Free market consumers think freely. Our humanosophy is a result of free market thinking. But consumers remain people and are longing for one globalizing and meaningful human story, for dancing/singing in harmony just as our ancestors.

So are Wrangham & Peterson wrong with their *Demonic Males*? Not wrong, but biased and overlooking the long-long evolutionary human history of low population density that repeatedly brought us to the verge of extinction.

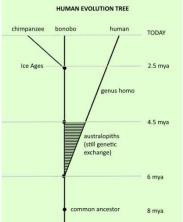
Wrangham & Peterson and most of other mainstream paleos see only 'stage' 1 and 2 as human nature. They are obviously ignorant of the peaceful nature of our longtime pure gathering-hunting existence in which stage 3 of our human nature nestled in our genome. They are unaware of the more recent effects of overpopulation, of male domination, of breed as rabbits. Mainstream anthropologists are still unfamiliar with the difference between how GHs live and how AGRs live.

 <sup>&</sup>lt;sup>7</sup>Anatomic Modern Humans; 'sapiens', the Linnaeus (1707-1778) name for all people who populate Earth today, has become popular again thanks to the popularity of the backward book of Harari .... It suggests that our ancestors, the Early People, would not have been sapiens

# 1. PART ONE: HOW HUMANS BECAME HUMANS FROM APES

## 1.1 how it started

Ten million years ago the climate became cooler and drier. Miocene jungles, that until then reached halfway into Eurasia, gradually retreated in the direction of the equator, being replaced by open savannahs. Five million years ago the jungle where our earliest ancestors lived in Northeast Africa, especially east of the Great Rift<sup>8</sup>, started to undergo this change. It is here that our story begins.



Humanosophic version of the human family tree

Our earliest ancestors were hominid apes. Frans de Waal (*Bonobo* 1997) says that, if we want an image of our earliest ancestors, we should look at the bonobos. They are the only kind of chimpanzee whose environment never changed. A species will only change when its environment changes. The environment of our earliest ancestors<sup>9</sup> changed totally, so our early ancestors changed totally. The environment of the chimpanzee ancestors changed much later and partially, so the chimpanzees changed partially.

Here, we will name our earliest ancestors ' $our^{10}$ 

ancestor-bonobos'(ANBOs).

It took millions of years for their jungle to turn into a savannah. Our *ANBOs* never were aware of this change; for them the world was in every phase like it always was. So the adaptations to the new conditions passed unnoticed. But for our story these adaptations are crucial. Not the physical adjustments so much, but especially the social and mental, in short the cultural evolution.

The savannah is a diverse environment consisting of open woodlands, mixed with impenetrable shrubs and grasslands accommodating herds of many kinds of grass eaters.

Our *ANBOs* lived in the woodlands, where like many present-day apes, they spent the nights in nests high in the trees. But these woodlands along the shores of rivers and lakes didn't contain the fruit trees their ancestors used for sustenance. For food, our *ANBOs* had to roam the open grasslands: a dangerous area because of the big cats that preyed on the grass eaters. The saber-toothed tigers were specialists in preying on pachyderms: rhinoceroses, hippopotamuses and (ancestors of the) elephants.

I want to emphasize that the *Miocene* (22 - 5 million years ago) savannah was characterized by megafauna (large animals) and was much more dangerous than the current Serengeti. Lions, saber-toothed tigers and giant hyenas were formidable

<sup>&</sup>lt;sup>8</sup> Paleo Tim White points to the Middle Awash (Ethiopia) as 'the window on human past'

<sup>&</sup>lt;sup>9</sup> Assuming that they lived in the forest of today's Ethiopia, now desert but in the words of paleo Tim White at the time 'a lush environment' with lakes and rivers.

<sup>&</sup>lt;sup>10</sup> 'our' because bonobos and chimps have their ANBOs too

predators. Though the little *ANBOs* were much stronger than we are now, they needed special armament to roam the grasslands safely. This was: throwing stones to keep the predators on distance.

This can be illustrated by the behavior of apes today. Jane Goodall tells the story of the adult chimp male 'Mister Worzle'. The bananas she left for the chimpanzees in order to study their behavior in the neighborhood, also allured baboons (large and brave monkeys) that frightened some female chimpanzees. But Mister Worzle did not give a centimeter of ground and threw anything he could grasp: grass, branches, once a bunch of bananas (baboons happy!). Soon he discovered that stones worked better and that bigger stones worked even better. And he began to gather them on a heap.

Our *ANBOs* needed to become 'professional' stone throwers. They could not take a step on the open grasslands in safety without their armament of stones. Who did throw men or women?

Women carried babies and had to gather food stuff. Men with their stones made sure that the group went safely around over the open grasslands. Division of tasks from the beginning .

One stone was not enough to ensure their safety; the men needed a handful of stones. But how you can as an ape carry a handful of stones?





skull sabre cat

Sabre cats – we already mentioned them – were specialists in predating fat-skins like

elephant-like and rhinoceroses. They stalked such a meat fort and after a fierce sprint they turned open its soft underbelly (these cats could open their mouth unusually wide, the sabres laying in the extension of the skull (see photo).

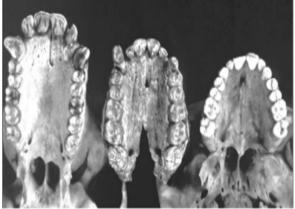
Sabre toothed tigers ate only the entrails of their kill. The rest of the carcass was left to other animals. As soon as vultures started circling around from their high vantage point, lions and hyenas knew that a meal was coming. Lions were first, then the hyenas and the vultures ate the left-overs. Because of the steady supply of carcasses by the sabers the basically inedible, hairy or leathery skins and the skeletons stayed there. The *ANBOs* beat the bones for the marrow with their stones and used the hides to carry things<sup>11</sup>; with their long experience in braiding and wattling their sleep nests, tying these hides was easy.

But how will apes carry bags filled with stones? How do bonobos and chimps carry heavy things? They use their hands, so they must walk upright on their feet. Our *ANBOs* needed to become bipeds: without carrying some stones for armament, it

<sup>&</sup>lt;sup>11</sup> See also Nancy Tanner and Adrienne Zihlman in Mothers and Daughters of Invention (1995).

would not be safe for them to venture into the open grasslands.<sup>12</sup> In tens of hundreds of thousands of years our *ANBOs*, having no other choice, turned into bipeds with longer and stronger legs, special pelvic and buttock muscles, special midriff and blood circulation<sup>13</sup>. At least they made a good start developing these properties, good enough for foraging on the savannah. They kept using their hands and feet for climbing: it was not safe to sleep on the floor, so they still needed them to make sleeping platforms high in the trees of the woodland.

Females had to carry their babies and gather food for themselves and the rest of the troupe, so they couldn't carry and throw stones. Males couldn't gather food: they had to offer protection, because hungry predators were always watchful for moments of unalertness. So our ANBOs cultivated a division of labor from the very beginning. Women and children gathered food: grass seeds, tubers and roots which they dug up with digging sticks<sup>14</sup>, larvae and insects, eggs and small animals. The adult men did nothing but provide safety. The groups who practiced those behaviors most effectively, flourished (by keeping more young alive) and soon outnumbered the groups that were clumsier at these things. Through hundreds of generations, the population exhibiting these behaviors, were the fittest and survived.



australopith. Right: human

The same mechanism applies to group harmony. Because of the big cats and the giant hyenas, the open savanna was a dangerous environment for apes and forced them to maintain strict group harmony. That was not a big problem at all: bonobos live in femaledominated groups characterized by group harmony, and solve tensions with sex.

Dentitions. Left: chimpanzee. Middle:

Clearly, our *ANBOs* probably 'professionalized' and optimized this behavior. The dentition of male bonobos still shows large canine teeth that can be used as weapons in sexual competition – although, chimpanzee canines are larger. Fossil *australopith* dentition shows reduced size of the canines: partially as a result of the need for grinding hard food like grass seeds, but also as a result of reduced male competition.<sup>15</sup> That our ANBOs solved all tensions with sex, is clear because while the size of the

<sup>&</sup>lt;sup>12</sup> Other speculations about the origins of bipedalism, such as: better sight or less body parts exposed to the sun, lack the answer on the obvious question: why then didn't the other savanna-dwellers like zebras or baboons become bipeds?

<sup>&</sup>lt;sup>13</sup> For the physical adaptations: Elaine Morgan *Scars of evolution*. London, 1990

<sup>&</sup>lt;sup>14</sup> Today's woodland chimpanzee females are observed digging up tubers with self-made digging sticks!

<sup>&</sup>lt;sup>15</sup> Mind also the reduction of the chewing apparatus from ape to human.

canines was reduced, the penises were enlarged! Of course the 'attractive' red vaginas of bonobo females and the heavy scrotums of bonobo males were not practical for bipeds, so those were reduced in size too. Every time the women were in estrus, this intensified male competition and group tensions. Therefore, the women's periods became less noticeable as well. All these reductions were compensated with nice breasts and buttocks for the women, and continuous sexual willingness: mechanisms for reducing tensions and fostering group harmony.

Didn't the men hunt? No way. Australopith bipedal locomotion was not fast enough to compete in hunting with the savannah predators. Nevertheless, besides birds eggs, insects and larvae there was yet another protein source for them on the savannah: hides.



Savannah today: more open space than in the 'cradle of humanity' which we suspect was in the Afar region of Ethiopia of 5 mya: woodland with less open spaces; but we can imagine an AP-group walking one after another between the grazers on their foraging trip. They were no danger to the grazers; as long as those kept quietly grazing, this meant for the ANBOs that it was safe for them as well, and they walked calmly, with their free hand occasionally stripping off grass seeds to chew them; in the meantime the women were searching for the edible tubers, recognizable by their leaves; and then the group had to stop for some time while the men watched with their stones.

As already mentioned, the hides all over the place, left behind as less edible by the other meat-eaters of the savannah, provided a new *niche* for the handy *ANBOs*. There was protein-rich tissue left on the hides to pick and scrape them with the sharp edges of bones, shells and stones. And when a hide was scraped totally clean, it made a perfect bag to carry things such as stones, or it made a blanket to use in cold nights, a screen against sun, wind, or rain. These multipurpose hides were the *ANBOs'* first and only property. The paleos lack attention for the importance of the hides in the technical development of our ancestors, an omission that is understandable because

hides are not preserved at archaeological sites (just like digging sticks and similar soft-material tools).

But philosophers are allowed to speculate more freely for the benefit of our Great Story, to immediately correct it as soon as a scientific evidence disproves a speculation<sup>16</sup>.

Actually, this use of hides marked the beginning of 'the stone age': the beginning of the use of stone flakes for processing hides.

Processing hides, soon slaughter of found carcasses, later slaughter of the prey carcasses of the men: until recent HG-times it is **females** work. Turning stones into useful tools as scrapers and knives is **females** work. Our primatologists tell us that male chimpanzees use stones only for impressing behavior but female chimps use them for cracking hard nuts. Stone technology was a **female** invention, even before the birth of mankind.

All these environmental changes and physical adaptations developed unnoticed by our *ANBOs*. Just like all apes 7 million years ago, they made their daily foraging routes in a vast foraging territory. In the course of two million years, ever more open grasslands became part of their territory and daily route. All necessary adaptations developed during this time. By 5 million years ago, the hominins (*australopiths*, bipedal apes), including our future *ANBOs*, were experienced woodland/savannah foragers.

What remained rather unchanged was their way of life. They would leave their woodland nests early in the morning, wander along a route they knew perfectly, gathering food along the way, and finally arrive at the next woodland where they would share the gathered food and then make their nests high in the trees. The only part of the routine that changed, was that instead of eating their food while ranging on the grass lands, they carried most of the gathered food (tubers, grass seeds, larvae, eggs, and so on) to their overnight place in some wood, to be distributed equally among all group members. This was necessary because the men had less opportunity to get food enough during the foraging: their vigilance could not be allowed to weaken for a moment because of the permanent threat of the hungry predators. After dinner and before the evening twilight, everybody had to climb in a tree and braid her or his nest.

Like their ancestors they lived in groups. Not too large: too much mouths to feed; not too small because there were enough men needed for the protection against predators. This asks for a number of around 25 individuals. But the composition of a group constantly changed and there was also constant exchange with nearby groups. This meant that harmony within the groups as well as between the groups was conducive to the flourishing of the population. Therefore natural selection selected harmonious behavior as 'good'. Our ancestors became 'good natured'<sup>17</sup>.

During 99.5 % of the long time span our species existed, our ancestors were first gatherer-scavengers and later gatherer-hunters.

<sup>&</sup>lt;sup>16</sup> After all, we did it thousands of years with Great Stories that were entirely dreamed up.

<sup>&</sup>lt;sup>17</sup> For Frans de Waal even chimpanzees are *Good Natured* (1979)

## 1.2 names for the things

So far, the *ANBOs* didn't stand out from other *australopith* species, such as *afarensis* or *africanus*, whose remnants our paleos have found in Africa. Now we get to the incidental invention that led, in the end, to our human condition.

For us, what we are going to tell now has been a familiar story for decennia. But yesterday (June 11, 2018) we read the article by Richard Nordquist<sup>18</sup> on ThoughtCo and again we knew that for philosophers in general and for linguists in particular it is still new. He quotes Bernard Campbell<sup>19</sup> "We simply do not know, and never will, how or when language began", and continues with the enumeration of the five most common theories which nevertheless have been put forward to then pull all five down. He ends by citing Christine Kenneally<sup>20</sup> "To find out how language began is the hardest problem in science today."

Certainly, discipline scientists have to limit themselves to hard facts and the first words have left no trace. But reconstructing our Genesis story is philosophical work and for humanosophers, making use of as much discipline as possible is sufficient. Moreover, the astronomers leave with their Big Bang from an unproven *just-so-story*, in order to explain their universe phenomena satisfactorily. So we consider ourselves entitled with ours.

Again a women's invention. No invention that resulted from a change in their environment, no new form of adaptation. Today there are chimpanzee women in Ugalla (Tanzania) who leave the protection of the woodland during the wet seasons to excavate tubers on the open grasslands with homemade digging sticks. For us the proof that our ANBOs did fine without any linguisticness. We would today still be ape-men (so normal animals) somewhere in Africa, if not 5 mya had happened something accidental in one of the ANBO groups.

But where something is possible, it happens too, sooner or later. So it was bound to happen somewhere and sometime in the *australopitic* world, that in one group, presumably in a forwarded group, and probably again a woman, somebody started with the first *name* for a *thing*. Because we are a *symbolic* species now and no other species has *names for the things* – if there was another species with *names for the things* – if there was another species disposing of *names for the things* does something with an animal. It does 5 things and later on we will list these 5 things.

Of course there were forwarded and backwarded living-groups, and different environments. In forwarded groups, in more savanna-like environment such as the Rift valley around 5 millions of years ago (mya), one may imagine that in the early mornings a patrol of three adult men scouted the route that the alpha woman had in mind for the next foraging trip. So that not the whole group of old people and children had to go back and decide to another route if some danger had been identified. In this

<sup>&</sup>lt;sup>18</sup> professor emeritus of rhetoric and English at Armstrong State University

<sup>&</sup>lt;sup>19</sup> Author of *Humankind Emerging* 2005)

<sup>&</sup>lt;sup>20</sup> Author of *The First Word: The Search for the Ogigins of Language* (Viking, 2007)

case the patrol returned and imitated [sabre tiger!] or [hyenas!].<sup>21</sup>

Our speculation is – and if you can imagine a better one, you are welcome – that on one morning a young girl of such a vicious group was very happy because she knew that the group would come across bushes with tasty berries on the foraging route of that day. Her two girlfriends looked at her in astonishment: why was this euphoria? The girl racked her brain: how could she communicate what she had in her mind?



# I made a painting of this pivotal moment: the birth of humanity

Inspired by the gestured imitations of the morning scouts she imitated [berry], [picking], [putting in mouth'], facial expression of delicious tasting and finally pointing with her digging stick in the direction of the group, already being on its foraging way.

No understanding. Another time. And another time. One girl became impatient: it was dangerous to detach the protection of the group. The older girlfriend racked her brain: and after again the

berry-pick-imitation the penny dropped at her. Yess!!

The girls ran after the group, laughing, and they had fun with the berry-pick pantomime the whole day. Some women understood the imitation and also got fun. The next morning the older girl friend invented something the group might encounter that day: digging tubers! And she imitated for her friends [digging] [corms]. And again fun with the new imitation, and some more women joined the fun of the imitation.

Except that the game was fun, it was also useful: so women could communicate what they had in mind. It was an extension but also an enrichment of their normal group animal communication. It improved their cooperation, benefited survival, and the group flourished more than *australopithic* groups without this handy practice. When young women moved to a neighboring group to find a mate, they took this habit along, spreading this gesturing practice over the whole clan and tribe. Our ancestors! Our ANBOs.

This was an incidental, casual beginning of a new group culture. It must have been contingent, because it was not necessary for surviving.<sup>22</sup> The childish game might have been forgotten, in which case we would be still a kind of ape men in the African

<sup>&</sup>lt;sup>21</sup> a recent research (PLOS Biology Feb, 2018) from teams of St Andrews, York and Kyoto shows at least four communication gestures which bonobos and chimpanzees have in common; conclusion is that those gestures were already in use among the common ancestors of our 'family'. In the more complicated environment of our ANBOs sophistication of these gestural communication could not stay away

<sup>&</sup>lt;sup>22</sup> The new and contingent 'culture' was not necessary for surviving: see *PNAS* (Proceedings of the National Academy of Sciences) December 4, 2007: "Savanna chimpanzees use tools to harvest the underground storage organs of plants". Female chimps leave their woodland habitat for digging tubers with digging sticks; during the wet season and despite the fact that then there is no shortage of fruit in their habitat but because then the soil is weaker.

savanna today. But this new 'culture' turned out to be helpful and useful. It improved group cooperation.

Keep in mind that in our opinion this has been the second women's invention that has made us from apes into people. Why a female again (after stone technology)? Because most (if not all) new things in apes begin with young females<sup>23</sup>.

You may notice that it was the men of the patrols after all? No, because their imitations were no more than the delayed warning cries of the vervet monkeys: stimulus-response reactions.

An incidental new habit ... a huge step towards becoming human! This was a totally new phenomenon in the history of life on earth. All group animals have their own means of communication. But in no other species individuals can communicate about something *beyond their awareness*, about something in another place, in another season, in the past or in the future. These gesture-imitations of things by our ANBOs were (the beginnings of) *names for the things*, enabling them to communicate on a new level.

A new level?

Disposing of *names for* the things *does something with an animal. It does 5 things, and you can better* memorize these 5 things if you want to know what had made our species so special in the animal world.

# 1.3 The 5 things that made our species so special in the animal world

1. A name for a thing is not the thing. There is an unbridgeable mental gap



between the *thing* and the *name* (symbol, word, image) of it. The French painter dedicated a painting to this phenomenon in 1922: *Ceci nést pas une pipe*. Going to live with an enrichment of our normal group animal communication with *names for things* has brought our species into a world of words, a spiritual (or 'virtual)

world of named things. This phenomenon has already occupied our philosophers from Plato.

It creates a feeling of **distance** between the *namer* and the *named thing*: the 'mental gap', the *human condition*.

In other words: it creates a distance between the *subject* (the namer) and the *object* (the named thing): we are distant from our environment, while normal animals willlessly remain part of it.

2. With a *name* you grab the *thing*. You can see the *name* (word, symbol, image) as a handle on the *thing* with which you can 'grasp' it, get a 'grip' on it. You can grab the idea (the mental thing) with it and reach it out to the other person who can grasp it and gets the same idea in her mind immediately. With *names for the things* our ANBOs entered the path of 'grasping' (understanding) the things of their world and we are still on this path of ever better understanding the things.

<sup>&</sup>lt;sup>23</sup> For instance, the young macaque Imo on the Japanese island Koshima who started with washing her sweet potatoes in 1953, a 'culture' that is still in use long after her dead

3. With the *name* for the saber-toothed tiger the ANBOs got mental 'grip' on the monster and it reduced their instinctive fear a little. Conversely, this also means an impairment of the named. In wild tribes one may never *name* an adult: one needs to describe someone (such as: father of ...). Jews (being from a wild tribe culture) are not allowed to call their god by name. Muslims (being from a wild tribe culture) are not allowed to depict their founder Mohammed. With *names for the things* ANBOs got emotional power over things. This led

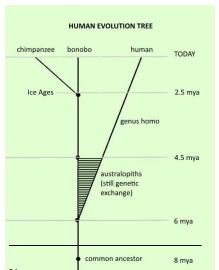
them to use the **fire** instead of keeping to flee for it like all other animals.<sup>24</sup>

- 4. With *names for the things* ANBOs could transfer knowledge acquired in one generation to the next. Knowledge could accumulate.
- 5. Two know more than one, and with the whole group ANBOs could *brainstorm*, could solve big problems, could devise plans. Together with their fire the ANBOs changed from fearful troops of ape-men to the 'hooligans of the savanna'.

As a result of these five effects of disposing of *names for the things* our ancestoraustralopiths developed more flexibility and inventiveness than other animals and even than other australopiths. Australopith groups without this facility of conferring with each another – *boisei, robustus, aethiopicus,* even *afarensis*– died out, presumably with some help of the ancestor-australopiths, the 'hooligans' of the Pliocene savannah.

Darwinian biologist and philosopher Richard Dawkins has introduced the concept *meme* as the cultural twin of the biological *gen*. Just like genes ensure transfer of physical properties, memes (ideas, melodies, fashions, techniques, practices) ensure transfer of cultural elements. It is important to note here that the *names for things* we are talking about, constitute a concept on a more fundamental level than Dawkin's memes. In a way, this name thing - the linguistic capacity - is a condition that is necessary for, and at the root of, the development of cultural memes.

#### 1.4 ANBOS a new species?



In a way. But initially only on the mental level. An important and leading research has been that of the Max Planck Institute of Leipzig that analyzed the bonobo-genome in 2012.

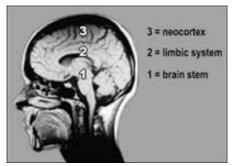
It showed 1. that we are more related to the bonobos than to the chimpanzees (for us no news) and 2. that there has been gene exchange with our close relatives up to 4.5 mya but that this has since stopped. Of course, this may have been the result of geographically separation: the bonobos remained rainforest inhabitants and the australopiths became savannah inhabitants.

<sup>24</sup> with the exception of pets and ... birds

But the temptation to speculate that more was going on is great. That time is close to the behavioral changes that have followed (use of fire, making stone knives and scrapers). Behavior that only can be attributed to a species that has *names for the things*.

#### Not sophistication of group animal cries!

For our ANBOs, normal ape communication (cries, gestures, facial expressions and other body language) was only extended with *names for the things*. But those *names* were produced with hand gestures, not with cries.



Animals – apes are animals – have no neurological control over their voice. Animal cries are controlled by the limbic system. So the extending of their normal ape communication included facial expressions and all other body language but excluded cries. However, our ANBOs weren't deaf, like present-

However, our ANBOs weren't deaf, like presentday sign language users. Their thousands and thousands of sign words were formed with silent

gestures but accompanied by *consonants*. Consonants such as t-k-f-s-ch-p are muscleformed, are controlled by the neocortex. To form more and more *names for the things*, the voiceless consonants were crucial.

So from the beginning, consonants have been part of the sign language of our ancestors.

The *Singing Neanderthals* of paleo Stephen Mithen (2005) were still !click-language sign language communicators in our opinion, and the oldest GH-tribes that are examples for our original GH-phase, the Hadza, the San and the Pygmies, still haven !click-languages

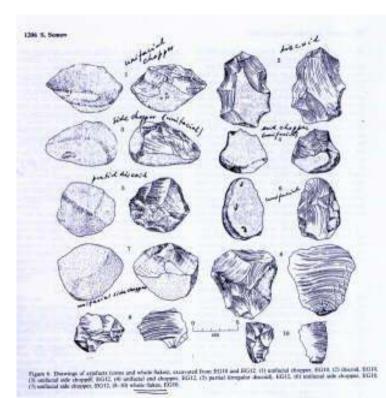
In the long nightly hours around the campfire, the growing gestural communication with *names* for the *things* the proto-form of sign language underwent an accelerated development towards real singing.

The accompanying cries became a proto-form of singing. Later more about dancing/singing.

# 1.5 the oldest stone tools

When we meet the first 'hard evidence' of our ANBOs in the archeological record? So the first 'hard evidence' of the use of fire and of the making of stone tools for cutting and scraping?

For the first use of fire the mainstream paleos can only find evidence in caves. But there is no indication that the ANBOs lived in caves, they made their forage trips over the open grass areas and spent the night in tree tops until they could stay on the ground around the campfire. We'll talk about it further. But even campfires don't leave an archaeological trace after let us say ten years. And certainly not if the researchers are not looking for it. Stone tools do. In my texts I could show for years the following sketch in the 2000 article of the Journal of Archaeological Science<sup>25</sup> of the Kada Gona stone tools.



At 15 locations east and west of the Kada Gona river, Ethiopia, Sileshi Semaw and his team recovered more than 3000 *surface and excavated* artifacts, dated 2.6-2.5 million years ago. Makers of these wellflaked artifacts: Australopithecus garhi. Archaeological name of these earliest stone industry: Oldowan. Other early Oldowan sites, older than 2 million years ago: Olduvai, Omo, Bouri, Lokalei.

We are not sure which fossil, if any, belongs to

the population of animals that could name things. Brunet, head of the French group which found the 6-7 million year old hominid skull in Chad, is shown with the skull, saying: "It's a lot of emotion to have in my hand the beginning of the human lineage..." But there is no label on the skull, and it is impossible to know if the skull in his hand is from an *ancestor-bonobo*, or from a *prey* of the ancestor-bonobos. If this fossil is found in context with fossil remains of prey animals, thus in context of a slaughter place, then one may see this skull as a prey<sup>26</sup>.

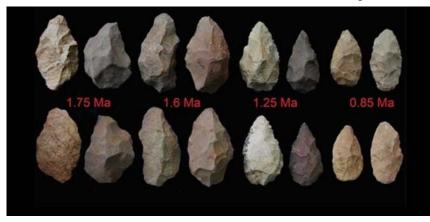
All these 2.5 million years old artifacts were found together with animal bones, many of them with stone-tool cut-marks. For us, these Kada Gona tools were the hallmark of the second big jump of our ancestors, as the consequence of the first jump: *names for the things*. Was it the climate again that triggered the jump? For five million years, the climate had been stable without giving much reason for changing behavior. But 2,5 mya the Ice Ages, the periodical increase of ice caps on the poles and around the high mountains, began. From now there were cold periods (stadials, maxima) interspersed with warm periods (interstadials, minima).

By 2.5 mya it started with a dramatic cooling and drying. Jungles receded to a narrow and interrupted belt around the equator; savannahs turned into deserts. There were ever less trees to sleep in, ever more natural fires.

<sup>&</sup>lt;sup>25</sup> Journal of Archaeological Science (2000) 27, 1197-1214,

<sup>&</sup>lt;sup>26</sup> We think that the first *H. habilis* fossil, found in context with fossils of prey animals, was a prey

I said: "the Kada Gona tools were the hallmark" … until a more recent publication<sup>27</sup> about cut-marks on bones from the Dikika site in Ethiopia demonstrates that stone



'knives' for processing of bones of scavenged carcasses may have been used much earlier: 3,4 million years ago. Butchery tools: the cut-marks on the bones are the

result of "hunting and/or aggressive scavenging of large ungulate carcasses". So the butchering of carcasses with stone tools must have preceded the start of the Ice Ages.

And who butchered? Even today (Inuit) it is the women who butcher the spoils brought in by the men! This division of tasks may already be so ancient. All the more reason to consider the refining of stone tools as a woman's skill.

*Names for the things* may have preceded this manufacturing of stone tools if we take some recent experiments with groups of students in learning to manufacture stone tools seriously. One group was only showed stone tools, cores and flakes. The second group got the same basic material but also a skilled toolmaker, showing his skill without words. The third group got all of the second group but now with verbal guidance of the toolmaker.

Needless to say that the last group was the fastest in getting hold of the tool manufacturing.

# 1.6 the fire.

Already as normal *australopiths* they knew the attractive qualities if fire and they were not the only animals who were lured by the far clouds of a natural fire. Vultures and other carrion eaters and even antelopes approached carefully, enticed by carrion and salty ashes.

The ANBO-females knew that some tubers and other plants, normally not edible, were edible after the work of the fire. Why about women again? Women have to feed their children. In everything they do, they are motivated by the need for more and better food for their children.

We guess this time it was an old and experienced woman, a grandmother who had the courage to take a glowing branch of an smoldering natural fire. Trembling with fear,

<sup>&</sup>lt;sup>27</sup> Nature, 12 Aug.'10 . More recently corroborated by the Lomekwi slaughter place discovered on the left bank of the Lake Turkana (Kenya) , dated 3.3 mya

she took it to a safe place, fed it with dry grass and wood and breathed in new life: **fire**.

Terrified, of course, the other ancestor-australopiths observed from a distance, screaming in fear at what the grandma did. She held a tuber on her digging stick in the flames. When she thought the tuber was done, she tasted it, went with the tuber to her granddaughter. Granddaughter would remember this moment ever in her life.

Too nice, this 'just-so-story'? Then consider this: gorillas have been observed sitting near a smoldering fire in nights when the temperature on the savannah approached the freezing point. But no ape is known to 'feed' the extinguishing fire with combustible material.

But our ANBOs did. Because they already had a *name* for **fire**, they gradually lost their instinctive fear of the fire and got a feeling of power over it. After this, of course it took many generations before they had developed the technique to *carry* the **fire** from one campsite to the other, as live charcoal in a bovine's horn or in some similar way.<sup>28</sup>

How dare we assume that this taming of **fire** occurred some 4 million years ago? Most paleos don't go farther back than the 790,000 years old Gesher Benot Ya'aqov site in Israel, where charred wood and seeds were recovered<sup>29</sup>. Some brave paleos accept the evidence from Swartkrans and Chesowanja dating 1.5 million years ago.



San women stop en route to roast an excavated tuber. What can be found after two years of such a road-fire? After ten years? After a hundred years?

There are two kinds of clear evidence that are indicate an earlier use. One: as experimentally proven by Richard Wrangham<sup>30</sup>, a raw (not cooked, not grilled, not roasted) chimpanzee diet would be simply

inadequate to sustain larger-brained beings of human size. So there is no other way

<sup>&</sup>lt;sup>28</sup> If you don't believe that such an early 'taming' of fire can be postulated, ask Ralph Rowlett of the University of Missouri-Columbia in Missouri.

<sup>&</sup>lt;sup>29</sup> In a recent PNAS article (March 2011) the paleos Roebroeks and Villa suggest that the real control of fire is not older than 400.000 years; we have to take in consideration that their research only concerns European archaeological sites, and that they emphasize that earlier use of fire was possible in an opportunistic way: using smoldering wood from a natural fire, keeping it smoldering in a gourd or something

<sup>&</sup>lt;sup>30</sup>*Cooking Up Bigger Brains* (2008); Wrangham himself did a research experiment by trying to live on a chimpanzee diet of fruit and raw meat: he found it not feasible for humans!

our ancestor-australopiths could have evolved into larger beings, than through some kind of radically improved food supply.

The paleos of the Wonderwerk-cave in South Africa have found traces of fire use and are convinced that they will also see these traces in the lower layers of 180,000 ya. So! Still 2 million years to go!

But it remains traces in caves. We continue to claim that the ANBOs did not live in caves but foraged in open areas. The traces of the on-the-way fires are untraceable after ten years already. Certainly not if the researchers are not looking for it. So we assume that controlled **fire** existed far more earlier than these 2 million years ago.

The first 'professional' stone tools found at Lomekwi are 3.3 mya and the Dikika cut marks even 3,4 mya. They attest to a new *niche* for protein: meat. And with it a new behavior, unknown in other species. Behavior that can only ascribed to disposing of *names for the things*.

Not for the start of meat consumption, however. Already the common ancestor was a part-time meat eater: both bonobos and chimpanzees are. For the ANBOs we have to look back to the hides that could be found all over the Miocene savannah. In the following millions of years the *hooligans* of the savannah, ever more audacious with their stones, learned to chase away feeding predators from their prey. That was the moment when the males began to contribute to the diet: carrion became an increasingly important part of nutrition.

The best sources of carrion, the pachyderms (elephants, rhinos, hippos) had skins that were too thick for lions and hyenas and vultures to penetrate. Those predators had to wait until, after two or three days, the skin cracked open by decomposition gasses. But the ANBO's with their knife-sharp stone tools could start processing the dead animal immediately! And again: women slaughtered, and men kept hungry hyenas and vultures at bay with their stones.

The Dikika stone tools of 3.4 mya may have had their first precursors 4 mya, and this date is close to the mentioned 4.5 mya, the date from the split of Max Planck Institut Leipzig!

For millions of years, the standard way to make a 'knife' or scraper had been to smash a stone against another stone or rock, and then pick out the best 'knife'. In the new circumstances, this was no longer sufficient. I think knapping the 'knife' from a core stone with a hammer stone was too risky for long, bent ape fingers (they still needed those ape fingers for climbing quickly into trees for sleeping and safety). But in order to improve the stone 'knives' they needed some knapping technique; and in order to develop a knapping technique they would need shorter, "handier" fingers.

Evolution had to find a balance between the need for long, bent fingers for climbing and making nests in trees on one side, and the need for shorter, handier fingers for knapping better knives on the other. It was the use of the **fire** that altered this balance. Since the **fire** provided protection from predators, this made it possible to stay on the ground instead of climbing in a treetop to build nests. Because our ANBOs no longer needed to climb trees at night, they no longer needed long "ape" fingers. This allowed the development of shorter, handier fingers suitable for better knife production. 2,5 mya, the earth climate became even more cool and dry: the onset of the Ice Ages. Woodland savannah began to turn into desert savannah. The carrion competition grew more fierce. This is the time that the other australopith apes died out and that our ANBOs, thanks to their *names for things*, their ability to communicate with each other and the resulting *wisdom of the crowd* gained power over their circumstances.

# 1.7 the impact of fire control on communication

Most important was the impact of the campfire on communication. Before this forward momentum of fire control, communication was limited to daytime: during the foraging hours and the food sharing upon reaching the next sleeping place. Before twilight, for safety purposes, everyone had to climb high in a tree to make a nest, which effectively ended communication. But now, with a campfire keeping predators at bay, they could rest and communicate all night long! Those nightly hours could be used for nothing else but communication.

What did they communicate during this long nightly hours?

One might say: nothing at all, they just wrapped themselves in a hide and went to sleep while only one of them (a man of course) kept his eyes open and the fire burning. Speculating in this way however, one might easily overlook that they were a subspecies of bonobos: fervent communicators!<sup>31</sup> In their new, more dangerous habitat they lived in closer togetherness than their rain forest ancestors, so they needed to be even more social. The new circumstances in combination with their bonobo-like inclination had already lead them to their new habit of *names for the things*.

So: what did they communicate? I propose it was the exchange of thoughts, expressions of what was going on in their mind: in other words, they were sharing emotions. For example the memory of some shocking event in the past day. Communicating these emotions took the form of performances. Let me dish up a possible 'performance' here.



The threatening encounter with the dangerous buffalo! The males had made a line with their stones at hand. The buffalo had hesitated, perhaps he remembered an encounter with a troupe of those apes, resulting in a hailstorm of painful stones. He scraped with his hoofs. After some long lasting seconds the buffalo had turned his back and moved.

Now, quietly around the campfire, a woman, with that threatening event in her mind, got up and imitated it with emotional gestures. The others screamed in approval. A man jumped up and imitated the buffalo. The emotional screaming increased. Other men jumped up and made the defense line, with imitated stones at hand. Then the 'buffalo' slunk off, and the screaming became jubilation. And calm returned in the

<sup>&</sup>lt;sup>31</sup> We can pass a fruit tree without noticing the chimpanzee group we were looking for, as it sits silently in the canopy. On the other hand, a group of bonobos will be heard from a far distance, screeching like a mob of barking dogs. See Frans de Waal's book *Bonobo* (1997) and Craig Stanford's book *Significant Others* (NY 2001)

group. But the nice performance stayed in everybody's mind, and after several quiet minutes some women jumped up again and repeated the performance. And again, and again, until everybody wrapped himself in his hide to go to sleep. Evening after evening they did 'the buffalo' over and over, until a new event was subject of a new performance.

Generations after generations similar nightly performances became ever more sophisticated, and the gestured communication too. Sophistication means that the gestured 'words' underwent standardizing and shortening. Because when the beginning of a gestured 'word' is already understood, you don't need to finish the whole gesture. In a group of women gossiping by sign language and cries, each woman wants to contribute her share. (Why women? Hunting men make no noise. But gathering women chatter and laugh: noise chases serpents away.)

Expressing such emotional thoughts the person used her/his whole body (just like bonobos do today) with accompanying cries. The others responded with imitating gestures and cries, and many of them jumped up and joined the communicating person. And when communicating very emotional items, the whole group was dancing and crying, over and over. From generation to generation, this behavior became ever more ritualized, controlled and refined.

When we say 'ritualizing', we mean, as neatly formulated in Wikipedia, "behavior that is formally organized into repeatable patterns, the basic function of which is to facilitate interactions between individuals, between an individual and his deity, or between an individual and himself across a span of time." Ritual synchronizes the activity of participants, a phenomenon that contributes to group cohesion – which can also contribute to survival. Some scholars also suggest that human ritual behavior reduces anxiety. It makes me think of the 'war dances' of the Yanomamö<sup>32</sup>, as preparation of a raid. A more modern example may be the ritual drilling of recruits in the barracks.

They began dancing and singing around the campfire. In my view, dancing and singing cannot be separated here, which why we may call it *dancing/singing*.

# 1.8 Why dancing/singing?

This development towards better expression through more refined body control affected both dancing and singing. First the dancing. Our ancestors were sharing emotions in an ever more ritualized mode of body language: their bodily expression of experiences, feelings and thoughts evolved into a kind of ballet, of formal dancing. In the course of this evolution, the specific gestures for specific meanings became more formally stylized. A more modern example of extremely stylized and formalized dancing is the 19<sup>th</sup> century Balinese religious dancing (as described by Dutch colonials) where women told a complex story without any word – just by dancing. In a way, present-day sign language for the deaf functions in a similar way: especially

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Napoleon Chagnon Yanomamö. The Fierce People (New York, 1983)

when this concerns a message with emotional and/or religious content, the sign language may look like a kind of ballet dancing.

Next the singing. Our ancestors were like bonobos, so much more expressive than chimpanzees, who are more silent. Just like their dancing was gradually ritualized, the accompanying cries and calls underwent ritualizing in the evening-after-evening performances. Over the generations, this gradually led to better neurological voice control. The more meaning and information one can convey by voice, the more impressive and effective the resulting performance will be.

I will get back to this combination of dancing and singing later, in the context of the origin of our religious feelings.

#### 1.9 homo erectus

The control of fire turned the ancestor-australopiths into *Homo erectus*. Fire use began in one group of ancestor-australopiths, but soon spread throughout all groups, by exchanges of sex partners and group interactions (in a way similar to the dispersion of agriculture later on). The H. erectus population dispersed over Africa and started the first Out of Africa migration into Eurasia.



[Traditionally H. erectus is always imagined as a male. So we were glad to find a reconstruction of a female H. erectus on the blog-site "Kay Nou = Our House". Thanks, Kay Nou. Her digging stick was nice; but she missed her hide bag. So we gave her one. Unlike in this picture, she was never alone on the savanna, nor elsewhere.]

Finds from an earlier period, in the archaeological site Dmanisi (1,7 million years ago) and Flores

(descendants of Java hominids from 1,6 million years ago) show a more primitive hominid, with a more primitive toolbox. So many paleos today believe that it was an earlier hominid, *H. habilis* or *H. rudolfensis* that spread Out of Africa into the Far East, developing to *H. erectus*. A later *erectus* group returned to Africa as ancestors of the Turkana population. For the humanosopher, this theory of a much earlier Out of Africa migration corroborates the early use of **fire**, because moving out of the tropics requires fire-use.

# 1.10 linguistic beings

*Names for the things* is what made us humans. It may have been the result of a casual and fortuitous girls' play. It was not necessarily caused by some gene mutation or brain growth or the emerging of syntax: such developments were rather result, not cause.

As said before, disposing of *names for the things* does five things with an animal:

- 1. It creates a feeling of distance
- 2. It opens the path of grasping (understanding) the things
- 3. It creates a feeling of power over the things (for example the fire)
- 4. Transferring and accumulating knowledge
- 5. Brainstorming, solving problems, devising plans.

Having several *names* for several *things* is by itself not enough to become a linguistic creature. Look at the family Washoe. This is the group of chimpanzees who were made to learn ASL (American Sign Language) when they were young and in a human family setting, presently living at the CHCI of Central Washington University of Ellensburg, in the lifelong care of Roger and Debbie Fouts<sup>33</sup>. The Washoe chimpanzee family is able to use 250 different names for 250 different things.



Koko, the gorilla that mastered sign language, has died aged 46 in California. It was considered a pioneer in interspecies communication after being taught it by scientist Dr Francine Patterson. At one point Koko was estimated to able to understand about 2,000 words in English.

When the teachings of Washoe were not so rigidly limited to student teachers who were only allowed to communicate with her in sign language, but when that teaching

<sup>&</sup>lt;sup>33</sup> See www.cwu.edu/~cwuchci

had been like Penny Patterson did with Koko: communicating with sign language but also with spoken words (like we do that with our pets), Washoe would certainly have learned to use 1000 sign words and also learned to understand 2000 spoken words. Koko, died June 19, 2018, not only knew more explicitly to sign what she wanted: "You key there me cookie" but also to express her sadness when her pussy had escaped and was drove to death: "Cat, cry, have-sorry, Koko-love, un-attention, visit me".

The 37-year-old bonobo Kanzi was taught by Sue Savage-Rumbaugh to communicate using a keyboard with lexigrams. Once a researcher who had worked with gorillas showed him videos of Koko. Rumbough was astonished to see Kanzi beginning signing to this researcher.

What makes an ape into a linguistic creature? In other words, what transforms animal gesture communication into a language?

250 or even 1000 separate sign words, you may consider this as proto-language? Can you consider Washoe and Koko as starting people?

In our view, they are indeed comparable to our ANBOs during the million years that they had not yet started using the fire.

But only after our ANBOs could spend their nights around the campfire did their proto-language develop into language. Language is a stock of words, a vocabulary, an inexhaustible stock of *names* for a countless number of *things*: making one's whole world into something that can be experienced primarily as a world of *named things*.

How do we produce our present spoken vocabulary? With *phonemes*: sounds that have no meaning of their own (the vowels and consonants of the alphabet), but are the building blocks of an endless number of words. We produce those phonemes with our speech apparatus: throat, tongue, lips and cheeks. But apes cannot produce enough similar phonemes, because their throat is too short and their tongue too narrow. Experiments in training a young chimpanzee to speak resulted in *p-p* for *papa* and *c-p* for *cup*, pronounced without vowels. The most serious handicap however is that apes cannot really control their voice. Their cries are neurologically driven by the limbic system: an evolutionary older part of the brain, the same that also produces our own cries of pain or anguish or rage or ecstasy. When we hit our thumb with a hammer, we cannot withhold a cry of pain: the older parts of our brain are beyond conscious control.

How could our ancestors – even Neanderthals may have been sign language communicators, be it with a rich !click-vocabulary – build up a stock of gestured words without being physically able to produce vowels? In his groundbreaking research on modern sign languages of the deaf (such as American Sign Language, ASL) William Stokoe<sup>34</sup> has showed that gestured languages can be just as flexible in

<sup>&</sup>lt;sup>34</sup> William Stokoe (1919

<sup>-2000),</sup> Professor at Gallaudet University of Washington, DC, was the creator of the linguistic study of the sign languages of the deaf. Before, the sign language used by the deaf was generally believed to be a corrupt visual code for spoken language, or elaborate pantomime. Stokoe's first and eye opening book was *Sign Language Structure* (1963) and till the end of his life he was the indefatigable champion of the language of the deaf.

combining gestures as spoken languages can be flexible in combining phonemes. Stokoe named the sign language alternative for phonemes *cheremes*: gestures without intrinsic meaning which by combing them can be used as building stones for an endless number of gestured words. Just like we speak all our words by uttering a limited number of phonemes in countless different combinations, modern ASL achieves something similar by combining 55 cheremes (base gesture elements).

So the gestured 'sign' language of our ancestors may have evolved from simple gestures denoting specific objects, into a stock of names or a vocabulary using combinations of cheremes, making an unlimited number of 'words' from a limited number of base elements: small and quick hand configurations, hand locations and hand movements.

To illustrate this development, let me briefly go into a nice parallel: the similar development of script (written language). 8.000 years ago, ever more people in the Middle East lived as farmers in villages. Each family contributed a part of the yield of their fields and cattle to the 'temple' (the common hall for religious anniversaries, for meetings and barter with other villages, and for emergencies). To prevent parasitical behavior and envy, the temple functionaries needed to register each family's contributions exactly. In early Sumeria, these notes were engraved in the clay of the storage urns (later of clay tablets). The first notes were pure imitations, drawings. These were at best 'minimal art': a representation divested of all that was not strictly necessary for identification.

In due course, these representations became more and more stylized symbols. This was the start of Sumerian writing: pictograms, simple representations of what was meant. A simple depiction of a head stood for *<head>* and two wriggling lines for *<water>*. But soon these two symbols combined meant *<drinking>* and even *<drink>*. In this way, the pictograms became more and more schematic. The big jump came when some pictograms got a sound value, mostly the initial sound of the word-symbol. Soon there was a complete alphabet. The symbols did no longer point to some specific object, but came to represent just sounds - initially mostly consonants. By combining these by themselves meaningless symbols, now every possible word could be written easily. Such written language made it possible to record personal messages, enactments and laws, oral traditions, heroism of the successive kings, important events, scholarship, philosophy, everything. This written language started the historical era (before the invention of script, it was prehistory).

The earlier development of signed language may have followed a similar route. The *cheremes* (snippets of sign language) initially came into human communication as very simple and direct gestures. In due time, some gestures got the function of syllables: they evolved into building stones (*cheremes*) for signed words. Didn't those cheremes make the gestured communication slower? After all, instead of making one primitive object-sign, you now had to combine some small gestures (cheremes) to indicate the same object. This question can be answered in two ways.

In the first place we can refer to the universal linguistic **abbreviating propensity**: the aversion to repeat an already uttered word or sentence element – and when you repeat it nevertheless, you do it mainly to give it extra emphasis. We may assume that from the beginning there was a natural tendency (just like in modern sign language) to

make the language gestures as fast and simple as possible, if only for communication efficiency: when just the start of a gesture is already enough to be understood, you don't need to finish the whole gesture. The faster you can produce gestures, the shorter the time you need to make your point or to contribute to a discussion.

In some cases however, the use of cheremes (even when these were as small and fast as possible) may have resulted in more complexity. For instance, instead of one gesture for the object " tiger" you might now need to use a combination of three quick cheremes to indicate the same object. So why would people opt for increasing complexity? Here the second answer comes forward. The price one may have paid for a little more complexity, at the same time bought a huge advantage: thanks to using cheremes, the number of possible words and expressions now became really limitless. While primitive sign language might have had a gesture indicating "tiger", it may not have had gestures specifying "reddish tiger" or "wounded tiger" or "a cloud in the sky shaped like a tiger". The use of cheremes made it possible to say (gesture) all this, and more.<sup>35</sup> Eventually, they made it possible to discuss even *abstract* concepts for which no simple gesture would ever have been adequate. How important this was, we will see when discussing the evolution of the creation story as a central factor in the evolution of mankind.

Now three other questions occur that have to be answered. Firstly, is it admissible to infer ancestral behavior from the cultures of present-day hunter-gatherer tribes? The humanosophic answer is: yes we may, because there is a continuum between our modern behavior and that from our ancestors, a continuum that is transmitted by genetic inheritance, tradition and inveterate habits. Old usages and practices and customs stay alive till they no longer fit. The same goes for language characteristics: deeply rooted in communication practice, they are transmitted from generation to generation as a vital part of a culture.

But if is this a valid comparison, then may we also assume that the signed communication of our ancestors developed towards the same level of sophistication (especially regarding the emergence of cheremes) <sup>36</sup> as modern sign languages such as ASL (American Sign Language)? Our deaf populations possess modern human brains, don't they, and are integrated into a modern urban culture that requires more sophistication, for example in order to discuss the stock exchange by ASL? The humanosophic answer is: yes, we may, because the modern sign language is a flower out of the seed from the gestured linguisticness of our Early Human ancestors. In essence, it is the same flower as we can see sprouting when our modern babies pick

<sup>&</sup>lt;sup>35</sup> Cheremes emerged in thousands of generations of dancing/singing the creation story of their world. The story grew in detail and complexity; so did the gestured representation and performing.

<sup>&</sup>lt;sup>36</sup> The research of Stokoe and others on signed language reveals how easy it is to produce adjectival or adverbial and other elements of syntax with modification of or additions to the gestured words by facial expression and posture changes: "Adjectives need neither to precede nor to follow nouns as physically distinct elements but can appear simultaneously as modifications in the performance of the sign language word. Likewise, adverbial modification of gesture action is natural effect of the way that visible gestures are performed." Other grammatical elements of language such as the pattern of Subject-Verb-Object emerge spontaneously and inevitable in a social phenomenon as language: one cannot participate when one doesn't know the meaning of the spontaneously emerged words, as little as one doesn't follow the spontaneously emerged rules.

up language from their environment, irrespective of whether this is gestured or spoken language.

The third occurring question is: why would people eventually switch from gestured to spoken language? The answer is that signed language may be adequate, but less so when you have your hands full, or in a situation that you cannot see each other. For this reason, from the very beginning visual communication has been supported by making sounds such as guttural and dental clicks, labial sounds, and emotional cries. Even from the beginning of gestured communication, such vocal additions were structural word parts. So we may suppose a continuum between the most primitive gestured communication and the 'click!'-languages of nowadays Hadza and San people (and our own gesturing even when we are talking on telephone). There has been, however, a turning point in this continuum: the rise of the ability to communicate with sounds alone, *without* gestures. We will talk about this in the paragraph **Anatomical Modern Humans**.

To summarize: in the paragraph about the first use of **fire**, we speculated about the Australopithic population to which we could attribute the wonderful innovation of controlled use of fire. We found Kadanuumuu (estimated 1,5-1,8 m. high) a good representative because of his human-like posture, much taller than "Lucy" (1,1 m. high, dated 3,2 mya), and yet hundreds of thousands of years older. We supposed the use of fire here because such a taller population of Australopithecus afarensis must have had better food at his disposal. In its turn, control of **fire** in our view assumes the presence of linguisticness: feeling of power over the things.



Excavations between 2005 and 2008 in the Afar Region of Ethiopia uncovered an upper arm, a collarbone, neck bones, ribs, pelvis, sacrum, a thighbone, a shinbone and an adult shoulder blade. The partial Australopithecus afarensis fossil is dated 3.58 mya and nicknamed Kadanuumuu, ("Big Man" in the Afar language). The photo here shows an arm bone to muse about: apart from throwing stones, this very 3.58 mya bone must have been used to

gesture with companions. Kadanuumuu as a linguistic being!

'Ardi', *Australopithecus ramidus*, from 4,4 mya Afar Rift Ethiopia, had an ape-like short thumb. The hominid species *Australopithecus sediba*, recently found in South Africa, was presumably from *A. africanus* origin and possibly a transitional species to *H. habilis* and even *H. erectus*. It has a human-like thumb but is only 1.98 mya, 2.42 mya younger than *Kadanuumuu*. Somewhere during those 2,42 mya long interval, the more human-like thumb of *Sediba* must have evolved. The skeleton of the much older *Kadanuumuu*, "Big Man" provides no hand- or foot bones, so in fact we cannot know yet what kind of thumbs he may have had.

## 1.11 linguistic consciousness

There must have been a moment in history when acting from *instinct* became less dominant than acting from *deliberation and consulting*. No two captains on the ship of your thinking! With the advent of **fire** control, our ancestors demonstrated that unlike normal animals, they were no longer acting purely by instinctive reaction to sensory impulses.

Thinking? Animals? Of course animals do think. Most kinds of mammals and birds make scenarios in their brains: they weigh the different possibilities of what can happen or be done, in order to choose what is best. Intelligence is widely spread! We are used to seeing some kinds of animals or birds as more intelligent than other kinds, but every species exhibits its highest level of intelligence in its own special niche. The tortoise is the most intelligent animal in the tortoise niche. And where instinct is concerned: only 'lower' kinds of animals act exclusively by instinctive reactions. Group animals act largely by learning, example and intelligent trial and error. The animals we use to label as 'most intelligent', are nearly always group birds or mammals. But intelligence is also a personal quality: as far as intelligence is concerned, not all dogs are created equal.

But consciousness is unique to humans, isn't it?

It depends on how we define 'consciousness'. If you mean: being aware of one's environment, then this applies to animals as well. Every mammal does continually process environment information, unless it has been knocked out.

Do you mean: self-conscious? Apes, elephants and dolphins evidently display selfconsciousness. As proven in several experiments<sup>37</sup>, they are able to look in a mirror and be aware that they see themselves.

What then is unique to humans? The main difference is not that we, as all mammals, are thinking beings, but that we on top of this animal thinking have *names for the things*.

And disposing of names for the things does 5 things with an animal, remember.

Animal thinking is the manipulating of things with *representations* (mental images of the things) in the brain. In our human thinking, these representations have labels, 'handles', 'grips': the *names* that enable us to 'grasp' things. So we are able to handle things better: not just when communicating about them, but also for easier and more inventive thinking. If we define creativity as the ability to combine things, then our *names for the things* make it easier to make new combinations, and therefore to think in a creative way.

So when we speak about a concept of 'human consciousness', we really ought to name this *linguistic consciousness*. Consciousness is not unique to humans, but linguistic consciousness is.

<sup>&</sup>lt;sup>37</sup> G. G. Gallup (1970) *Chimpanzees: Self-recognition* and after him many others on other animals in addition to elephants and dolphins.

### 1.12 linguisticness and its consequences

The philosophical term 'linguisticness' is the translation of Heidegger's concept *Sprachlichkeit*. In the work of another hermeneutic philosopher it appears even as 'linguisticality'<sup>38</sup>, but for humanosophic purposes the word 'linguisticness' suffices. However, our definition is not exactly the same as Heidegger's. In the humanist/philosophical view on human nature linguisticness is the mental condition of an ape who has begun to use *names* for the *things*, gradually finding himself in a *named world*, in a virtual 'words-world'. The definition of *linguisticness* in this context (in another sense than just 'the ability to use language') is obvious: with 'linguisticness' we mean the mental predisposition to experience the world in concepts. This is the characteristic that makes us humans unique among all animals.

Our linguistic consciousness, the grasping, comprehending understanding of the world, started with the first gestured *name* ('the first word'<sup>39</sup>). In the beginning, communicating with *names for the things* – and also thinking with it – was still rather inadequate. Nevertheless, eventually the humans had to rely on it: they had to make instinct secondary (no two captains on the ship of your decision making). When you no longer use an organ it will shrink, and something similar happened to our instinct. Because the humans began to understand their world with a linguistic understanding that was still weak and unreliable, they fell prey to *incertitude*. Therefore, this is a major consequence of linguisticness: it made us into 'worrying apes'.

By itself, incertitude is not a new phenomenon in the animal world. When an animal comes upon a situation where his instinct cannot give an adequate impulse, it may feel uncertain. But for humans, incertitude became a more permanent part of daily life experience.

One cannot live with constant incertitude, so the early humans developed two anguish allaying mechanisms: *repetition* and *believing*.

- *Repetition*: rhythm, dancing, singing, rituals: I already mentioned some scholars who suggest that human ritual behavior reduces anxiety. Tradition has the same effect: doing things the same way they had be done since many generations. Consequently, the early humans were astonishingly *conservative*. Especially the females: the most real humans.

Over more than a million of years, the form and material of their hand-axes (female tool) showed virtually no change. In their *named* world, the most important tradition and ritual was the danced singing of the creation story (females were leading in religion<sup>40</sup>) every night around the camp fire.

<sup>&</sup>lt;sup>38</sup> Gadamer *Europa und die Oikumene* (1993)

<sup>&</sup>lt;sup>39</sup> title of Christine Kenneally's book *The First Word* (2007)

<sup>&</sup>lt;sup>40</sup> even the San Bushmen already have male dominance; but to get into a trance their trance dancers (healers) still need the dancing /singing of the women (Lee / DeVore, p 297)

- *Believing*: a firm inner conviction that things are the way we *want* them to be, or at least are the way somebody with status and/or authority says they *should* be. In primitive times humans were not yet acquainted with the concept of *authority*: in the group, they were strictly equal. Therefore the most important parts of their belief were not based on some kind of authority, but rather on *magic* (fear allaying ritual actions) and *myth* (tradition-based elucidations of the world).

Until our scientific times, it was never important whether a story was true. It mattered only if it was a **good** (useful) story, a story which people *wanted* to be true, which was felt to be relevant to their existence. Just like in a later era, in the time of patriarchal society, the story of the birth of Eve out of a rib of Adam became a **good** story because it was just what the men wanted to hear, as a reinforcement of their supremacy. Such stories *had* to be true.

The thus acquired certitude enabled our ancestors to intervene in their environment. As I said before: *names for the things* also gave them (a feeling of) power over the things. linguisticness created a distance between the understanding brain and the *object*, the understood thing or phenomenon. Humankind became a factor in nature that mastered a mental but also an instrumental power over the world, the first critical intervention in the natural environment being the control of **fire**. The inner conviction that some ritual words – such as incantations, charms or spells - evoke magical forces that can create or destroy, is just as ancient. Knowing somebody's name gives a feeling of power over him. *Naming* somebody can be felt as disrespectful, or even be understood as violating the named one's integrity (which is why in several traditional religions, including Judaism, the actual *name* of the feared powers (be it natural elements such as a tiger or a volcano, or the gods, or a single God) may not be spoken aloud.

As another consequence of having *names for the things*, the ability to exchange complex thought scenarios with each other became a powerful new strategy: two know more than one, and people now could share their thoughts and overcome the biggest problems. Essentially, this is the power of democracy.

Some other consequences need to be mentioned here. Between the linguistic beings and their environment, an apparatus of thousands of concepts (the sign language codes associated with representations in the brains) arose, which created a 'virtual' world.

All things in our world are *named* things (things only *exist* as far as we have a name for it), but how can we know if there are no things that we do not (yet) have a name for? Many philosophers (Plato with his cave metaphor; Kant with *the thing as representation* and *the thing in itself*) wrestle with the feeling that, besides the world we know, there is a another or even more real world, but one which slips out of our hands as soon as we try to *name* and know it: talking about it is by definition not possible. Perhaps this philosophical 'second' or 'real' world exists in the larger part of our thinking: linguistic consciousness takes only 20% of our actual thinking.

A last important consequence was the emergence of *the bastion of holiness*. Our ancestors kept their incertitude at bay with belief and magic rituals. They believed when and where they couldn't know for sure: these beliefs were imagined certitudes, pseudo-elucidations, not based on hard evidence. Deep in their minds, incertitude

lived on. So the necessary elucidations were canonized into **holy** elucidations. *Holy* is unassailable, untouchable: something holy may not be doubted or called in question. But this runs counter to the progress of our linguistic consciousness, our knowing, our rationality. To the path of ever better *grasping* (understanding) things. To the only ability which can really free us from incertitude.

Fortunately, we now live in the time of the free market economy. It frees us out of *the bastion of holiness*. It is a blessing for mankind. At least, when it got the bad dog of the finance capital, who has been biting its leg since the 1980s, back to the chain of government. Perhaps the humanosophic project as developed in Part Two could help.

## 1.13 religion explained

*Religion Explained: The Evolutionary Origins of Religious Thought* is the title of a 2001 book of Pascal Boyer, a French-American anthropologist. Because of its actuality and its daring title it is a much discussed and translated book. Most of the reviews, however, are not very enthusiast, complaining of its dry and abstract philosophical and cognitive-psychological argumentation. Even more serious is the conclusion that the book does not really explain the phenomenon of religion. Boyer himself excuses this lack of satisfactory explanation with the statement that "religion is not a single entity resulting from a single cause."<sup>41</sup>

But is he right? Couldn't religion in essence be just that: a single entity resulting from a single cause? For the humanosopher, who explains consciousness as *linguistic consciousness*, the obvious mission here is to unravel the real evolutionary origin of religious thought.

Our ancestors, now armed not only with stones and sticks but also with **fire**<sup>42</sup>, spread from the tropics to the temperate zones in Africa and Eurasia. It was a slow migration: about 30 miles per generation. Why so slow?

Groups that had become too small due to any catastrophe joined a more successful group. When a successful group became too numerous, tensions arose and then soon a little group of young women, children and men would decide to move to a new territory.

We may assume that this region had already been known because adolescents had to make a long journey as part of their initiation in adult life – upon their safe return, they were able to recall for the remainder of their lives the faraway regions and people they had encountered on their journey.

The settlers of new territories were the first humans who gave the mountains, rivers, lakes, marshes, fruit trees and wild animals their *names*. For humans, things exist to the extent we have a *name* for it. For our ancestors, as linguistic creatures, those first name-giving settlers were the *creators* of their tribal territory. People always had (and

<sup>&</sup>lt;sup>41</sup> "Religion Explained' reminds me of "Consciousness Explained" by Daniel Dennett: this book didn't explain consciousness either.

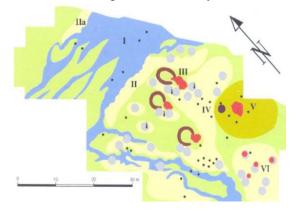
<sup>&</sup>lt;sup>42</sup> this position seems seriously questioned in the recent PNAS article of Roebroeks and Villa (March 2011) "*On the earliest evidence for habitual use of fire in Europe*". However, they emphasize that their research concerned (a) the European fire use and (b) the producing of fire: they didn't question the use of fire by keeping smoldering charcoal obtained from a natural fire.

still have) the practice of defining a total group as one person (*The American* for all Americans, *The Australian* for all Australians) and in a similar way, our ancestors spoke of *The Big Ancestor*.

We have already mentioned dancing / singing as a result of the performances to fill the nighttime hours before bedtime around the campfire that kept the predators away. The performances had taken such an important place in their daily routine that they lived their days to it and that they made it beautiful - especially the women - with flowers and feathers. Feierabend.

Of course this is speculation. We can at most refer to the Yanomamö of Napoleon Chagnon, in whom, despite their permanent threat of war, this was still the daily practice evening after evening.

We dare not to speculate exactly when and where this process began. The first hard



evidence (in our opinion) of how these humans expressed the experience of their world in danced singing, is *Bilzingsleben*: an archaeological site in Germany, a H. heidelbergensis campsite from 370.000 years ago (*Reinsdorf interglacial*). This is the first known place with evidence of a special dance place between 3 huts<sup>43</sup>.

Reconstruction Bilzingsleben camp site of Early Humans, 370.000 years ago

The tribal "Big Ancestor" we are talking about here - who was not regarded as a specific person but rather as a reference to the mythical ancestral group - was not a man, nor a woman, nor some kind of animal: it was something all of this. We need to emphasize here that this tribal Big Ancestor is in no way synonymous with the figure of God as worshipped in today's main monotheist religions (Judaism, Christianity, Islam). This patriarchal God has been constructed only a few thousand years ago.

But if our atheists claim that God did not create man but that man created God, we may refer to our cultural evolution at this moment. The little group of young women, children and men who were the first to settle new territories, were the first ones to give the *things* in that territory their *names*. For their descendants, the ancestral settler group was personified in 'epic concentration', *The Big Ancestor*.

God is in essence ourselves – it personified the first little settlers group – and even later thinkers and shamans have always remained aware of this. In the classic Greek-Roman culture of the first century BC, this still was the central and deepest mystery of the Mystery Cults and of the Gnosis movement: that God is ourselves.

<sup>&</sup>lt;sup>43</sup> Steven Mithen in his book *Singing Neanderthals* (2006) describes this same excavation, with the "demarcated space for performance (!) ... to sing and dance, to tell stories through mime, to entertain and enthrall ..." ['mime': Mithen has no idea of linguisticness, and even speculates that Neanderthals had not yet language!]

Let us take a closer look at Him, in the form he still figures as a central force in the creation stories of present-day 'primitive' populations such as the Australian Aboriginals.

The creation story of such tribes still tells how in a long-ago *Dreamtime*<sup>44</sup>, the Big Ancestor entered the tribe land on a special place and began to journey all through the known world. Everywhere on his journey She/He/It deposited mountains, lakes and trees and all the special features of the land. She/He/It also left, in a special place, the little souls who could fly into the wombs of women who passed by that place, the same place to where the souls return after death. The Big Ancestor could travel through the sky or under the ground. Once finished with his creation effort, She/He/It departed from the land through a special hole in the ground<sup>45</sup>.

Special creations (mountains, trees, animals etc.) were also important Figures in the Story, with special tasks or abilities. This Story of the creation of their world was so important to them, that they believed their world would come to an end when they no longer sung/danced their world. And that makes sense: it was a *named* world for them. And it still is for us – but we are familiar with the fact that the world goes on even when we are never dancing/singing it.

In the dawn of humanity there never was a tribe without a sung/danced Creation Story. Over thousands of generations of singing/dancing the essence of our world and our community, this practice has become so-to-speak a part of our genome. It lives on within each of us as our *religious feeling*. We are born with the expectation of experiencing a sung/danced representation of the world and togetherness. When a baby cries, it will be quiet or even begin to smile when mama sings/dances with the baby in her arms. This is the base of the *religious* feeling that remains with us even when we are convinced secularists or atheists. It is this ancestral practice of dancingand-singing the world that makes us "incurably religious" as theologian Dorothee Sölle defined it<sup>46</sup>, even though she herself did not see the link.

This instinctive reaction does not just apply to babies. Many grown-ups will feel an urge to dance when hearing dance music. In a similar way, many people will experience deeply rooted feelings when hearing religious music such as the Matthäus Passion or In Paradisum. And in fact, the chants by the public in football stadiums do also have the same effect.

<sup>&</sup>lt;sup>44</sup> an important concept of the Aboriginals, but one that is found with 'primitive' populations all over the world: it indicates the time of the beginning of being human, when the ancestors felt themselves still being animals, a part of the animal world, not yet *linguistic creatures* with their existential incertitude as 'worrying apes'.

<sup>&</sup>lt;sup>45</sup> In Australia of the 50's a whole territory had to be emptied for a nuclear experiment, so emptied from Aboriginal tribes, who were transported with trucks to a new place (it was noticeable that the babies were so well-fed, despite the harshness of their residential area). A later researcher noted that a woman sang for her child, drawing in the sand the Creation route of the Great Ancestor, and it ended with a hole in the ground.

<sup>&</sup>lt;sup>46</sup> Dorothee Sölle (1929 - 2003) was a German liberation theologian and writer who coined the term Christofascism.

Singing (music) is the merger of our cortical ratio (human) and limbic use of voice (animal). Singing (music) is a return to primitive stage of being human, when we could easily find ourselves in a *trance*.

In the book *Kalahari Hunter / Gatherers* by Lee and Devore (1976) we read that the !Kung San attach great value to the *trance*, but that in order to get into a *trance*, the women have to dance/sing. Matthäus Passion and the chants in football stadiums have to do with the desire for *trance*. With to go crazy.

All these common, instinctive reactions to singing and music led me to presume that the sung/danced creation stories by our ancestors played an important role in the group cohesion, which is why this social song/dance mechanism is basically still working even in the nature of western people today.

The creation story as described above evolved over thousands of generations, along with the evolution of the prehistoric economy. In the creation stories of a few present-day tribes (such as Australian Aborigines) we can still recognize its original form.

## 1.14 good natured

This is the title of the philosophically most relevant book of primatologist Frans de Waal (1996).

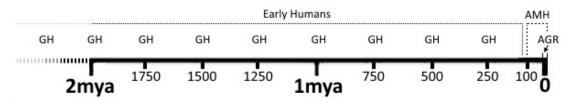
A question that has been much debated in the last few thousand years of philosophy: is human nature intrinsically *good* or *bad*? Many philosophers from the past, for example Plato or Hobbes, tended to the second option. In many forms of religious belief, for example ultra-orthodox Protestantism, an inherent badness (sinfulness) of human nature is postulated as well. On the other hand we have had philosophers, such as in the 18<sup>th</sup> century Enlightenment, who opted for a positive – sometimes even naively positive – view on human nature: just let Reason reign, install true democracy, and everything will be alright. Both views on human nature are simplistic.

In more modern philosophy, the trend is rather to *avoid* such moral presumptions about human nature. Modern philosophy has often (and not always in a fruitful manner) been reduced to playing with words and abstractions, while claiming to not being able to contribute much when it comes to moral matters. Whether we like it or not, by avoiding such moral positions, modern philosophy does no longer function as the moral beacon it once, alongside religion, was in human society and has made itself in a social sense largely irrelevant.

As for the anthropologists, they too seem to follow a pessimistic philosophical view on human nature. In the 1950s, shortly after World War II, among them the "killer ape hypothesis" of anthropologist Raymond Dart was influential. According this hypothesis, war and interpersonal aggression was the driving force behind human evolution. Science writer Robert Ardrey expanded on this idea in *African Genesis* (1961), suggesting that the urge to act violently was a fundamental trait of the human mindset. Ethologist Konrad Lorenz also emphasized this pessimistic view of human nature with his book *On aggression* (1966). According Lorenz, animals, particularly males, are biologically programmed to fight over resources. Movies such as *Planet of*  *the Apes* (1968) show that this issue affected popular opinion<sup>47</sup>. In 1996, Wrangham and Peterson followed the Dart/Lorenz trail in their influential book *Demonic Males*, suggesting an evolutionary connection between violent chimpanzees and violent man.

However, in the same year the Dutch/American ethologist Frans de Waal countered with his influential book *Good Natured*, wherein he argued that many traits such as sympathy and comfort were already inherent in those demonic chimpanzees. In the Introduction we have already shown that these characteristics belong to our second phase, that of the group animals. But because of our long third phase of GH economics, our tendency to harmony has become the gentle force that emerges like a cork wherever it gets its chance.

### 1.15 Gatherer-Hunters (GHs)



As we said: 99,5 % of the time of our kind our ancestors were gatherer-hunters, and essentially we have retained the gatherer-hunter nature of harmony and peacefulness. Today most primitive societies are horticulturalist. We see a sharp distinction between the ancestral GH-behavior (equality between the sexes and the generations, complete absence of exercise of power, in short 'noble savage'-behavior) and the interpersonal relationships of humans since the overpopulation situation changed human behavior.

The best short-term we may use here for cultures showing this more recent behavior is AGR, as this suggests both aggression and agriculture.

Horticulturalists slash and burn a field in the jungle where they grow sweet potatoes or plantains, and usually live in longhouses or shabonos. For some months each year, they happily take up their old gathering/hunting life, but most of the time they need to guard their village against hostile neighbors. War makes men important. AGRs are what becomes of GHs in an overpopulation situation.

Today there are scarcely people who still live as pure GHs. Even in the most remote territories the economic life has changed; even people who see themselves as GHs, do part-time farm work, keep some cattle or have some additional form of income. But in their child-rearing and communal lifestyle they still keep their old GH-tradition as a valuable heritage, and are proud of it.

The first anthropologist who studied the life of GH-people in comparison with the life of horticulturalists and primitive farmers was Hugh Brody.<sup>48</sup> To give an impression of

<sup>&</sup>lt;sup>47</sup> Perhaps influenced by the German/American humanist psychologist Erich Fromm, in 1986 under US auspices the *Seville Statement on Violence* stated that while patterns of human aggression may be inherited, warfare need not be a necessary consequence.

<sup>&</sup>lt;sup>48</sup> Hugh Brody is a British anthropologist, writer, director and lecturer. He was born in 1943 and educated at Trinity College, Oxford. He taught social anthropology at Queen's University, Belfast. He is an Honorary Associate of the Scott Polar Research Institute at the University of Cambridge, and an Associate of the School for Comparative Literature at the University of Toronto

the GH-mentality, here are some quotes from of his book *The other side of Eden* (London, 2001):

In a tent made from hides – but it can also be an igloo or a government's prefab – the baby awakes. She is taken up, cuddled, breast-fed, and people are talking to her: she hears the voices of people in the room. Above all the familiar voice of her mother who says she's drinking fine. It is her own decision if and when she drinks or stops drinking. The sounds of voices are reassuring to her. When she dozes off after drinking, she goes in mothers amautik, the baby carrier that is part of the parka, against mothers back. The mother senses by the baby's movements when her child must relieve herself; then she takes the baby and holds her above a proper place, talking in a cheerful tone. While wiping her clean, mother says: "Now you're done again my fatty, my darling."

Grandfather comes near for a while and says, with his face close to hers: "Dear little wife of mine! You are my little wife? Yes, you are!" The mother smiles and holds her daughter up: "Mother? Yes, you are my mother!" Because the baby was born shortly after the passing away of her grandmother, she is seen as the atiq, the ghost of her grandma, and she has inherited her grandmother's name too. Though all babies are cherished, an atiq is extra loved and adored as an obvious link in the chain of generations.

Babies are treated with respect – like everybody is treated with respect. Babies get all they want. They may sleep when they want, they never are brushed off because babies can never do something  $wrong^{49}$ .

From the beginning of their life children listen to stories. Nothing is concealed for the child: it picks up only what it can handle. Grandfather tells of the creation of the sea mammals, the principal prey of the Inuit. Stories with all sexual and bloody details, and mysteries. The children listen as long as they want, often hearing the same stories repeated, growing up with them. They see how adults respect each other and that everybody has her/his special abilities and tasks. They learn the names of the animals and plants effortlessly and grow up as Inuit.

All anthropologists who have studied the scarce GH-communities, report the same: notwithstanding the desert- or icy cold character of their environment, people are strikingly healthy and happy. They all interact with their children, with each other, with animals and plants in a respectful way. Nature is hard and merciless, meaning that for GHs, existence itself is precarious. On awakening, you will not know for sure

<sup>&</sup>lt;sup>49</sup> GH's do not yet have that automatic distrust of human nature that we, AGR's, civilized and thus frustrated humans, may have developed; GH's see humans still as essentially good natured; GHs impute special qualities and capacities to babies and children, on account of their being good natured: capacities which they as adults think to have lost.

The reason why the Bedouin women (and on their example also the men) danced /sang naked around the Kaaba before it was banned by the Muslims. For their clothes symbolized the lost innocence and their nakedness were their newborness. The Muslims also deposited their clothes but covered their nudity with loose rags and they still maintain this pagan practice, just like circumcision.

whether you will find something to eat that day. But for them and their ancestors, even for their animal ancestors, it had always been that way.

Today, the few remaining GHs such as the Hadza still are living as noble savages. Are they (so were our ancestors) *better* than us?

No way. Remember that we have become such special animals by having *names for things*. We have gone the way of understanding things. The path of understanding things better and better. We have progressed much further on this path today. We can now even understand ourselves.

The GHs are so nice because their primitive economy forces them to do so. They do not have a lot of respect for the more high-level economies they are confronted with, but they are greedy for the technological products of it. In the meantime, their world is to prey to the supremacy of even higher cultures. Their thinking, no matter how noble it may be, cannot outweigh those of the rest of the world. Their world of thought has only become a study material for future humanity. We are on the path to become more noble than they are.

The Hadza, living in north-central Tanzania around Lake Eyasi in the central Rift Valley and in the neighboring Serengeti Plateau. Considering genetic evidence and click language, their closest kinship is with the San people, but nevertheless the difference is obvious. It is not too bold to assume that they are the descendants of a population that never migrated from the beginning of AMM's in Africa.

But as to determining a contemporary control group for pure GH-behavior, reflecting the lifestyle of our early ancestors, we take Hadza, Bushmen and Ituri Pygmies, and retrieve the following four characteristics:

- each person is equally entitled to food, regardless of his or her ability to find or capture or process it: food is shared
- nobody has more wealth than anyone else; so all material goods are shared
- nobody has the right to tell others what to do; so each person makes his own decisions; even parents don't order their children around
- group decisions have to be made by consensus; hence no boss, 'big men', chief
- as regards shamanism: only Bushmen know shamans

- initiation fundamentally concerns girls, as celebration of first menstruation

We assume that professional ethnologists can sum up more GH-groups sharing these four characteristics.

### 1.16 noble savages



One of the authors, Couwenbergh with a real HG, be it a nice reconstruction in Neanderthal museum, Metmann, from a unsuccessful photo of the other author, Van Setten

In the previous chapter,

we exhibit a culturally optimistic view on human nature. Many of our readers, however, may have in mind recent books such as Keeley's *War Before Civilization: the Myth of the Peaceful Savage* or *Constant Battles: The Myth of the Peaceful, Noble Savage.* <sup>50</sup> These studies contradict our 'good natured'-view, you may argue. Of course we studied these books eagerly. But they do not really contradict or falsify our 'good natured'-view. Keeley produces an impressive list of massacres by and among pre-Colombian populations.

He neglects the cause: overpopulation stress. He only remarks that populations that did not engage in war, "were isolated nomadic groups (for whom flight is an option)". Would he really have no idea that our ancestors lived millions and millions of years in "isolated nomadic groups"?

He compares the average deaths per year among the studied pre-Colombians caused by warfare with the percentages of our times, including the massacres of World war I and II, and concludes that the last percentages are very modest. And he ascribes this to the effects of civilization.

LeBlanc's book *Constant Battles* emphasizes ecological imbalance as cause of war. Imbalance, provoked by primitive colonizers of islands, or by primitive agriculturers. Like Keeley, LeBlanc overlooks overpopulation as cause of war. He praises *H. erectus* people who didn't induce ecological imbalance, but he considers chimpanzee warfare as evidence of our innate belligerence (ignoring that this behavior is caused by overpopulation). Therefore his *Constant Battles* is not invalidating our "myth of the peaceful, noble savage" as its subtitle pretends to do.

The overpopulation stress begins to flash at the horizon, at the appearance of the AMHs, the human variant to which we all belong today.

### 1.17 Anatomical Modern Humans (AMHs)

As said before, sign language is an extension of body language. Not just the hands and fingers play their role, but also the arms, facial expressions, and posture and movements of the body as a whole. In early humans' emotional and dramatic performances, this body language function merged into a kind of dancing which over time became more and more ritualized. One of the essential features of dancing has always been the repetitive movements, which (just like walking, jogging or playing sentry-go) release endorphins. As such, it serves as one of our uncertainty-allaying mechanisms.

As for singing, I already mentioned how our ANBOs probably were very communicative animals, screeching emotionally all day long just like present-day

<sup>&</sup>lt;sup>50</sup> War Before Civilization: the Myth of the Peaceful Savage (Oxford UP, 1996) by University of Illinois Professor L.H. Keeley

Constant Battles: The Myth of the Peaceful, Noble Savage (NY 2003) by archeologist Steven A. LeBlanc.

bonobos. From the beginning, vocal sounds accompanied their gestured communication. Besides the screeches that were beyond conscious control (being driven from the limbic system) there probably evolved a more intentional application of conscious (cortical driven) sounds like [puffs] and [clicks] and [mmms], to support the communicating of still primarily gestured *names for things*. Such non-vocal sounds proved useful in the dark, too<sup>51</sup>.

In the dancing-singing of the Creation Story, the cortical control gradually emerged over many generations: in line with Steven Mithen<sup>52</sup> we assume that the Neanderthals were indeed 'singing Neanderthals' and as a humanosophers we assume that their earlier Early People were already 'singing'. Be it that we in 'singing Neanderthals' and 'Early People' we imagine women in the first place.

More scholars assume that the AMHs (Anatomical Modern Humans) were the first real speakers to communicate with spoken names, and that for the AMHs gestures were reduced to an accompanying role. In a relative short time during the great migrations, these AMH descendants of the African early humans replaced earlier humans wherever they showed up. These Anatomical Modern Humans are our nearest ancestors: every human today is an AMH.

Now what made these first AMHs so special? A genetic mutation, says Richard Klein of Stanford University.<sup>53</sup> Other paleos do not agree, but they do not offer a satisfying answer on the question either. Sure is that (apart from anatomical differences) the AMHs in Africa were culturally quite different from all earlier humans. Unlike their predecessors, they used bone, antler and ivory to make fish hooks and harpoons. For the first time in human history, they also relied on sea food: their camp sites were characterized by shell middens.



#### Scratchings on ochre from Blombos cave

At the South African Blombos cave some chunks of ochre were found that were marked with crosshatched scratches 70,000 years ago. Researchers view this as art or even a primitive form of script, but we believe that these scratches were made to ease the scraping of ochre powder from the chunk (one can see earlier scratches under the fresh

<sup>&</sup>lt;sup>51</sup> The dark ... for the Early Humans we have to consider their very sharp vision; even the slightest light was enough for them to see in the dark

<sup>&</sup>lt;sup>52</sup> Steven Mithen *Singing Neanderthals* (2006) proposes the term *Hmmmm* for the pre-linguistic system of communication used by Early Humans: an acronym for Holistic (non-compositional), Manipulative (utterances are commands or suggestions, not descriptive statements), Multi-modal (acoustic as well as gestural and mimetic), Musical, end Mimetic.

<sup>&</sup>lt;sup>53</sup> A friendly but rather negative review of his (and science writer Blake Edgar's) book *The Dawn of Human Culture* (2002), including his theory that spoken language was the result of a genetic mutation, immediately followed by a cultural 'big bang', has been written by Derek Bickerton in *Scientific American* Sept. 2002, "A Bare-Bones Account of Human Evolution". The review ends: "*The likeliest conclusion is that language as we know it arose most probably through some fusion of preexisting capacities, around the time our species originated more than 100,000 years ago. Precisely how this happened remains one of the great unsolved scientific problems. Unfortunately, Klein and Edgar don't bring its solution any nearer.*"

scratches). Most of the chunks are without scratches; it can be the particular property of one woman do it in this way. For communicative engravings limestone slabs would be far more adequate.

Anyway, the research of Richard Klein<sup>54</sup> shows how the AMHs hunted buffaloes with more sophisticated weapons.

Still the question remains: why did AMHs develop this new behavior, while the Early Humans did not? We have our own humanosophic hypothesis. Communicating with only one's mouth and without further body language makes

*lying* more easy. When trying to lie with sign language, you have to keep too much nerves of your body under control (and the person you are trying to deceive, will already be closely watching your body language). The others will see more easily that you are lying. Even in today's sign language for the deaf, lying is much more difficult than in spoken language<sup>55</sup>. But when you communicate primarily by sounds, you can lie with a poker face.

Of course the AMHs didn't lie every day. But the fact that they *could* so when needed, may have made them a tiny little bit more self-confident and individualistic. This growing inner confidence made them a little more flexible, a little less restricted to rigid traditions. In the early human mindset, thus far mainly formed by traditions and rituals, tradition and truth were two closely related concepts. Once people became aware they were able to lie (to deviate from truth) this may have made them, by inference, more aware of the possibility to deviate from tradition as well. Eventually this made them more inventive. Unlike their conservative<sup>56</sup> Neanderthal counterparts, the AMHs began to manufacture new kinds of hunting weapons (such as fish harpoons and fish hooks) from other material than the traditional stone: bone, antler and ivory. These helped them to open a new food niche which until then was not being used by other early humans: the water world.

Maybe we overplay our hands with this theory about the effect of the new spoken communication. One may also simply ascribe the transition from Early Human to AMH to the fact that the AMH ancestors in the glacial period of extreme dryness were forced to search for alternative food sources – which they found at the coast, in lakes and in rivers. Therefore they became coastline dwellers, adapting to feeding on shells and other water animals. The oldest harpoons, found at Katanda, date from 90,000 years ago; the beads, used as jewelry, found at Blombos cave, are from 75,000 years ago.

<sup>&</sup>lt;sup>54</sup> He discovered that the Early Humans from the Klasies River caves concentrated on eland—large antelopes—instead of the more dangerous buffaloes, although buffaloes probably outnumbered eland in the local environment. In more recent sites, by contrast, buffalo bones dominate those of eland. "Something happened after 50,000 years ago that allowed people to hunt buffaloes." (*Klein, R. G. & Cruz-Uribe, K.* (1984) *The Analysis of Animal Bones from Archaeological Sites (Univ. of Chicago Press, Chicago).* 

<sup>&</sup>lt;sup>55</sup> We remember the reactions of American deaf people on a speech of Ronald Reagan: they saw he was lying.

<sup>&</sup>lt;sup>56</sup> We were in the excavation site Veldwezelt-Hezerwater (Belgium): two Neanderthal campsites, one from 130.000 ya and another from 34.000 ya. On the question: is there difference in stone technology? was the answer: not at all!

Christopher Hensilwood says: "There's more and more evidence that they could fish and hunt large mammals, and that they were making fine bone tools. When our ancestors left Africa, they were already modern, already thinking and behaving in many senses the way we do today."<sup>57</sup>

However, this still leaves the question open why these Early Humans were able to make these 'modern' changes, and why this did not happen earlier than some 70.000 years ago.

Their extra nutritional niche: mollusks, fish and other water animals, enabled them to feed larger groups. The groups of the Early Humans numbered around 25 people; those of the AMHs could number around 100 people. In a small group, new ideas may find not enough support and die away, while in a larger group new ideas may easily find at least some followers. Furthermore: as a consequence of better nutrition, the number of AMH-groups also increased, which in turn caused more inter-group exchange of goods and ideas over larger areas. Hensilwood<sup>58</sup> points out the increase in population of modern humans, and how this easily explains both the new, modern behavior that lead to the 'Out of Africa'-migrations, and the "creative explosion" that took place around 45,000 years ago in Europe. But the question why these Early Humans managed to achieve this, and why it did not happen earlier than some 70.000 years ago, is still waiting for a scientific answer.

Vocal communicating - just by larynx and mouth – must have had a strange effect on an Early Human: making her a tiny little bit more individualistic, a tiny little bit more independent from traditional thinking. Yes, I see this as a female attainment again; for the still-gesturing men this may have been a female foolishness, too weird and unreliable to use it in their ritual prayers to the Big Ancestor before hunting. Women had a leading share in the daily danced-singing of the Creation Story, but also in the allaying and charming and medicating of illness. I think the first shamans were mostly women.<sup>59</sup> So initially, the sophisticating of traditional sign language with ever more meaningful vocalizations may have been primarily a female concern.

AMH-behavior: the conquest of the water world with fish harpoons and fish hooks, and the explosive growth of their group size (number of huts) and the numbers of their groups, may have flourished around 120.000 years ago. Also the consequences from this behavior: increasing population and perhaps some population stress, resulting in the first Out of Africa II movement.

This first emigration wave (we could name it OoAII-A) not only let his traces in Skhul and Qafzeh (dated around 100.000 years ago if not earlier) but also the first AMH-groups arriving in Australia some 70.000 years ago. The AMHs bred like rabbits.

<sup>&</sup>lt;sup>57</sup> National Geographic News, April 15, 2004

<sup>&</sup>lt;sup>58</sup> *Christopher* **S.** *Hensilwood* is a Research Professor at the Institute for Human Evolution, University of the Witwatersrand. With Francesco d'Errico e.a. he excavated the Blombos cave (near

Cape Town, SA) and found ornament shell beads from 75,000 years old. So 5000 years older than the engraved ochre chunks mentioned before. <sup>59</sup> Remnants of this tradition can still be found in several aboriginal cultures, for example in Siberia; see

<sup>&</sup>lt;sup>39</sup> Remnants of this tradition can still be found in several aboriginal cultures, for example in Siberia; see also the work of Mircea Eliade.

### 1.18 the Toba-explosion

But there was a sudden end to this AMH population explosion. On Sumatra exploded the mega-volcano Toba, somewhere between 74-73,000 years ago. At least 2,800 square kilometers of tephra (Greek word for 'ash') rose to the stratosphere, causing ash plumes to cover a large part of the world, from the south China Sea to the Arabian Sea. It left behind what still is the world's largest caldera: Lake Toba.

For comparison: the largest volcano event in historical times was the Tambora eruption on the Indonesian island Sumbawa in 1815. It produced the 'year without summer' in 1816. But Toba ejected about 300 times more volcanic ash than the eruption of Tambora and caused maybe six years of climatic deterioration ('volcanic winter'), which in turn caused the decimation of animal and human life over very large areas.

That most paleo authors do not mention the Toba bottleneck – in the discussion between Richard Klein and his critics Hensilwood and d'Errico e.a. we don't find any reference to the Toba event – can perhaps be ascribed to the fact that thorough research on this catastrophe is fairly recent.<sup>60</sup>

So far, the effect on many species of life has been demonstrated in DNA research on the history of a growing number of species, such as bonobos and chimpanzees. Geneticists Jore and Harpending<sup>61</sup> propose that all humans alive today are descendants from a very small part of the earlier population: perhaps some 8000 breeding pairs about 70.000 years ago<sup>62</sup>.

The impact on the northern hemisphere was more severe than in the south; nevertheless also Neanderthals survived the supposed six years of volcanic winter. The AMHs had even better chances, not only because they lived farther south, but also because of their broader subsistence strategy based on hunting and gathering coastal resources (shellfish, fish, sea lions and rodents, as well as bovids and antelope).

<sup>&</sup>lt;sup>60</sup> In an article in October 1993 Ann Gibbons, a staff journalist for *Science*, was the first one to suggest that a bottleneck in human evolution about 50,000 years ago could be linked to the Toba eruption. Rampino and Self backed up this idea in a letter to the journal later that year. The bottleneck theory was further developed by Ambrose in 1998 and Rampino & Ambrose in 2000, who invoked the Toba eruption to explain a severe culling of the human population. (Wikipedia)

<sup>&</sup>lt;sup>61</sup> Population Bottleneck from Macmillan Science Library: Genetics. Copyright © 2001-2006

<sup>&</sup>lt;sup>62</sup> Wikipedia "Toba catastrophe theory"



The ash plume drifted obliquely to the north and covered the peninsular India with a decimetres thick layer of tephra. At Jwalapuram in India, archaeologists dug through a meter thick Toba ash layer (see photo). First, above the Toba tuff, they found many stone artefacts from about 74,000 years ago, made from

limestone, chert, chalcedony and quartzite, with blades and bladelets representing a Late Pleistocene assemblage also assigned to the Middle Paleolithic. Digging deeper, below the thick Toba tuff layer (the white one<sup>63</sup>), they found many more stone tools that could be dated at about 77,000 years ago, of limestone, quartzite, and chert: scrapers, blades and a burin also identifiable as Indian Middle Paleolithic. This lithic assemblage clusters together with the lithic technology of sub-Saharan Africa, and indicates that the AMHs belonged to the first migration wave out of Africa. We will talk about this in the next paragraph.

According to the excavators, before the explosion this place was a 'paradise' on the shore of a lake. Then it got buried under two-to-five decimeters of volcanic ash. The next six years, with the atmosphere still full of ash particles, were a volcanic winter. During the next thousand years, the climate still was extreme cold: a glacial maximum<sup>64</sup>. But perhaps after some decennia of annual monsoons already, big parts of the area became sufficiently overgrown to harbor grass eaters again. So archaic AMHs must have lived in this area, and after the Toba explosion survivors reappeared as soon as grass vegetation and grazing animals reappeared.

The Jwalapuran excavation is not the only site showing evidence of the *Out of Africa* (*OoA*)-migration of the AMHs, both *before* and *after* the Toba explosion. Another recent excavation site is Jebel Faya<sup>65</sup>, where 125,000 year old hand axes are found, showing a pattern of flaking seen only in early Africa. Indicating an out-of-Africa migration 20.000 earlier than thought before. Indeed, 130,000 years ago, there was a window of climate change. The Arabian Peninsula was more habitable than today.

<sup>&</sup>lt;sup>63</sup> these layers, together a meter thick, originate from aeolian transport and slope-wash during annual monsoons into this low location. The location is an important one

OIS 5 - 130,000 to 74,000 years ago (warm)

OIS 4 - 73,000 to 63,000 years ago (cold)

OIS 3 - 63,000 to 45,000 years ago (warm)

<sup>&</sup>lt;sup>65</sup> Anthropology Net 27 Jan 2011: Hans-Peter Uerpmann of the University of Tubingen and his team excavating the *Jebel Faya* site in the United Arab Emirates.

### 1.19 migration waves and genetic diversity



Map of early human migrations according to mitochondrial population genetics. Characters represent different haplo groups. All Out-of-Africa groups descend from the African L3M group.

The early OoA-migration was around 2 mya, by *H. ergaster* groups. Researchers name this Early People dispersion OoA I. The AMH dispersion of OoA II occurred in two main waves. The first, from around 120,000 years ago, is called OoA

II-A. The presence of these early AMHs has been demonstrated with their fossil remains in the caves of Skhul an Qafzeh. but everything indicates that this wave has not been limited to this evidence but that other groups of this wave have migrated further to the Far East, ending around 70,000 ya in Australia.

The second, OoA II-B (65,000 ya), took place after the Toba bottleneck, and within this wave fall the 7 mitochondrial daughters of Eva, as Bryan Sykes states in his 2005 book, and began dispersing all over the world.

OoA II-A took place in a warm period when the Sahara barrier was green. So perhaps this wave left Africa along the Levant. As mentioned above, AMH hand axes are found on the Arabian Peninsula dated 125.000 years ago. Paleos have found fossil AMH remains dated 120,000 years old in the Mount Carmel caves Skhul and Qafzeh (Israël). Their stone assemblages did not differ from those made by the Neanderthals who had survived the severe cold period after the Toba catastrophe in the same caves, which during that period were abandoned by the AMHs. The paleos see the OoA II-A wave as 'archaic AMHs', because they do not yet show the more modern life style of the post-Toba Blombos populations in the Southern tip of Africa.

We can follow the migrations by looking at archaeological remains. We can also reconstruct them by looking at the dispersal of different types of musical traditions<sup>66</sup>. But the most clearly we can follow the migrations by looking at the tree of mitochondrial genetics, as in the map above.

Genetic diversity in present-day Africa is extremely high (even between closely related groups or groups living in each other's' vicinity) and much higher than diversity in human populations *outside* Africa.

This diversity suggests a recent African origin for modern humans, because in the rest of the world the genetic diversity is much smaller.

Tishkoff<sup>67</sup> also suggests that the group which migrated out of Africa came from northern East Africa. "The diversity of groups in Ethiopia and Somalia is intermediate between that of the rest of Africa and the rest of the world," according to Tishkoff, "Perhaps this group was isolated from the rest of the African continent before they

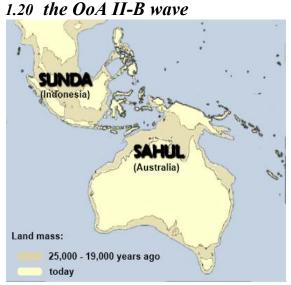
<sup>&</sup>lt;sup>66</sup> Journal of World Prehistory March 2003 "Language, Symbolism and Music – An Alternative Multidisciplinary Perspective" from Francesco d'Errico et al.

<sup>&</sup>lt;sup>67</sup> Penn State University

migrated into the Middle East and Europe." As said, this first OoAII-A group doesn't show the life style of the southern AMHs of Blombos cave and other sites. So this archaic group may have been driven northwards along the Nile by the population pressure of more modern AMHs from the south. Because their first appearance outside Africa is on the Arabic Peninsula, near the Strait of Hormuz (Jebel Faya, 128,000 years ago) and they appear in the Levant 8000 years later, it is also possible that they left Africa by crossing the Strait of Bab el Mandab. Or should we suppose two emigration groups of archaic AMHs? Because their stone technology is a little different.

Most of the 'archaic AMHs' (OoA II-A) moved 'beachcombing' to the East. In this relatively warm period, lush vegetation on the Arabic Peninsula made it habitable for grazing animals and their human predators. Recently, African-looking hand axes have been found in Jebel Faya (UAE)<sup>68</sup>. From there, migration to India may have taken place, where we find them "spearing dinner and filleting meat" 76,000 years ago in Jwalapuram.<sup>69</sup> At the moment of the Toba catastrophe, most of them had already passed that area, beachcombing farther eastward. Their descendants populated Sundaland and eventually reached the Sahul continent (New Guinea, Australia, Tasmania).

Today we still find descendants of these early AMHs (OoA II-A) in the jungle of Malaysia: the Semang. The Malaysians name them Orang Asli, and in the Philippines they are named Negritos.



Yellow: the lower sea level parts remained until 10,000 years ago!

The AMHs in their home continent Africa survived the Toba disaster mainly in the southern coastal region. Perhaps the oyster beds have played an important role in survival, because their whereabouts are characterized by enormous shell middens.

We speculate that this population really started to show the 'modern' features that led to the Early People's extinction. Think what must have been the effect of

a six years volcanic winter on these people.

They have not noticed anything of the Toba explosion. Only their world darkened and also during the day it became only dim light. Woman started to sing and dance, to awaken the Great Ancestor from his sleep so that she/he/it could restore the world for

<sup>&</sup>lt;sup>68</sup> By Hans Uerpmann of the University of Tübingen and his team, in 2010.

<sup>&</sup>lt;sup>69</sup> According to Petraglia and his colleagues.

her/his children. They continued to dance/sing even when the night had fallen much earlier than usual. The next day the world was possibly even darker and now the men joined their choir with their stronger voices. Day after day they kept on going, until the men gave it up: even on the drums and flutes the Great Ancestor did not respond. He had apparently let his children down and retired somewhere high in the air and did not interfere anymore with his world.

But He was not gone; He sat too deep in their inborn religious disposition. But He no longer interfered with them, that was clear, and that is why they no longer interfered with Him.

From now on they turned to the elements that offered salvation in need, such as the sea, the Great Mother of their oyster beds, the Great Mother of the prey, the Great Mother of their food plants. And to the Sun, which gradually showed itself stronger and which they encouraged with their dancing / singing.



### oyster bed (Wikimedia)

It may be assumed that the women had become more 'no nonsense': their children and men needed food they had to provide it, anyhow, The women struggled to collect food in the twilight during the day and wood for their cooking fires. For the men it was no way to go hunting.

For the coastal population the oyster and mussel banks and other sea food offered a solution, the enormous shell middens provide the archaeological evidence for this.



Here another picture, from Oyster Bay Travel (Eastern Cape province in South Africa), that shows also other seafood.

As mentioned, the genome shows a bottleneck in all species around 73,000 years ago. But most species in Africa survived the disaster, except for the Early People – we mean the contemporaries of the European Neanderthal people. But the post-Toba people have started to show different behavior. The paleos (we mentioned Hensilwood and d'Erricio), find in the post-Toba layers of the South African coastal caves and rock shelters new assemblages and fish spears and other tools from bone, ivory and antler, shell beads, engravings on ochre lumps. Especially microliths, very small stone fragments intended to be fixed in handles of bone or wood.

Another speculation is that the coastal inhabitants defended their dwindling oyster beds against the hungry women of inland living groups: there can only be one group of one oyster bed. The women chased their husbands on the wives of other groups to drive them away. The inland groups were angry about this unheard-of behavior: no group ever considered themselves the owners of a food source, and groups in need were always welcome to a group that was doing better. But this natural disaster broke through all norms: only the strongest group survives.

In INTRODUCTION I have already depicted human nature as a three-stage rocket. Also the noble GHs are subject to three conflicting impulses and that it is the circumstances that decide which drive is the strongest at that moment.

Maybe you wonder where the shell centers of the mussel bank people of Blombos cave stayed. Dr. Hensilwood points to the fact that today the sea level is much higher than at that time, and that the flood line was then tens of kilometers away. On the map below this flood line is visible as a gray-blue strip.

For now we want to suggest the possibility that it was the musselbank people who were not only the ancestors of our 'modern' cultural achievements such as bow and arrow, spear-thrower and rock art, but also of warfare and male domination. War makes men important - statement by Marvin Harris in Our Child (1989). The war with the inland groups was purely a survival battle. For the first time men discovered that their gender was as important as that of the women. Until now, the men did what the women wanted from them. At the musselbank people, this ancient balance between the sexes was disrupted.



Around 68.000 years ago was the largest concentration of musselbank people on the east coast of South Africa (on the map Sisubu cave and Border cave, the 'shore district'.). The researchers state that this entire culture disappeared 65,000 years ago and that after some thousands of years that region was populated by AMHs with a more primitive culture!

They also discovered that Africa was then prey to desertification, and concluded that the musselbank people must have been emigrated to the north. That they have populated the Arab peninsula (then green) via Bab el Mandeb. And then further migrated, partly to the east and the Far East, and to Europe. Genetically this musselbank humans are the 7 daughters of Eva from Bryan Sykes. They brought with them the real Post-Toba modern-human behavior as we know today in the 'primitive communities' such as the Hadza, the San and the Pygmies, but also of the 'wild tribes' such as the Aborigines, the Inuit and the Indians. This means: bow and arrow and other hunting weapons, the most refined stone techniques, skin paintings, petroglyphs, and especially: **male dominance**.

Male dominance ... is this only because of the survival behavior that the mussel bank people had to have during the Tobawinter: the women who chased their men off against women from other groups who were driven by hunger on their mussel beds?

We are now thinking of the Kwakiutl of Vancouver Island (Canada) of 70,000 years later.

Still being GHs, they live on the northwest coast, in a 3000 km long narrow strip from California in the south to halfway Alaska. On the left is the Atlantic Ocean and on the right the coastal mountains of British Columbia and the Cascade Mountains. The coastal strip, rarely more than 150 km wide, is a paradise. The Japanese wave stream

softens the humid westerly winds while in the winter the high mountains stop the cold winds from the interior.

In this temperate climate zone, spruce, pine and cedar trees that can grow to 70 to 80 m grow in dense forests, while deer, elk and bear live at the edges and mountain goats and sheep on the slopes.

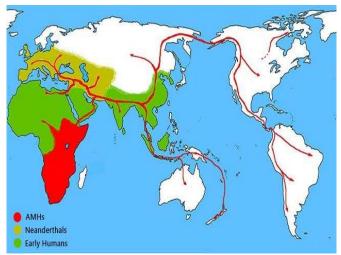
The sea was an even more important source of food for the Indians: whales, seals, porpoises, sea lions, sea otters, halibut and sturgeon. In addition, schools of pegs and smelt, and the eulachon that even dried are still so greasy that they are used as candle with a candle spit.

But the rivers were the most abundant. Six times a year, salmon swim upstream to spawn. With tons together, they could be caught and dried on long racks. That meant a week's hard work, but it provided so much food that it could feed large groups, groups that split so that the vast paradise soon became full of more than a hundred tribes. Which of course lived with each other on foot of war. War makes men important, so also male dominance. Even without horticulture or other means of food growing, the people of America's northwest coast became 'wild tribes'.

The luxury of food richness made them live in permanent villages, in wooden houses, with huge totem poles on either side of the doors. The many free time resulted not only in beautiful carvings but also in decorative blankets, beautiful mats, fur cloaks, jewelry, armor and many other industrial products. All this industry served a social purpose: to maintain friendly relations with neighboring villages through the exchange of gifts.

In all GH groups there is this tendency to exchange gifts: it prevents jealousy and disagreement. Even today we are inclined not to eat food on our own but to share it with others, and to give presents at festive occasions. It is very deep in our manners. But with the Kwakiutls it got an extreme form because the village leaders wanted to outdo each other in the display of luxury. Their mutual hostility got a peaceful form with this imposing behavior. Such a several days lasting festival was called *potlach*.

# 1.21 Out of Africa II-B



About 65,000 years ago, they crossed the red Sea at the Strait of Bab el Mandab. Presumably in several waves.

### Dispersal of the AMHs

The mussel bank people had a slightly lighter skin color and were not frizzy, like the *negritos* of OoA II-A, but had straight hair.

With their 'modern' mentality,

their better armaments and their larger groups, they pushed aside the *negritos* to jungles and other less attractive regions. They would later be replaced by the even more 'modern' Aryans, a savage horse folk from around the Black Sea. The mussel

bank AMHs would become *dalits*, at least in India, with its hopeless caste system. May the free market economy finally bring salvation there.

The musselbank people also entered Europe, inhabited until then by Neanderthals only, around 45,000 years ago. Bur Europe seemed most empty: Neanderthals lived in very isolated little groups. As Early Humans, they now were confronted with a totally different kind of humans: black, numerous, noisy, armed with farther reaching spears (and maybe wolves!) and living from fish – people who didn't react on your gestured communication.

So you could better avoid confrontations and retreat into an area without fish. The musselbank AMHs seldom encountered a Neanderthal, they mostly stumbled on an abandoned camp or cave of them.

By 35,000 years ago, the AMHs had populated most of the Old World and forced the Neanderthals into mountain strongholds in Croatia, the Iberian Peninsula, the Crimea and elsewhere. The Neanderthal groups became isolated from each other, suffered ever more from inbreeding and would extinct some 30,000 years ago.

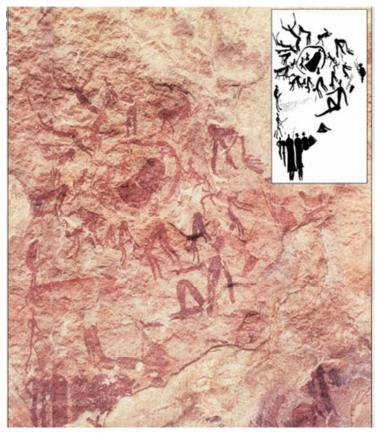
Finally, around 15,000 years ago, humans crossed from Asia to North America and from there to South America. The white regions on the map is territory that was never been tread by humans before.

## 1.22 overpopulation and machism

Our species started in very harmonious groups with the women as the dominant gender. Survival on the savannahs was extremely precarious. Groups living in harmony flourished better than groups with tensions: natural selection advanced harmony within the groups or tribes. Millions and millions of years of harmony is what made us the most social beings in nature, while the other side of our nature – violently defending ourselves and our kin – was pushed far away to the background. On the sparsely populated savannahs, such violent behavior was only used against them threatening predators or when hunting, not against each other or their neighbors. Their groups, moreover, exchanged continual of composition, so that one cannot even speak of 'neighbors'.

Women were dominant in religious performances, like they were dominant in medical care and magic and everything. Males should never put the success of their hunting at risk by using female speech to pray to the Big Ancestor: they clung on the sacral sign language for their hunting prayers. Nowadays before each hunting trip, the Semai hunters still use *sign language* to pray to their Big Ancestor. When we look at the important role of gestures in sacred rituals today, we see that sign language must have survived a long time in the sacral singing-and-dancing of the Creation Stories which had such a dominant place in the lives of our ancestors.

To get back to the point: let's take a look at how overpopulation led not just to war, but also to male dominance. We need to make a difference here between male



dominance and *machism*. So let's clearly define both.

Male dominance means that men replaced women in highest status. In this hyper-religious phase of humanness it was tantamount to be leading in the adoration of the Ancestral Being – in the form of the concerning culture. In many cultural myths all over the world this is illustrated by the element of males taking over the holy flutes for their own ritual use.

The iconic Bushmen wallpainting with the elima, the menstruation hut, where the women do the moose dance. The boys

form the first circle and the adult men form the outer circle.

It is clear that in this painting the women are still leading in the religious experience of the world. Today the San Bushmen still need the singing of the women to get in *trance*.

In the Pygmy culture, God is the forest, the Pygmies are His children<sup>70</sup>. Pygmies adore the Forest in singing/dancing their holy songs. For special occasions young males go in the forest and bring out the *molimo*, the holy flute. The *molimo* ritual is a male business: women and children have to retire in their huts, with doors closed. But once a year women take over the ritual, showing that they are the real performers of the holy songs. Men keep quiet, knowing that the women are right. After this performance, the women retire in their huts, satisfied to have made their point. The men stay around the fire the whole further night, most of them in *trance*.

This demonstrates a take-over of the highest status by men, but initially without losing respect for the women. But what later AGR *machismo* means, is humiliating women into the status of inferiority, even of slavery. Example of early exacerbation of male dominance are the AGR Baruyas of Papua-New Guinea, studied by French anthropologist Maurice Godelier in 1967-88.<sup>71</sup>

<sup>&</sup>lt;sup>70</sup> Colin Turnbull *The Forest People* (1961)

<sup>&</sup>lt;sup>71</sup> La production des grands hommes : pouvoir et domination masculine chez les Baruya de Nouvelle-Guinée, Paris, Fayard, 1982

Baruyas are horticulturists, have gardens in which **women** grow taro and sweet potato's. And they keep pigs. The Baruya men keep the *kwaimatnié* (flutes, rattles and other holy things) in the men's house. At the age of nine the boys are brutally separated from their mothers and from the world of women, to be taught, during years of initiation, that the flutes were originally the property of the women, and that one of the men's ancestors stole the flutes from them. The men justify this expropriation by saying that the first women did not know how to put their powers in the service of the community. For instance, "they killed too much game [sic], and were at the source of multiple disorders. It was necessary for men to intervene".

An interesting indicator of gender relations in most tribes is the initiation rite. Initially, initiation only concerned girls (a boy's passage to manhood was accepted after his first big hunting kill). As an example of the initial girls' initiation ceremony, see the San wall-painting above.

Colin Turnbull describes the one among the Mbuti.<sup>72</sup> A girl's first menstruation is still one of the happiest, most joyful occasions in her life – and in the community also. The girl enters in the *elima*, a specially built grass hut, with all her young friends, those who have not yet reached maturity, and some older women. Pygmies from all around come to pay respects, the young men sitting outside the *elima* house in the hopes of glimpse of the young beauties inside. The girls inside sing special *elima* songs in a light, cascading melody, the men replying with a vital chorus. On some days, the girls burst out of the *elima*, wielding saplings, chasing after any particular boys they fancy. On being touched, a young man is honor-bound to enter the *elima*, where he may have his first sexual experience, attended to by a whole bunch of women. Over the next few days, a succession of youth may find themselves similarly initiated. The final test of a favored boy is, however, that he goes into the forest and brings back a large game animal.

## 1.23 three steps into machism

Hunter-gatherer bands, stumbled in overpopulation-situation, in which the males have become warriors and aware of their importance for the survival of the band, take over the ancestral female dominance. That is the beginning of male dominance. The second step into *machism* is that men decide to build a men's initiation house, somewhere in the forest or in a deep cave wideness, separating young boys from their mothers and from the world of women, stealing the holy flutes and other paraphernalia, and start their own male initiation ceremonies. The third step is institutional violence against women. This occurs only in the fiercest tribal warfare. In all tribal societies all over the world we see one of those three gradations of male dominance.

Chimpanzees are examples of how an overpopulation-situation, causing warfare between competing groups, also contributed to male dominance. But can we observe *machism* in our relatives, the chimpanzees? No. Among chimpanzees, dominant alpha males do need the support of women. As soon as this support fails, they lose their dominance.

<sup>&</sup>lt;sup>72</sup> Ituri forest pygmies

From the very beginning of our species, defense was a male business. Males took care of the defense against big cats and hyenas, enabling woman and children to gather the food in safety. But while in itself this defensive task may have led to male dominance in overpopulation situation, it is not something that automatically also produces *machism*.

What made human males into *machists*? This is an important issue, because since the advent of overpopulation until modern times women have suffered from male violence and aggression, against our innate GH-nature. It is only recently (in our Western consumer societies) that women have begun to regain their ancestral high status. So what may be the historical root of *machism* in humans?<sup>73</sup>

As a general hypothesis, we may suppose that *machism* is characteristic for some horticulturalist tribes that live in overpopulation stress all over the world, but not for all of those. First, an example of a group where male dominance has been established, but without *machism*. An example are the Amazonian Xavante, described by anthropologist David Maybury-Lewis. The Xavante have chiefs, have extensive boys initiation ceremonies, but without violence against women. Because the Xavante live in relative peaceful coexistence with their neighbors, so not in permanent stress.

As an example of a band where not just male dominance, but also *machism* emerged, we propose another Amazonian band: the Yanomamö, described by Napoleon Chagnon. Their groups live in permanent threat of warfare. Chagnon observed<sup>74</sup> that young boys and girls are treated differently: the girls have to help their mothers at early age and spend a great deal of time working, while the boys spend their childhood playing with other boys. The boys are also encouraged to be fierce. When a toddler slaps his father in the face, father is glad and encourages his child to slap harder. From early childhood they see their mothers and sisters beaten up by their fathers and other men, for the slightest omissions. Even his mother encourages the young boy when he inflicts a blow on his sister. The boys are quick to learn their favored position with respect to girls.

[Note that this is characteristic of all the wild tribes, including the Arab, and thus for Muslims and many other not-western cultures. Even Western societies have not yet transcended the 'tribal tribes' stage. See Donald Trump: the example of stage I and II of our human nature par excellence. Civilization progresses painfully slowly.

How can this cultural attitude have emerged in an ancestral egalitarian GH-society with female high status? Because an overpopulated world brought new situations, where for the first time women found their food sources plundered by intruders. In such a situation, they wanted *fierce* men to defend their food sources from stealing intruders. As overpopulation progressed, women also wanted *fierce* men to protect them against raiders who might abduct women who were collecting fire wood or garden produce.

<sup>&</sup>lt;sup>73</sup> First of all: is it not a pure AGR-characteristic. Some Australian aboriginal groups know machism, while on the other hand the continent traditionally did not provide the basic condition for agriculture (grains, fruits or vegetables that can be conserved until the next year). Agriculture was imported only recently, by English colonists. So by tradition, all 263 Aboriginal tribes are GHs.
67 The Fierce People (1983), chapter 4

In such a hostile overpopulation-world, the 'fittest' groups are the groups with the most violent males. Therefore, in these groups women will see violence as a **good** quality in males and promote this warrior-attitude in their men and sons.

The Yanomamö have lost their traditional initiation rituals and religious festivals, and have serious problems with male youth.



The Xavante still have their initiation rituals, age groups, songs and dances. By advancing colonist plantations their habitat is so shrunken that they have ceased to be nomadic and live in horseshoe villages on the open savanna. But still women build the 'beehive' houses and collect the food, while men hunt tapir and deer, and plant crops (maize, beans, pumpkins) in shifting cultivation. They are not involved in warfare.

### 1.24 overpopulation

The first indication of overpopulation (accompanied by the start of wars and male dominance) in European AMHs may date from the onset of a cold period of OIS-2<sup>75</sup> about 35.000 years ago. Hunting territories shrunk, groups were driven together in the southern refugia. The cave paintings of Chauvet and elsewhere may be seen as male initiation sanctuaries: as places for secluded male rituals, separated from the women. At the same time, female rituals became more concentrated on the growing importance of food plants like peas and lentils, the boons of Mother Earth which they venerated with the renowned

Venus figurines such as the Willendorf statuette.



Many paleos wonder why the AMHs in Europe developed brilliant cave paintings and Venus statuettes (the 'Upper Paleolithic Revolution'), while those living in Africa for much longer did not produce that many art works. For example, archaeologist Richard G. Klein theorizes about some brain-related gene mutation leading through symbolic language to symbolic art.

The question about Klein's 'Upper Paleolithic Revolution' is: where has it be gone after the end of the LGM<sup>76</sup>? The Magdalenian reindeer hunters followed the reindeer tracks into evermore

northern tundra regions, forgetting the cave paintings of their ancestors. For the next page of the 'Upper Paleolithic Revolution' we have to look elsewhere: to the Levant.

We think there is a more simple explanation: technological inventions may have been fostered by a colder climate, where in a long icy winter (when people lived mainly from food gathered in autumn) for males there was less to do. This may be corroborated when we compare the technological activities of Inuit gatherer-hunters

<sup>&</sup>lt;sup>75</sup> Marine isotope stages (MIS), marine oxygen-isotope stages, or oxygen isotope stages (OIS), are alternating warm and cool periods in the Earth's paleoclimate, deduced from oxygen isotope data reflecting temperature curves derived from data from deep sea core samples.

<sup>&</sup>lt;sup>76</sup> Last Glacial Maximum

with African gatherer-hunters such as the San. Also in artistic activity such as rock art, San people are less masterfully than the cave painters of Southern France<sup>77</sup>.

About 16.000 years ago, it was the time of beginning horticulture. In regions of Eurasia with a high density of long-houses (the combined huts or *shabonos* of semi nomadic horticulturers) the wild tribes with struggles for survival arose. War makes males important.

But on a more fundamental level, it was only the situation that had changed (war), not the males or the women themselves. So the males had to suppress their incertitude, to allay their own doubts: they declared their newly-won importance **holy**. A deep incertitude of the males made a new phenomenon a necessary: a constant denigration of female abilities. Present-day religious fundamentalists still display this primitive incertitude, by isolating and over-protecting their wives, by limiting female freedom of action, or by demonizing love affairs or abortions.

A good question is: was male dominance not a legacy of the early AMHs? Was their immigration *Out of Africa* not a result of overpopulation? Even the most egalitarian tribes like the Mbuti (Congo) know a certain degree of male dominance. So when you say male dominance may be very old, I agree. For example, as we can see at chimpanzees, male dominance may always have been a strategy to cope with situations of overpopulation and/or competition. Both peacefulness and a warrior-attitude have always been strategies to cope with specific environmental challenges. For most of human history, a predominantly peaceful way of living was the most successful way to interact with the environmental factor, gradually a warrior-like style of living became the more successful attitude.

Here is an narration about horticulturers, already forty years in my memory, so I have forgotten the source. It is from a visitor or missionary and I retell it in my own words:

Oh what a noble people, so respectful for each other and for their children! So much better humans than we in our western civilization! One day men learned that strangers were roaming in the north of the territory. So they had to go down there. Perhaps whiteman would like to come along? Oh yes, sure, whiteman was always ready to learn some new. They stalked the camp of the strangers. It appeared that the men were hunting and the women gathering, so they found only old people and children in the camp. All of them were slaughtered ruthlessly. A desperate girl crawled to the petrified on looking visitor for help. "Oh, you want to fuck her, whiteman?"

<sup>&</sup>lt;sup>77</sup> December 2001 we visited the Cave de la Marche, one of the many caves on the river La Marche, near the south- French Lussac le Chateau. In 1937 the owner discovered that the sandstone tiles with which the small cave was filled to the brim had served as 'slates' for practicing drawing. They date from 1420 BC and thus from the Magdalenian. After wiping the slab with a mixture of ocher and fat, the student could start a new drawing. Many drawings also contain caricatures! The many overlapping lines of each drawing are reconstructed with the microscope. It is now clear how the cave painters of Lascaux and Chauvet could become so competent.

asked a helpful Indian, "wait a moment"–and he pushed his spear through the girl's body into the ground.<sup>78</sup>

This event accurately reflects the recent reports of prehistoric mass slaughtering in Kenya<sup>79</sup> 10.000 ya, a 7.000 ya massacre near Frankfurt (Germany)<sup>80</sup> and a 4.000 ya from the Middle Copper Age in Croatia<sup>81</sup>. This reports caused great enthusiasm in some cultural pessimistic professors, but for us they confirmed once again the consequences of overpopulation in the recent past.

From these stage 2-reaction events we may conclude that humans are very social, but only to those they see as fellow humans. For the prehistoric horticulturers, the strangers were not fellow humans. Not even humans. To them, these others were rather a form of harmful wildlife that you need to destroy.

It can also be concluded that this awful behavior didn't make them less social: it had survival value. Only one group can make a living from a given territory. They didn't have a government yet to regulate things.

Even the Arab tribes in the beginning of the Islam still lacked a government; the Islam of Mohammed was an attempt to civilize the wild tribes.

In any threatening situation, humans fall back into mode 2 of our human nature. Today we still see the same behavior in AGR-societies such as Rwanda. In a civilization, such behavior can be revived by ideological indoctrination and can happen even when the supposed threat is in fact an imaginary one, such as the Japanese (the Nanking massacre) or the German civilization (Holocaust). In the justmentioned cases, the Tutsi, the Chinese, the Jews were not a real threat, but ideological indoctrination had caused them to be felt as a threat. In a sense, such indoctrination created an imaginary overpopulation situation.

### 1.25 the contrast between HGs and AGRs

Two million years or longer our ancestors lived as HGs. The HG-mentality has become part of our genome. Today our babies are still born as HGs. They are even born as NTs: short necks, their windpipes still normally ends in the nasal cavity: they still can simultaneously swallow and breath like normal animals. Until five to eight months: after this time they have become AMM's.

Also mentally they are born as HGs, expecting to have been born in a HG environment. That is: they expect to be moved, hanging on the mother body, especially a dancing or walking or working mother. They expect smelling her body

<sup>&</sup>lt;sup>78</sup> Surely not from *Jesuit Relations*, field letters from the missionary priests, published for two hundred years beginning in the early 17th century as a fundraising tool. Because the Jesuits found their own civilization superior, and urged the native men to beat their children and to suppress their women

<sup>&</sup>lt;sup>79</sup> Science News, January 21, 2016

<sup>&</sup>lt;sup>80</sup> Science News, January 21, 2016

<sup>&</sup>lt;sup>80</sup> Anthropol. Anz. 74/2 (2017)

odor, especially the milky breasts. They expect sounds of people, especially singing. They expect the smell of camp or cooking fire<sup>82</sup>. They especially expect to be loved and cared for.

What they not expect is a cradle in a nursery, stillness and silence. Silence and stillness mean danger and being abandoned. Not to be moved bereaves them from the possibility to lose the surplus energy: they cannot yet move themselves enough to lose surplus energy. Being moved is urgently required. Happily mothers have been born as HGs also, with inherited behavior towards their baby's, and one can frequently observe AGR mothers and aunts shaking a baby or the pram.

One can see AGRs as frustrated HGs. Frustrated by the change in the inherited HG lifestyle that implicated free daily moving from campsite to campsite in a boundless world, in full equality and females in high status – into the AGR lifestyle, forced by over-population, characterized by warfare, a world bounded by tribe territories, male dominance. As horticulturers they lived in longhouses and were no longer 'noble savages'. The loss of mutual respect was evident primarily in relationship between man and women.

Mbuti pygmies, one of the oldest AMM-populations of the world, live as primarily hunters-gatherers but in a weird symbiosis with primitive Bantu farmers in the Ituri forest of Congo. In their past, Mbuti men annexed the *molima*, the rites of the holy flutes and excluded the women from it. But still, women and men remember that this change in gender status is a recent development and once a year they have a ritually reversal of the roles, by mutual consent.

The Bantus however, are farmers and in their past intruders in the Mbuti regions. The Bantus depend for their meat and honey and the labor force of the strong Pygmies, which in turn are eager of the iron knives and other iron things, the tobacco and the palm wine, and even the bananas of the Bantu. A strange and therefore instructive interdependence. Instructive because we can learn from this about the first confrontations of the first farmers with the GH Europe around 4000 BC. And we can learn from the confrontation between the GH mentality with the AGR mentality.

### 1.26 leadership, shamans and animism

We humans, linguistic beings, are the only species that can exchange individual ingenuity, ideas, skills and goods. We can consult each other in order to handle the challenges of our environment. Having started long ago as a tiny population of apemen trying to survive in a hostile environment, thanks to this special faculty we now are the dominant vertebrates. This special faculty enabled our ancestors to survive in hostile environments and climates, and to survive big catastrophes that for many other species spelled extinction. It is this uniquely human faculty of being able to consult each other in order to make common decisions (democracy) that we will present as the base of a new, universal human self-confidence.

<sup>&</sup>lt;sup>82</sup> the predisposition of our tobacco addiction?

In the original groups of 25 individuals that existed at the time when our human nature was formed, during the long-long time of our Early Human ancestors, it may have been relatively easy to arrive at common decisions. In his 1990 book *Our Kind. Who we are, where we came from & where we are going,* Marvin Harris looks at today's small populations: with 50 people per band or 150 per village. Everybody knows everybody else intimately, people are bound together in the reciprocal exchange of killed animals and gathered food.

We, humanosophers, make a strong distinction between true GH-cultures (food gatherers) and AGR-cultures (food growers). Examples of the first are the Hadza (Tanzania), the Pygmies (Congo) and the !Kung People of Botswana (still true hunter-gatherer cultures, as our prehistoric ancestors were millions of years long). Examples of the second, of the food growers (AGRs), are the Mehinacu of Brazil's Xingu National Park or the Semai of Malaysia (both horticultural societies) and all later 'wild tribes' and farmers and cattle nomads, and still later ourselves, still being AGRs, still retaining traits of the 'wild tribes'<sup>83</sup>.

Since chance plays a great role in success of hunting and even in gathering, individuals who have a lucky catch one day, may need a handout on the next. So the best way to guarantee a daily portion of food is to be generous. Anthropologist Richard Gould said: "The greater the amount of risk, the greater the extent of sharing". Richard Lee in *The !Kung San* (1979) watched small groups of men and women returning home every evening with the animals, wild fruits and plants that they had killed or gathered. They shared everything equally, even with camp mates who had stayed behind and spent the day sleeping or taking care of tools and weapons. "Not only families pool that day's production, but the entire camp – residents and visitors alike – shares equally in the total quantity of food available. The evening meal of any one family is made up of portions of food from each of the other families. Foodstuffs are distributed raw or are prepared by the collectors and then distributed. There is a constant flow of nuts, berries, roots and melons from one family fireplace to another until each person resident has received an equal portion. The following morning a different combination of foragers moves out of the camp."

What about leadership? In GH-societies leadership is unknown. To the extent that political leadership exists among simple AGR band-and-village societies, it is exercised by individuals called *headmen*. However, they lack the power to compel others to obey orders. How can such a headman lead? Among the Inuit, a group will follow an outstanding hunter, especially the leader of the whale hunting party. But in all other matters, his opinion carries no more weight than any other man's. Among the Amazon Indians, headmanship is mostly an irksome job. As the first one to rise in the morning, the headman stands in the middle of the village and shouts, rousing his companions. If something needs to be done, it is the headman who works at it harder than anyone else. After a fishing or hunting expedition, he gives away more of the catch than anyone else. In trading with other groups, he is careful not to keep the best items for himself.

Among the Mehinacu the headman is a kind of scoutmaster. Among the warlike Yanomamö he is the captain at the raids. It is his task to patrol outside the *shabono* (village) in the morning and to risk being shot by a raiders group.

<sup>83</sup> think of soccer

He has also to maintain the biggest garden in order to feed guests (every man tries to keep his garden as small as possible!)

Among the Semai, who are horticulturists like the Amazon Indians and with a gift economy too, the headman is more a spokesman for public opinion than a molder of it. Disputes in the Semai community are resolved by holding a *becharaa* (public assembly) at the headman's house. This assembly may last for days and involves thorough discussion of the causes, motivations and resolutions, ending with the headman charging either or both of the disputants not to repeat their behavior lest it endanger the community. Somebody who neglects the *becharaa* verdict, is really endangering his ife<sup>84</sup>.



In hunter-gatherer societies, the principle of making decisions by reaching consensus of all adults in the group is the most frequent model of decision-making, although there are a few exceptions. The Gwi hunters in Botswana discuss their intentions carefully to avoid mutual interference.

*Gwi hunters in discussion; pay attention to the participating child* 

Today most tribal AMMgroups, usually numbering

some 150 people, are horticulturers living in an overpopulated region. Even when they live in peace and equality, in every social group nonconformists and malcontents try to use the system for their own advantage. Individuals who take more than they give and lay back in their hammocks while others do the work. But such freeloaders have to watch out for the shaman.

Hunter/gatherers such as the Hadza, the Kung San, the Pygmies, live in huts, built by the women on each campsite, and knew no headmen and no shaman, and are not animists. They live free and easy as GHs, singing the creation songs of their world. Horticulturists however are AGRs, live in longhouses and shabonos, have an headman and a shaman. They know taboos and heavy initiation rituals. Every band- and village society has one or more shamans or witch-doctors with a special aptitude for communicating with the spiritual world and more specific: with the tribe's god and other ghosts.

To go into trance they took hallucinogenic substances, danced to a monotonous drumbeat, inhaled magic smoke. For healing they have a rich repertoire of huffing, puffing and sucking practices, and multiple other tricks. This shaman, woman or man, is not the headman. In their spiritual world, illness or disease was not primarily

<sup>&</sup>lt;sup>84</sup> presumably *Otzi*, the 'iceman' found in 1991, had violated the rules of his community, was on the run and hunted down by the community's avenger

physical, but rather caused by evil spirits. But from her or his divinatory trance, the shaman could pinpoint and accuse a freeloader, who might be lucky to be only expelled.

In all aspects that we will encounter in the following paragraphs about the transition from small populations to modern democracy we have to realize that our ancestors were AGRs, animistic creatures: believing that souls or spirits exist, not only in humans, but also in animals, trees, plants, rocks, mountains, rivers, the sea, the air and so on. People always believed – and some of us still believe – that these spirit beings can be induced or compelled to help us in hunting or winning a match, in healing from an illness or winning in the casino, in surviving a dangerous voyage or going to heaven.

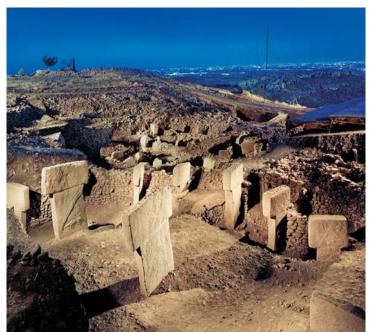
For example, among the Inuit each man had to have a hunting song: a combination of chant, prayer and magic formula that he inherited from his father or his uncles. Around his neck he wore an amulet: a little bag filled with tiny animal carvings, bits of claws and fur, pebbles, insects, and other items, each corresponding to a personal spirit helper who protected him against hostile spirits and helped him to succeed. (Real GHs such as our example Hadza, Pygmies and San, don't know such 'specialists', and our prehistoric ancestors of the millions of years ago neither.)

Another human characteristic that stems from our 'wild tribes' past is tribalism: a strong feeling of identity with our parental tribe. As modern free market consumers, today we have learned to view ourselves primarily as individuals. But for a member of a tribe it is nearly impossible to feel what it means to be an individual. Being a tribal person means: being a member of one special family, and this family being part of one special clan. A broader loyalty may be felt for the special tribe to which that one clan belongs. That is what we have to keep in mind now we experience influx from non-western societies in our western societies.

An even wider loyalty can be felt in confrontation with a common, shared enemy: without such a shared enemy, our unity will disintegrate. For the Nazi ideology was its built-in antisemitism a 'modern' form of tribalism and our populists still try to awaken this feeling in us today.

## 1.27 from headman to Big Man: the rise of distribution

Just like today in small tribal societies such as the !Kung San and the Semai, in the past *reciprocity* was long the only form of exchange practiced in egalitarian band- and



village people. Among more agricultural populations, another way to give and take arose with the seasonal feasts among the bands.

Gobekli Tepe, East-Turkey: a huge hill full of sanctuaries, built from large hewn sandstone pillars, dated some 9000 years BC

When wild seeds ripened and game was abundant,

neighboring bands gathered on a special place, each bringing an abundant stock of food and beverage in baskets and bags, for days long festivals of dancing and singing and the ritual renewal of group identity.

A well-known archaeological example of such a festival place is the famous Gobekli Tepe site (see above) and for example Stonehenge was a later festival place.

The start of it was the fact that 'wild tribes', locked up in their territory and in permanent fear of enemies, could no longer keep their ancestral initiation rituals. They got a youth problem. As an outlet they organized races with tree trunks or other heavy blocks. Also between neighboring 'wild tribes', everything to prevent outbreaks of hostilities.

This resulted in many places in severed sandstone pillars, jointly cut out and towed to a shared but non-occupied festival place.

At such occasions, no longer the headman alone could be responsible for the abundant stock of food and beverage: each family had to help with contribution of food and beverage. The headman now functioned as the administrator of the stock. This megalithic culture has lasted thousands of years, but everything stops once and usually a natural disaster, a catastrophic drought and famine are the cause.

Agriculture had become the prime source of food. Saving the stock became a permanent and institutionalized necessity: a stored surplus to overcome bad harvests. The headman-redistributor became the Big Man: a prestigious figure with a storage building to whom each family turned over his surplus on preservable food such as wild cereals, nuts and sweet potatoes, yams or taro. Only on places where such products could be harvested or cultivated, could redistribution emerge and with it the role of the Big Man. This is why even today we won't find Big Man figures in Aboriginal tribes: in Australia, there were little to none preservable and storable products to cultivate.

Full agriculture leads easily to overpopulation stress. A situation of **overpopulation** happens to apply to our next of kin, too: the chimpanzees. It is interesting to look back for a moment to apes here, as they represent the most primitive component of our nature. For most of our evolution time, we lived rather like the peaceful bonobos. But when suffering from overpopulation stress, we live more like warfaring chimpanzees.

Do chimpanzees have Big Men? Normally in chimp groups the *alpha* males change every four years. But Frans de Waal mentions one interesting case.<sup>85</sup> One alpha man managed to remain in charge twelve years, manipulating his rivals by redistributing surplus food. Even when he was not the successful hunter himself, he distributed the coveted prey. The largest morsels were for the most serious competitors, and for himself he took little or nothing. Chimpanzees are political animals.

Back to our own species: the Big Man became a prestigious figure. Even when he had to work harder and to reserve smaller and less desirable portions for himself, the headman-distributor was compensated with admiration and prestige. Every woman was proud to become his wife, and he was good enough to embrace many of them. Every boy's ambition was to become a Big Man.

<sup>&</sup>lt;sup>85</sup> He told this in a lecture that Couwenbergh attended

A classical anthropological study of Big Man is the late Douglas Oliver's *The Pacific Islands* (1951). He studied the Siuai, a village people living on one of the Solomon Islands in the South Pacific. In the Siuai language, the big man was known as the *mumi*. Organizing great feasts and publicly demonstrating the tribe's (and his own) prosperity by giving things away was the essence of mumihood. Therefore, great mumis consumed less meat and other delicacies than ordinary men. The Solomon Islands saying is: "The giver of the feast takes the bones and the stale cakes; the meat and the fat go to the others."

As long as those Big Man societies lived in peace, there was little inducement to change anything. But the combination of seaworthy canoes and restless, energetic young men enticed to visit other settlements and islands, to trade, exploration and raiding. The great mumi consumed less and gave much, gaining prestige and adoration. His ongoing effort helped to increase production: the mumi and his followers initiated agrarian methods and improvements such as dams and canals. All this augmented his prestige. His (again, restless and energetic) sons inherited this prestige and adoration without having to establish it by modest and self-sacrificing behavior. Their young followers weren't content with 'bones and stale cakes' either. It were these young men who manned the canoes, and it depended on the defensive force of the visited settlement whether it became a trade visit or a raid.

We already mentioned the Kwakiutls of America's northwest coast.

Kwakiutl chiefs also became war leaders who by boasting and *potlatches* recruited men from neighboring tribes to fight alongside them on trading and raiding expeditions. The Tobriand chiefs were equally war lords. Anthropologist Malinowski stated that they conducted systematic and relentless wars, venturing across the open ocean in their canoes to trade or to fight with islands over a hundred miles away.<sup>86</sup>



*Trobiands preparing for a raid* 

What was the root cause of this propensity to warfare, universal among horticultural and early agricultural societies? Especially societies that had seaworthy canoes or riding horses? Two million years long our ancestral groups lived in peace with each other, so making war is not an inherited property.

<sup>&</sup>lt;sup>86</sup> The Trobriand Islands, 1915

However, when we discussed "Human nature" we already saw that **good** was "what is conducive for the survival". Picking fruits and other food is **good**. Hunting other animals is **good**. For the AMHs who were living in evermore larger groups and who were confronted with a situation of overpopulation,<sup>87</sup> other groups were not human. Humans were people of their own tribe only: people with which one could communicate.

'Inuit' means 'human'. 'Yanomamö' means 'human'. People with another language weren't really humans: they couldn't even talk properly. When Early Human groups met each other, it was a reason to feast: they knew each other and there were relationships. But when AMHs were confronted with a group of strangers, fighting and murdering was good, because only one group could live from the territory.

Raiding another group was **good**. The winner of the confrontation seized the survival means of the looser. In situations of overpopulation, raiding is **good** – but dangerous too. The young Jane Goodall was the first to discover that chimpanzees raid each other's groups. Chimpanzees patrol into another group's territory very quietly, hoping to meet a single foraging man and to kill him. When they repeatedly succeed in doing so, the other group is weakened so much that they can take over all its women. In *The Fierce People* about the Yanomamö we can read that these people behaved in a very similar way.<sup>88</sup>

An important factor in the propensity to warfare were the young men. The !Kung were alert for high aspirations of young men and had their methods to "cool his heart and make him gentle." The Mehinacu and other Amazon tribes invested much time and effort in long and extensive initiation ceremonies during which the young men were 'tamed' and integrated in the males' world. The Yanomamö lived under such an overpopulation stress that they had no time left for initiation rituals, and consequently they had a serious problem with their young men. The problem was worsened by the fact that most men had more wives, which caused a women shortage: in many tribal societies, finding women is a motive for raiding<sup>89</sup>.

Generally, in most cases it were the young men who manned the canoes and were eager to kill and to become a man.

<sup>&</sup>lt;sup>87</sup> Even the American northwest coast Indians (Kwakiutl et al.), still being hunters and gatherers, arrived in an overpopulation situation, due to the richness and abundance of their territories, populated by some hundred tribes. It led to sedentism, trade, warfare, social stratification. Perhaps the *potlaches* were a means to avoid and reduce wars between the tribes. The population never reached the phase of city states and empires because it lacked cereals. (James Deetz, *The First Americans*, Time/Life, 1973)

<sup>&</sup>lt;sup>88</sup> "Strong villages should take advantage of weaker villages and coerce them out of women; to prevent this, the members of all villages should therefore behave as if they were strong. Thus, the military threat creates a situation in which intervillage alliance is desirable, but at the same time spawns a military ideology that inhibits the formation of such alliances: allies need but cannot trust each other. They are obliged to behave aggressively in order to display their respective strengths. Alliances between villages involve casual trading, mutual feasting, and finally the exchange of women. The most intimate allies are those who, in addition to trading and feasting, exchange women. Alliances with trade and feasting but without proceeding to woman-exchange, are weak alliances. Nevertheless they serve to limit the degree of war. The Yanomamö tend to avoid attacking those villages with which they trade and feast, and rarely accuse each other of practicing harmful magic. Allies bound to each other by 'affine' (marriages-bound) kinship ties, are more interdependent: are under obligation to exchange women." Napoleon Chagnon The Fierce People (NY 1983) p. 147

<sup>&</sup>lt;sup>89</sup> Remember the 'rape of the Sabine women', an episode in the legendary history of Rome

The root of all this evil is that the victims are not seen as fellow people by the slayers. Or perhaps the root is that we believe what we like to believe. Power corrupts. When we are in power, it is easier to believe that our victim is not a fellow human but some kind of weed. For raiders such as the young horse-riding Mongols or seafaring Vikings, villages of unarmed farmers were a sort of fruit that they only had to gather.

It is the raiding that has been the motivation to develop counter-measures in the form of religious structures (monotheism) and political actions (subduing 'wild' tribes), both aiming at the restoration of social order in the interest of trade and prosperity. This is what we mean by 'civilization' as a historical process.

### 1.28 the roots of states

Yams, sweet potatoes, taro and dried salmons are calorie-rich but perishable goods: they can be stored for only a few months. In the Levant (the 'fertile crescent' in the Middle-East) could cereals be harvested and stored till the next year. Only on the places where wheat, rice and maize could be found and cultivated, chiefdoms could evolve to states. The first actual states, based on a wheat-economy, emerged in the Middle East.

Endowed with wild cereals and animal species suitable for domestication (sheep, goats, cattle and pigs), the Levant and the foothills of the Zagros Mountains (today's Eastern Turkey) facilitated an early conversion to a more sedentary way of life. The climatic warming after 12,600 BC enticed foraging women to build ever more permanent huts near rich fields of wild wheat, to prevent that other foragers were



earlier on the spot to harvest the food<sup>90</sup>. The women learned to store their seasonal yield, so that they could pound the grains with pestles on grinding stones during winter and spring time, producing flour for baking bread every day.

Natufian culture, about 12,000 BC until 9500 BC

The population of this region –

named Natufians after the archaeological sites around Wadi al-Natuf - bloomed until a return of cold and dryness around 10,800 BC91 caused famine, forcing most survivors to return to their ancestral nomadic way of life. Some women, trying to placate the Great Mother Earth (who had been so generous before and apparently had got angry now) by returning some of the best grains to special places. And behold: the great Mother was grateful and produced more of this same quality wheat in the next

<sup>&</sup>lt;sup>90</sup> For centuries, this was performed by pounding the corn stalks with their digging sticks with a woven basket to catch the grains; only later, when the good grains shucked on the ear, the women began to make and use a sickle, threshing the grains at home; still later they cut the whole culms, to use the straw for stronger loam for the walls of their huts <sup>91</sup> Perhaps caused by the Laacher See explosion, the LSE-event

season. This was the beginning of agriculture. Selecting the best grains for Mother Earth was the beginning of cultivation. In essence this attempt to influence the powers of nature was the first form of 'sacrificing' that in later times, when men took control over religion, would develop into more specific forms, involving altars, priests and temples.

When around 9,600 BC<sup>92</sup> a better climate returned, this initial grain-sowing ritual led to preparing fields for harvesting crops. This led to permanent villages with common storage facilities as a part of the common ritual building. The shaman, who we have to name 'priest' from now, and his assistants, administrated the distribution. Here we see the Priest, instead of a Big Man, as the distributor. But the basic rule is a similar one: he who has the say over the distribution, has the power at his grasp.

How did it work? When a family was not able to deliver the required quantum of the harvest to the temple, it received a survival quantum from the stored grain, on security of the property of its field. When in the next seasons the same family kept failing to meet its debt, then eventually the property of the field went over to the temple. From then on, that family was serf of the temple. This kind of process was the actual start of stratification between owners and serfs: the temple was rich, some people were rich, most people were poor.

The distribution administration required some way of registering the quantity that each farmer family had contributed to the Temple. How this was done in the Natufian temples is unknown, but it had to be done to prevent free-riding. In the first Sumerian city-states, this need for administration would lead to the development of writing on clay tablets (around 3500 BC).

Peaceful as farmer-villages may be, they could not do without some kind of defensive force and a headman: there was always the threat to be raided by vagrant groups. Later on, growing differences in wealth between different settlements may also have fostered the rise of some kind of military force. In the Stone Age, volcanic obsidian was the most sought material for producing razor-sharp 'knives'.<sup>93</sup> The Late Natufian world became the scene of extended trade routes, not only of obsidian from Anatolia (today's Turkey) but also of shells from the Red Sea, of exotic stones for making ornaments, of cereal seeds, Dead Sea bitumen, lumber, hides, dogs, sheep.

Villages that profited from their location on trade routes or from their own production, became rich while others remained poor. Rich villages could feed more people. Producing trade goods led to division of labor (using specialist production workers). When a rich village needed more territory or a better water supply, it could take over and integrate poor villages and grow into a small town. When a poor village was unwilling to be integrated, the rich village had the greater military power to

<sup>&</sup>lt;sup>92</sup> The start of the *Holocene* we still live in; eh, some writers propos e the *Anhropocene* for now

<sup>&</sup>lt;sup>93</sup> Archaeologists can determine the source of origin of an obsidian tool. The Anatolian obsidian source was the base of Hasan Dag volcano, and the significant trading in it gave rise to the settlement Catal Huyuk. Because the obsidian blades and spear points had to bear sacred incantations to insure their swiftness and flight to bring down the kill, the manufacture required priests and priestesses. Half of the buildings in Catal Huyuk were shrines. The city was not just a major trade center, but also a religious center.

subdue and enslave the poor village by force. The leader of the military expeditions was the headman, the chief. And here we see the origins of the historical conflict between 'church and state': who is in charge, the High Priest or the Chief/Big Man/King? The Sumerian cities during the Uruk period were probably theocratic, headed by a priest-king (*ensi*), assisted by a council of elders.



On the Standard of Ur, 2600 BB, the first chariots appear, pulled by onagers

Sumer was the first chiefdom that became a state. Situated in a rainless but swampy and flood-prone deltaic zone of the two river mouths, the fields of wheat and barley were dependent on irrigation works. The local farmer population had to furnish high taxes and free labor for this

water infrastructure. Organizing this labour required an advanced administration. Sumerian cities were the first civilization to practice intensive, year-round agriculture, showing around 5000 BC the use of core agricultural techniques: large-scale intensive cultivation of land, mono-cropping, organized irrigation and labor division.



By 4350 BC, mud-brick structures with ramps and terraces called ziggurats, combining the function of fortress and temple, began to loom over the larger settlements. By 3500 BC there were streets, houses, temples, palaces, and fortifications in Uruk. Perhaps the definitive transition to a city state occurred in Uruk, or else in one of the other Sumerian cities such as Lagash, Eridu, Ur, or Nippur.

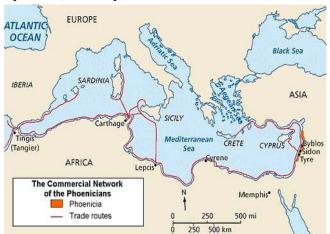
All these had become flourishing independent kingdoms by 3200 BC, dividing their territories by canals and boundary stones. Each had a central temple dedicated to the city's particular patron or goddess, and each city was administered by a priestly governor (*ensi*) or by a king (*lugal*, literally 'Big Man') who also was intimately tied to the city's religious rites.

Frequent wars among Sumerian city-states boosted military technology. The first recorded war, pictured on the *Stele of Vultures*, between Lagash and Umma in 2525 BC, shows the king of Lagash leading an army consisting mostly of infantry. The infantrymen carry spears and leather or wicker shields, and wear copper helmets. They show a kind of phalanx formation, which requires training and discipline. This suggests that they were professional soldiers.

In Egypt, where just like in Sumer agriculture was dependent from regular flooding – in this case the predictable annual flood of the river Nile) the development of cities, administration and culture took a more or less similar course – with the difference that in Egypt, government and its power base became more centralized. The richest places were the few cities that could rely on two crops each year: thus Abydos, Memphis, and Thebes

became the power centers of ancient Egyptian civilization. In ancient Egypt, the construction and maintenance of irrigation canals was a major endeavor of the pharaohs. The Old, Middle and New Kingdom each were periods in Egyptian history

when strong central government flourished in times of 'good Niles' (ample yearly flooding), followed by periods of 'bad Niles': stagnation in economy, accompanied by social, military, and artistic decline.



Commercial network of Phoenician (Byblos, Sidon, Tyre) trade

Egypt, lacking forests, got its timber from what is Lebanon today. This trade gave rise to important city-states such as Ugarit, Byblos, Sidon and Tyre, that came to flourish as the Phoenician civilization. The Phoenicians traded in Lebanese wood, copper from Cyprus, and

ever more goods from evermore regions, such as tin and silver from Spain. They also intermediated between the Hittite and the Egyptian empires, keeping them and the trade in peace (the beginning of diplomacy). This lasted until around 1200 BC: some of the last documents from Ugarit mention severe starvation in Anatolia. This induced migration from the Mediterrean and other regions. The so-called Sea Peoples embarked on piracy raids, causing the collapse of many cities and empires such as Ugarit, Mycene, and the Hittite empire. This marked the end of the Bronze Age and the beginning of the Iron Age.

The influence of the commercial Phoenician civilization in the Mediterranean area has been immense. It created many trading factories, which in later times developed to cities themselves (see the map). One of the most important innovations was the Phoenician alphabet, mother of modern writing. When the Greeks adopted this alphabet, they just needed to add some signs for vowels. From the Greeks, alphabetic writing was brought to the rest of Europe, eventually leading the modern West-European and Russian alphabets.

It is astonishing that we have no scriptural legacy from any Phoenician town. Being traders, Phoenician people must have written a lot, but they didn't share those writings outside their society. Very frustrating for us now, but this secretive behavior served these people well over the years<sup>94</sup>, allowing their small and unarmed societies to survive among the military superpowers that surrounded them. Nevertheless, the Phoenicians were the far-ranging sea traders who went from society to society carrying discoveries, inventions, techniques, customs and many material objects from one to the other. They were important go-betweens, incorporating one of the positive characteristics of a free market situation. Other societies wrote frequently about the Phoenicians. Those many bits and pieces together give us an idea of this unique Phoenician 'free market' phase.

<sup>&</sup>lt;sup>94</sup> For example. Phoenician seafaring merchants had discovered the tin deposits of the British islands. Tin was a vital metal for making bronze, but its deposits were small and scarce. The Phoenicians kept the knowledge of the Cornish tin mines closely guarded secret so they could control trade in the metal and charge an high price for it.



#### Harappa seals

Less known than Sumer and Egypt, the Indus civilization was equally important, larger, and technologically more advanced. Also known as the 'Harappa'-civilization, it developed around 6500 BC in the fertile Indus valleys and flourished until about 1200 BC it collapsed by drought and a decline in trade with Egypt and Mesopotamia. It was first of all a trading economy. Archaeologists have found over 1000

cities and settlements for this civilization; mayor ones were Harappa and Mohendjodaro in today's Pakistan, and Mangalore and Lothal in India. These cities show an astonishingly modern planning, architecture and technology: houses built with baked uniform bricks, two or more floors, bathrooms with water supply.

Archaeological finds do not indicate male dominance, belligerence, stratification, monotheism; idols or temples have not been found either. These cities could not have thrived without schools and literacy. But till yet there is no script found or deciphered. Is it the same mystery as with the Phoenicians?

These cities could not have been built and maintained without a central government: some kind of king or city council. But so far, no statue of a chief or commander has been found. The only 'big man'-figure is a priestly statue (see left, so the government may have had a religious or sacral character. For the rest many male and female figures have been found representing activities (dance, music, painting), and fertility figurines.





Trade was important for the

Harappan civilization due to its convenient location halfway between Sumer and Egypt on one side, and India and the Far East on the other side.

#### The Harappan civilization

The town of Lothal had the most modern seaport facilities of that time. The Indus civilization must have had a stimulating cultural influence on other civilizations, but the only evidence for this are its many seals.<sup>95</sup>

Official Harappa seals have been found in Sumer, Egypt and other places in the Bronze Age world. These seals were marked with the (not yet deciphered) Indus script writing, and inscribed with elegant portrayals of real and imagined animals (suggesting a symbolic or religious intent). No emperor or Big Man figure is found on these seals: this indicates a society without a centralized autocratic power. Perhaps they were used as a kind of money, but this is not clear yet. In Mesopotamia, it took until around 600 BC before the first money appeared.

<sup>&</sup>lt;sup>95</sup> For now 4000 seals have been found, some 2000 of it in Mohenjodaro alone.

The Harappan civilization was a bronze age civilization, and like many civilizations of that time (such as the Minoan, the Ugarit and the Hittite) it ended around 1200 BC. This was a time of change: the onset of the Iron Age, and of migrations such as of the Sea Peoples. The invention of iron melting-and-hammering has been attributed to the Hittites of Anatolia, but recent research has found iron working in the Ganges Valley around 2000 BC, and 1200 BC in Africa. Sure is that around 1200 BC steel<sup>96</sup>, as a stronger, lighter, and cheaper material, replaced bronze for tools and weapons all over the civilized world.

Another important change at this time was the transition from iconic script to alphabetic script, an invention which made it possible to write down every spoken word without having to make new icons for every word. The oldest alphabetic script stems from Ugarit, a Canaanite city-state which around 1300 BC was one of the centers of the literate Bronze Age world. It was an important link in the sea trade between Egypt, Cyprus, Creta, and the Cyclades. The town was burned around 1190 BC by pirates. Perhaps this catastrophe accidentally baked the writing tablets in the archives of the merchant-king, the temples, and the houses of rich merchants. Many of these tablets were written in an alphabet of 30 tokens: 27 consonants and three for *a*,*i*, *and o*. They give information about the Ugarit society and show the high status of women, especially the mothers. This is characteristic for more Bronze Age civilizations, such as that from Elam and Indus.

The onset of the Iron Age (1300-600 BC)<sup>97</sup> appears to have been triggered by a catastrophic drought and starvation, the breaking adrift of the Sea Peoples (pirates from Greece and Anatolia) and the devastation of Bronze Age civilizations such as the Hittite empire, the Mycaenean, and the Ugaritic civilizations, with at the same time a temporal decline of Egyptian and Mesopotanian civilizations. It was the beginning of warfare and raiding by horse-riding pastoral peoples from the Russian steppes. The decline of the Hittite empire contributed to the rise of the Assyrian empire that would dominate the Middle East for centuries. At the same time, the onset of the Iron Age started the decline of the ancient high status of women: in society in general, and particularly in the agricultural religions. The rise of monotheism around 600 BC established the definitive victory of male dominance in religion.

To conclude this chapter, we should make some general remarks about the development of *free market* societies: for both the Phoenician and Harappa societies were typical representatives of this new category.

In a free market situation, the deep rooted power of being human: our *linguisticity* that enabled us to exchange individual ingenuity, ideas, skills and goods, comes to its full advantage. Even in the late GH-times, tribes already could experience a shortage of one good and a surplus of another good within their own territory. So tribes were eager to exchange goods, and both tribes participating in such an exchange were satisfied and tended to be friends where otherwise they might have become hostile.

<sup>&</sup>lt;sup>96</sup> Iron in its natural form is too soft for tools – though harder than bronze –unless it is combined with carbon to make steel.

<sup>&</sup>lt;sup>97</sup> The conventional end date for the Iron Age is about 600 BC, although technically, we are in fact still living in the Iron Age today.

Exchange is inherently neutral: on the market place, the saleswoman is not interested in the race or the social status or the belief of her customer. Any customer who has enough money to buy her merchandise, is a good customer. The customer provides the saleswoman with a living, and the saleswomen provides the customer with a needed product. If the sale is closed, both are happy and therefore both appreciate each other positively.

In a broader context, those societies flourish where markets are free from enforced influence by despots such as kings or military elites, because in such societies the creativity and ingenuity of each individual get the most opportunities. In antique Greece and Renaissance Italy we see those city states flourish with prosperity, science, arts and philosophy and so on, where despotism was kept within bounds.

# 2. PART TWO: NEW VIEW

In the Introduction and in passing in Part I, we promised to introduce the new view on human nature and a new creation story into our globalizing-human coexistence without imposing it upon anyone.

We're going to do that.

But first let's talk about our globalizing-human society.

## 2.1 The origin of capitalism

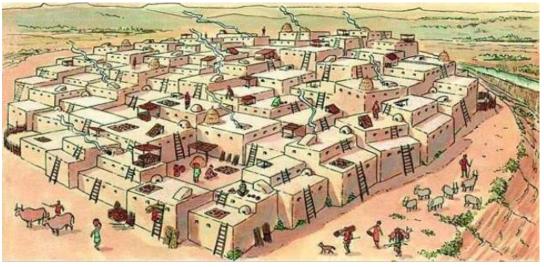
Our globalizing Western society is capitalist.

But if you google 'capitalism', you will not find a word about what **big money** does to a person. Only the *invisible hand* of Adam Smith: if every entrepreneur strives for his own interests, everything will be fine.

But a Dutch professor, Bas van Bavel, published a book<sup>98</sup> wherein he explains that with the *invisible hand* of capitalism everything not will be fine. And we don't need a book for experiencing that since the 1980<sup>th</sup>, when financial capitalists got free hands, our society tumbled from one crisis to another, with deterioration in Western prosperity.

Marx, Keynes, Friedmann and all other economists don't know anything about human nature, just like philosophers. Where may we find the roots of capitalism? In the 'wild tribes'-phase, starting with the first overpopulation situations? No, that was the phase of the cruel narration of page 60, the phase of the first horticulturers, the phase of the megalithe-festivals (*Gobekli tepe* p.65) when people tried to create more peaceful ways to deal with the overpopulation stress; the phase of the first trade, the other way of peaceful contacts between the wild tribes.

Important trade in the late stone age was obsidian, chunks of volcanic glass with which razor-sharp shards could be made. Find places of this became rich by the barter



<sup>98</sup> *The Invisible Hand* (2016)

trade therein and a good example of it is Catal Huyuk (9,400-7,700 BC), excavated since 1958. No trace of capitalism. Only evidence of the peacemaking influence of trade between fighting wild tribes. Catal Huyuk was a really town. But no traces of walls or even palisades. During her 1700 years of existence, Catal Huyuk has retained her complete GH equality between the sexes. No trace of survival battles with other groups. Agriculture and animal husbandry, both women's inventions, were main sources of existence. The only form of worship that archaeologists have been able to find is a statue of a goddess, found in a storage room of grain, not in a temple or so.

Even in the Harappan civilization of the Indus Valley (2600–1900 BC) we cannot find an archeological trace of capitalism. And do not make me believe that it was not a flourishing trade community. It was a community with archeological evidence of a priestly man and a dancing girl and seals that can be seen as kind of money, as an efficient alternative to primitive barter trade. But even in this flourishing society no trace of inequality or private property, no trace of palaces or temples, in short no trace of power. Only abundant traces of welfare.

Ownership, property, greed, stage I and II behavior are all inherent to capitalism, but not to trade or market. They are also not specific to money. Money is the ideal universal medium of exchange, trade and market easing. Nor are they specific to production or service; these are just ways to make money.

Ownership, property, greed and other stage I and II behavior are even not inherent to too much money if this serves as a provision for the old age or for incapacity for work. Yes, not even if you lend too much money to someone who is short of cash. It only becomes capital as soon as you start to make more money from your too much money.

You can do that by lending your too much money to interest.

Judaism and Christianity and Islam were always against that. They regarded it as usury. But as soon as capitalism started to play a role in their societies, all three monotheisms were able to find their way out. Where Christian bankers initially could not calculate interest, people went to Jewish bankers, because those were allowed to do so to non-Jews. The Church itself went wrong with indulgence-trading, which caused a rupture. But also with the Protestants, the practice proved to be stronger than the doctrine.



Photo: kauri shells

#### When does the coin appear?

As soon as the exchange of one product against another plays a major role, one looks for something universal that is valuable to all parties and that is not perishable. For example, shells or salt.

But if you live by the sea, it is too easy to be rich, and salt is difficult to keep dry. It seems that the Lydians (on the south coast of present-day Turkey) were the first with coins. They used as a universal exchange tool *electrum*, a natural mixture of gold and silver that they found in a small river. They melted it and poured it into drops which they rounded and provided with a stamp on both sides. Voila, the first money. The neighboring Ionian city states took it as the better alternative to shells or salt. Because the contents of gold and the cheaper silver could differ quite a bit in the Lydian coins, they were now minted in either gold or silver. Later, a cheaper copper coin was added to the file, and since then the successful merchant has been characterized by his leather pouch with coins. Which of course attracts robbers, pickpockets and burglars.

Minting is blacksmith work. Also the manufacture of safes. That work was not something for an ordinary village farrier. The goldsmith could hear to the sound how pure a coin was when he dropped it on a table. The same experience had the money changer, and not only by listening to the sound when dropped on his *banca* (tabletop) but also by weighing.

Both were well protected against robbery and burglary, and more and more merchants kept their coin supply with them instead of converting their houses into bunkers. The *banca* owners took the money in custody for a fee and the merchant received an exchange bill of parchment as proof, stating the amount of gold and silver and the name of the *banca* owner.

The merchant felt safer when he set off for the owner of a piece of land near a river where the merchant wanted to start a shipyard. The landowner trusted the bill, and indeed he could get the amount of gold and silver from the *banca* owner in exchange for the piece of land.

However, the landowner preferred to leave the large amount of money to the bank (much safer), and went with the bill to a contractor for a new house.

And he ... anyway, the bills began to fulfill the role of our banknotes: a lot safer than walking around with bags of gold and silver.

The system was based on the confidence that the banker would indeed give the right amount of gold or silver if the holder of a bill asked for it.

After the invention of printing, the bills of beautifully printed paper also became available. Banknotes: fiduciary (trusting in good faith) money. The paper value was a pittance of the value stated on gold or silver. And only rarely did anyone ask for cash.

People deposited not only their excess money, also people borrowed money from the bank. The banker demanded interest for it, far more than the fee for depositing. The banker liked to lend money. Especially big money: paper money. As always, the opportunity makes the thief. The banker lended far more paper money much more than he kept gold and silver in his safe. The people trusted that they could still exchange their banknotes for cash.

Until, even if only through a rumor, a bank run arose ...

Making more money from your too much money can also by gambling. But that almost always goes wrong. A less risky form of gambling is investing in shares, or speculating with it. Shares!

After the Middle Ages, trade in Europe flourished again. First in the Italian city-states of Venice, Florence, Genoa and Siena, with all the splendor: architecture, artists, scientists and poets. Followed by the Portuguese, with voyages of discovery on increasingly seaworthy ships, and then the Spaniards. Until the Dutch experienced their Golden Age (1600-1700) and the English after them starting their ruling the waves.

Yes, we are talking about ships. These are, just like bridges or railroads, capital goods for building that you cannot lend at a single bank. A lot of people have to make a share of this. Shares!

A Dutch invention. the Seven Provinces had fought loose from Spain and started a polder republic. On the seas, their barges were supreme, they picked up many Portuguese and Spanish colonies. In 1602, the VOC (the Dutch East India Company) was established and for the required ships, it issued shares for a large public. Anyone who, thanks to the thrift and / or exploitation of poor drudges, had gained more money than he needed for living, could now make more money from that money. But it remains gambling. If the voyage of the merchant had been successful, the investor could see his share multiplied. But ships can also perish and then ... money away.

What is the major disadvantage of this way of making money with money? Entrepreneurs are accountable for their social responsibility: the degree of exploitation of their employees, the environmental damage, their tax liability. But shareholders are only interested in the return on their share.

At the end of the 70s the stakeholder model was replaced by the shareholders model. From now on the bad dog of finance capital clung to the leg of the free market. From now on, the process of moving employment to low-wage countries began at the expense of employment here.

What? Shareholders the real owners of the company? The gamblers owners of the fruit machine or the casino? The creator of that idea, Jack Welch, regretted it at the end of his life as *the stupidest idea ever*. But the idea is still alive today.

Big money corrupts, just like power. It throws people back in stage I of their human nature. Wrong stuff. Hedgefunds and more of those gambling systems and tax-rulings, get away with it! Bring us only crises, environmental damage, accident. People have birthright on GH satisfaction.

#### ... But wait a moment.

That bad dog on free markets leg of finance capital, causing crises and breakdown of the welfare state here and causing globalization of the free market, has also caused many people in those low-wage countries to be lifted from the deepest poverty! Perhaps that bad dog is the modern-day version of the cruel warriors of the Iron Age who united and civilized the "tribes" as slaves within their empire. Perhaps our crises are the contemporary version of the horrible religious wars.

Civilization has no other option than to move along this horrible road. Today we didn't still not totally surpass the "wild tribe" phase of the overpopulation when we started to breed as AMHs. We still have a huge job to do before we have regained the ancestral harmony. We are only at the beginning of the realization that we as humans have ever lived together in this harmony.

#### So just leave the bad dog alone?

Oh no, because then mankind does not even fulfill the 2015 climate appointments of Paris, just to name a few. But ever more people take action against the bad dog. Piketti, Panama Papers, Paradise Papers, Gabriel Zuckmann's plan for making the tax avoidance of the multinationals, the *Follow This* shareholders group of Shell: the number of people and groups of people is growing.

And we, humanosophers, also want to contribute something.

Okay, we have already made a nice contribution in the above by solving the problem of the origin of human language, the problem of why we are the only species that is using fire, the problem of the birth of God and religion, the problem overpopulation and of male dominance, etc.

But for now we want to contribute two things. A new idea for the organization of democratic elections. And a new belief.

### 2.2 New idea for the organization of democratic elections

In 1906, the old statistician Professor Francis Galton fulfilled a long-cherished intention: to demonstrate statistically that the opinion of experts prevailed over that of non-expert intellectuals, and above all that of the mass of people who did not belong to these groups. When he learned that in Plymouth a farmers market would take place where an ox was awarded for the person who came closest to the weight of the animal, he persuaded the organizers to have not only the name and address but also the appeal filled in on the lottery tickets. More than 800 tickets were sold. Galton received the pile of cards afterwards for his statistical calculations. A small number was unusable, he kept 787 cards to demonstrate that the opinion of joint experts was more accurate than the opinion of the crowds. But to his surprise, the average of the 'crowd' of market visitors turned out to have come closest to the right weight. Since then, this mysterious phenomenon has gone through life as the wisdom of crowds concept and has been tried many times and in many ways (guessing the number of peas in a jam jar).

However, the concept only appears to work if the individuals of the mass are diverse in nature (the statistical diagram of Galton in his Nature publication also shows strong outliers both upwards and upwards), and are strictly unaffected by their choice (because otherwise: herd behavior).

Our proposal is to bring this mechanism into line with the democratic elections. The big difference with the referendum is that it is not about one issue, with only three choices: yes, no, or not voting. The referendum invites populist influence and causes herd behavior. It has recently led to Brexit and Trump: both with political consequences that are not in the interest of the mass of voters.

Our proposal is a **summer festival.** A festival to celebrate our democracy. To celebrate our freedom and relative prosperity. A living situation that the non-Western and unfree humanity yearns for. A living situation that is certainly worth a celebration.

A festival at the end of each school year. A five-day summer festival, when the classrooms are empty but before the families travel to distant places.

A festival with all possible festivities but during which every citizen who wishes to participate in the way he/she is governed, can express her/his opinion for the coming reign.

Previously, the festival has long been subject to talk programs and articles in the press. In addition, the *wisdom of the crowd* and the crucial importance of each uninflated individual choice were discussed extensively. The schools have been practiced in the higher classes with old voting guides, so that the children can playfully get an idea of which party they appear to adhere to. Children have a longer

future to look after. The age restriction is also released: anyone who feels able to fill out a voting form is welcome. The children discuss this at home at the kitchen table so that their parents become more and more familiar with this form of co-governance.

Expressing her/his opinion for the coming reign, the voter does that by filling out a form, sort of voting guide. The guide contains thirteen issues: the thirteen most important ones that have been discussed in parliament during the last reign. Each of the issues is initiated with objective figures and facts. Under this objective information the positions that the various parties have taken with regard to the issue. Important: the names of the parties are omitted, and the order of the list is also random. The voter makes his own personal choice, without knowing which party he supports with this choise.

It requires some thinking. No one can be forced to do that. And it takes more time (we estimate an average of twenty minutes, but still less time than filling in a tax form ). Voters must therefore give up beforehand. Where they also have to indicate whether they want to be invited for the morning shift, the afternoon shift or the evening shift.

The strictly individual choices also require that the voting forms remain secret, as well as the exam assignments of the schools.

The polling stations will then also be the empty classrooms and the voters will be in neat rows, just like the exam candidates. The forms must remain secret until the end of the week so they cannot be photographed or overwritten and there will be surveilled.

Afterwards the voting form is published and everyone can see at which party he/she appears to adhere.

Will not these be elections for highly educated people? Like the tax forms, they are also intended for the less educated. The local voting committee can make provisions for people with a disability.

With this form of voting, the voter can influence the way she/he is governed for the first time. The citizen becomes a serious party. Many populist parties will therefore oppose it. Another advantage is that no one can call out that he is not being listened to: everything has been done to make his voice heard.

## 2.3 A new belief

??

Oh no, no god belief, rest assured. A human faith. Based on a new Creation story. The story as we have outlined in Part I.

Started as normal animals, with our *names for things* we took the path of understanding things. At first we understood very little, and since we do not like to live with uncertainty, we have always filled the gap in our knowledge with God-faith. Today we already know so much that God-faith is discredited. Especially because our free market economy cannot function with that old God belief.

But we still do not know enough, so we still need a shared belief to be able to live together well. It should be the task of the academic philosophers to design that new faith, but they still do not see it as their assignment.

#### A new belief in what?

In the power of being human: the power of consulting each other. The power of understanding things better and better. In the power of democracy, the power of the *wisdom of the crowd*.

How can such a new faith be heard? Should the humanosophers proclaim it as a kind of prophets?

Well, better not. We are thinking of a big project, in which universities worldwide take part. And preferably on the initiative of UNESCO. But that is of course an utopia.

Why UNESCO? Mankind has already established a universal document, in 1948, after the end of the last world war: the Universal Declaration of Human Rights. It is based on the dignity of every person. That concept of being human could not be further elaborated in 1948, because the relevant disciplinary sciences still had to start their spectacular flourishing. But after the breakthrough of the free market economy and its prosperity, they began to market their data from the 1970s onwards. Unfortunately, the philosophers (it is philosophers' work) were becoming postmodern and sitting on their hands. So we still live with NOTHING. But hopefully not for long.

Our utopia is that now UNESCO considers the time has come to strengthen the foundation under the Universal Declaration with the establishment of the Universal Declaration of Origin and Nature of Man. To this end, she invites all universities paid by governments to participate in the project. It can be largely via the internet, in the manner of Wikipedia.

The UNESCO organizes the election of a writing group of five science writers and invites participating scientists to nominate people there. The election takes place and the writing group is formed.

Already at the first announcement of the intention of UNESCO rises a tumult from all bastions of spiritual control, such as the Vatican and the Muslim world. They feel that their power base (their control over human origin and nature) is being challenged.

But UNESCO ensures that it does not want to change anyone's faith. She only wants to fill the void under her Universal Declaration, now that it is finally possible. Nothing more.

UNESCO provides the project and the writing group with a well-thought-out statute to protect it against every governmental or political influences.

The tumult has aroused curiosity throughout the world. Articles are being devoted, panel discussions on the TV's. Everywhere in the world people are wondering and are starting to follow the development of the project. The election of the writing group gets all the columns and each subsequent step will generate interest. Everyone is human and therefore curious what this project may bring on credible stuff (all knowledge institutes in the world participate!).

The writing group gets the assignment to come up with a hull story within a year. Because one needs something to shoot arrows of comment on. We would, of course, be proud if our story was considered useful as a hull. It would not be that strange because we are the only ones who have one on offer.

The hull story is translated into all languages and immediately becomes a bestseller. Not only scientists, everyone can comment. But just like Wikipedia: it has to have quality, otherwise it does not even reach the writing group consultation.

But objections from the scientific world that the story of creation counts unproven assumptions does not require the writing group to take heavy because it is not a scientific project. It is a philosophical project. It relies on as much science as possible and it closely follows all new insights from the disciplines of discipline, but it remains a philosophical project. The western alternative for the theological projects. This project grows accordingly and is open to any deviant insight.

The writing group is given three years for processing of all relevant comments and to publish the first **provisional-definitive** edition of the new Creation Story. That too is translated into all languages and a bestseller. The project is soon paying for itself.

And again the writing group waits for the comments. She makes her own independent choices. The group does not consist of an odd number of people for nothing: knots need to be cut. Ideas that did not make it in one edition will get a second chance in the next one. Because the project will never stop. Because the disciplinary sciences continue to go on. From now on they are even accelerated, because there is now a model to which new findings can be tested.

The project will, in addition to tumult, also soon cause new hope and optimism. This way an alternative Creation Story is created without being forced upon anyone. It comes on the market and one buys it or not. But because it is science-based, more and more educational content is tuned into it. All humanities benefit from the project. It represents the only truth that is available to a person: a truth that used all the knowledge that humankind has today. A truth that can be constantly adjusted. A truth that always stays on the road, on the path of understanding better and better.

Can this utopia ever become a reality?

Why not? Only UNESCO we can better forget for the time being. Perhaps Europe can start with it. Or else an even lower echelon.

In fact, the idea is only with us, humanosophers. But if the wing beat of a butterfly in Brasil can eventually cause a tornado in Texas ...

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