

# **10. SCHWEIZER BIENNALE ZU WISSENSCHAFT, TECHNIK UND ÄSTHETIK**

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**Speech by John Ashton**

## **THE BOOK AND THE BONFIRE Climate Change and the Reawakening of a Lost Continent**

- 1. Flames lick the edges of the printed page, which smoulder briefly before combustion takes hold. Knowledge and conjecture, matters of record and of passion, testimonies of human experience gathered over thousands of years, all consumed in moments, leaving only an acrid pall: hot smoke, ashes glowing like angry fireflies, rushing upwards into the dark sky, harried into oblivion by the shouts of the encircling mob. Every face, in the flickering glow of the pyre, seems to wear the same brutish mask, a mask of rage and violence.**
- 2. The burning of books is an ugly act. It almost always heralds no good. Often it is the light from these bonfires that casts the last menacing shadows before the onset of a long night.**
- 3. Those who burn books turn their backs on their better angels, on the virtues and accomplishments of their forbears, on memory itself. They leap by their own will into a kind of madness. As the pages**

**burn it is they themselves who stride willfully into the inferno.**

- 4. When daylight eventually returns we all say “never again” and inscribe the words solemnly onto new pages, hoping that this time for once we will remember.**
- 5. We Europeans understand this well. An early casualty of the conflagration whose centenary we commemorate this year was the great medieval library of Louvain, in the Flemish Brabant, burned spitefully to the ground in August 1914, as if to say “do not expect the conduct of this war to be constrained by any respect, any nostalgia, for all those hard lessons we have learned in our continent, from Herodotus and Livy onwards, about how human beings can live and prosper side by side.”**
- 6. Yet there is one largely forgotten episode in our history when the burning of a book in public marked not a dusk but a dawn.**
- 7. The place was not an hour’s drive from here, a public square in Basel. The year was 1527, one midsummer evening. The book was the *Canon of Medicine*, the most influential medical treatise of all time, a distillation of knowledge from a thousand years earlier compiled in the eleventh century by ibn Sina - that is, Avicenna - a polymath from what is now Uzbekistan.**
- 8. The man who hurled Avicenna’s book into the flames was Philip von Hohenheim, or Paracelsus.**

- 9. Best known today as the father of modern medicine, Paracelsus was, gloriously, larger than life. Cantankerous, restless, intense, endlessly curious, a prolific soul in an ample frame and neither was ever still.**
- 10. He loved to drink and argue into the night with his students. He scandalized his academic colleagues by inviting the public to his lectures and delivering them not in Latin but in German so you didn't have to be a scholar to understand them.**
- 11. To read about him is to invite him into your kitchen. You feel not only the power of his mind, probing like a searchlight across the centuries, but the warmth of his breath as he sits at your table, tankard in hand.**
- 12. Catch the quizzical, combative eye that gazes at you sideways from his portrait, and you can hear the hubbub of the hot, crowded tavern. You can almost smell the beer and stale late medieval sweat wafting into the future from the days before modern personal deodorants.**
- 13. Paracelsus was, among many other things, a physician. He wanted to cure his patients. He took the view that every sickness had a cause. It was the physician's job, through careful diagnostic investigation, to understand the cause and devise a treatment to alleviate it. "We are not called upon", he is supposed to have said, "to extinguish the smoke but the fire itself". And to do so, "the physician must start from Nature, with an open mind".**

- 14. His acts bespeak also a conviction that medicine must never be set in aspic. The frontiers could and should be continually pushed out, with better theories and an ever-growing body of empirically-tested knowledge. Every physician has, he seems to be saying, a responsibility to contribute to progress in this shared endeavour.**
- 15. That may not sound radical today. It is what we expect from our doctors. But in Paracelsus' time, it was little short of revolutionary.**
- 16. Physicians in late medieval Europe had become a precious and self-important lot. They rarely lowered themselves so far as to come into direct contact with patients. They left that to barbers, who were a bit more rough and ready. They would remain in their ivory towers, solemnly declaiming from the sacred texts of their profession the distilled wisdom from a long departed Golden Age. If you asked them respectfully they might from time to time offer - on payment of a fee - an opinion on what Avicenna or Galen of Pergamon would have done.**
- 17. Medicine, in this system, was indeed fixed in aspic. It could never progress. The answer was not in Nature but in the Book. If the patient actually recovered that was usually no thanks to the physician.**
- 18. Paracelsus thought patients deserved better. He reviled his colleagues as quacks, "painted monkeys" as he called them. He had no quarrel with Avicenna. He wanted to liberate his calling from the clammy grip of his own peers.**

- 19. And that is why, that night in June, he hurled Avicenna's book into the flames. It was one of the great theatrical acts in the development of the European imagination. It was an affirmation; a release; a leap not into the fire but over it towards a fuller realization of our capabilities.**
- 20. I can remember as a teenager being inspired by the story of Paracelsus. It helped carry me towards the decision I was soon to take, to pursue a career in science - a project from which I confess I was soon led astray.**
- 21. Paracelsus and others like him heaved open the gate that led to the European Enlightenment, though his was a more spiritual and holistic vision than that for which the Enlightenment came to stand.**
- 22. He was a man of science. But for him science was as much a product of passion as of reason; of intuition as of analysis. The scientist must always be engaged not detached. He was a foundational figure too in what we now call chemistry. But as Carl Gustav Jung later rediscovered, he was also one of the great alchemists. Indeed he would have seen no dividing line between these two disciplines, between transformations of matter and spirit.**
- 23. It was in Basel that Paracelsus thrived, the cradle of European humanism, and he is one of its shining stars.**
- 24. I am dwelling on this remarkable man because he planted a flag in the ground, in a turbulent and dangerous age.**

- 25. By his acts he declared: there is such a thing as reality. It resides not in books and institutions, it is not a construct at the whim of our invention, but all around us, in Nature, of which we are ourselves part, each one of us a microcosm.**
- 26. He declared: reality is not mysterious. Using our powers of observation, reason and intuition we can comprehend it. In doing so we improve not only our circumstances but ourselves.**
- 27. He declared: our destiny is therefore in our own hands. If we have the courage and the will to climb, to look up as well as down, our journey can be an ascent.**
- 28. But, he warned, beware of dogma, especially in the hands of those who hang their power on it. Test it all the time against reality and pull the painted monkeys ruthlessly from their pedestal if it fails the test. Truth must always have primacy over power and if power refuses to yield, even the burning of a book is a price worth paying for liberation.**
- 29. We must never forget those on whose shoulders we stand. Nothing we need today, neither knowledge nor virtue, is new if we remember how we came to be where we now find ourselves.**
- 30. If the example of Paracelsus was helpful to one British teenager 40 years ago, it is essential for all Europeans today.**

- 31. Climate change, or rather what we must do about climate change, is not the agonizingly complicated question we often make it out to be.**
- 32. I have a friend, Jamie, who works with disadvantaged children in a wonderful, historic British city.**
- 33. Jamie is - he wouldn't mind me calling him this - a climate activist. One of the things he does is run informal seminars on climate change for children who rarely go to school in the daytime and who often have no stable family, no safe home to go to in the evening. In what are patronizingly described as developing countries, they would be called street kids.**
- 34. One of the boys Jamie has worked with is Kelvin. He is ten years old; sharp as a knife, sadly already a heavy smoker. When Kelvin came to Jamie's climate seminar he listened carefully then piped up: "Jamie, what's the problem, why is it so hard, why don't we just stop burning fossil fuels?"**
- 35. He said this in a strong Glaswegian accent to which, with apologies to Kelvin and Jamie, I could never do justice.**
- 36. Why don't we just stop burning fossil fuels? As I say, we have a tendency to overcomplicate our climate problem.**
- 37. To fix it we need to stop using coal, oil and gas to generate electricity, to heat our buildings, to get around and to make a few basic materials like cement, or at least we must dispose permanently of the resulting carbon emissions. We also need to**

**use energy, in all its forms, much less wastefully. And we need to accomplish this transformation in a single generation or, if you like, a single investment cycle for large infrastructure. It really is that simple.**

- 38. To put it another way, we need to use electricity to do more things in smarter ways, while taking carbon emissions out of electricity. It really is that simple.**
- 39. As Jakob [von Uexküll], Thomas [Stocker], Marcel [Brenninkmeijer] and other speakers have said, we now know enough about the problem to know not only what we have to do by when, but also how to do it. What policies, what processes, what investment. We have the technologies we need, at least for the next stage. We can afford it - indeed if we shape the transition wisely it will make us feel more prosperous as well as more secure. It might even make our societies fairer.**
- 40. Yes, it really is that simple.**
- 41. So why aren't we doing it - because, believe me, as has also been said here, it isn't happening, at least not at anything like the necessary speed? We haven't begun.**
- 42. After all, didn't pioneers like Paracelsus open the path to a new kind of civilization, a civilization based on the conviction that with reason and goodwill we could overcome any obstacles we found in our way, even those we had put there ourselves? Progress - material, intellectual, even spiritual; progress - with its inexorable forward march; progress - with its promise to each generation that it could bequeath a better future to**

**the next; progress in perpetuity became the assumption that organized our societies and increasingly gave meaning to our lives.**

**43. Is our climate problem defeating us because what we need in this case is transformational change, change that cannot be achieved, not fast enough, by our normal method? One small step at a time and if it doesn't work try something else.**

**44. In this case we will need a massive mobilization of collective will and effort across the whole economy. It can't be done by stealth or in small steps. Once it is under way the sense of common purpose driving it will feel more like wartime than peacetime.**

**45. Well, that's certainly a challenge but it's not the real climate problem.**

**46. Is it perhaps that, as in any transformation, there are wealthy and well organized incumbents who have such a large stake in the status quo that there is little they will not do to impede its rapid replacement?**

**47. Such forces are at work, Jakob is right about that, and they are indeed powerful. And when you think about it, the incumbents are not just the obvious ones - the usual suspects - coal, oil and gas companies, big utilities and so on. We are all incumbents, because the value of our pensions, the tax revenues that pay for our schools and hospitals, all derive in part from the way carbon flows through the economy. There is no single enemy to overcome. This requires a fundamental re-engineering of the growth model, the system of**

**production, consumption and finance that we take for granted because at its heart is a carbon dependent energy system.**

- 48. Well that's certainly a formidable challenge, I grant you. But I'm sorry, it's still not the real climate problem.**
- 49. Paracelsus would have recognized the real climate problem.**
- 50. The real climate problem is a different kind of incumbency, the incumbency of a pernicious and discredited doctrine, protected by a priesthood whose position depends on the continued willingness of everyone else to take their incantations for gospel.**
- 51. For the tutelary priests of this pernicious doctrine, reality is no criterion of truth. It is a rough guide at best and if it steps out of line from its idealization within the doctrine it becomes a nuisance that has to be shut out. In Jakob's story yesterday, Larry Summers gave the game away by arguing with Herman Daly [Summers apparently claimed that the environment was a subset of the economy, rather than vice versa as Daly had stated].**
- 52. For the tutelary priests, in that sense, because reality does have the audacity on occasion to step out of line, it is indeed mysterious. But they take that not as an invitation to investigate, to get closer to the truth. Whatever they cannot encompass and enumerate within their models, they ignore.**

- 53. And nothing horrifies them more than the idea that our destiny is in our hands. If we decide what kind of society we want to live in, we will constrain the all-consuming forces that lurk at the heart of their doctrine. These forces “can’t be bucked”, they darkly warn; that is, they can’t be denied.**
- 54. The tutelary priests, then, live and breathe by dogma. And dogma has certainly brought them power. They whisper in the ear of kings and princes. They hold merchants, financiers, industrialists, and great public institutions in the palm of their hand. From their ivory towers they are seigneurs of the academy, propagating exactly the same kind of arid self-regarding scholasticism that drove Paracelsus to throw their book on the bonfire.**
- 55. Oh yes, Paracelsus would have recognized them, and you will have guessed by now who they are.**
- 56. For over a generation, most of the major economies have been in the grip of this doctrine and in thrall to its priests.**
- 57. The doctrine travels under various names. Whenever you hear expressions like neoliberalism, Washington Consensus, rational choice, Chicago School, freshwater economics (that’s one for economics insiders but by the side of this beautiful lake it seems appropriate to mention it!) - whenever you hear those phrases you can be sure that those tutelary priests are not far away.**
- 58. But if there is a single well from which they all drink, it is what is known as the neoclassical**

**tradition in economics. That is the source of the pernicious doctrine.**

- 59. Human beings, in this perspective, become “rational agents”, defined according to their propensity to seek gratification through what they choose to consume.**
- 60. The future is discounted so it is consumption today that really matters. There is no tomorrow.**
- 61. What cannot be priced does not exist so there is no realm beyond the goods and services that fuel material choices.**
- 62. Every human being and every corporation is a free agent and the economy is simply the aggregate of their choices. So there is no community; no such thing, as a British Prime Minister once put it, as society.**
- 63. The Earth system, in all its complexity, is assumed to be effectively limitless - or if there are limits they will by some mysterious but inevitable process be overcome by the even more limitless ingenuity of human beings. In this narrative of cornucopia, there is no nature.**
- 64. Tomorrow, society, nature: these are all dimensions of who we are, or to be more precise, of who we are together, our shared public identity. If we were to recognize their importance we would need governments to be constantly on the alert, and to act whenever necessary, to ensure that the operations of the market do not destroy the prospect of a better future, the cohesion of our societies, the integrity of natural systems - all**

**conditions without which, by the way, the market itself cannot function in any useful way.**

**65. But, according to the pernicious doctrine, efficiency is everything and only the market can allocate resources efficiently. Government interference makes the economy less efficient, cuts growth and curtails liberty.**

**66. The first rule of the pernicious doctrine is that government shall get out of the way and let the market do its work, conjuring for the good of all the most efficient and productive of all possible economies. All that remains is to give thanks, like Voltaire's optimist, give thanks for our good fortune, even if we find ourselves in the midst of disaster, thanks for our good fortune to have been born into the best of all possible worlds.**

**67. And so we drift, like the Marie Celeste, blown hither and thither by the market winds, having given up of our own accord the will to seize the rudder.**

**68. And *that* is the real climate problem.**

**69. Jeremy [Jackson], in your quite brilliant talk – thank you – you said it was important to deal with the cause. Well *that's* the cause of our difficulty.**

**70. I am not denying the importance of markets. We can't have prosperity or progress without them.**

**71. But the market left to itself will not reconfigure the energy system and transform the economy within a generation.**

- 72. The mobilization of collective effort will of course need to extend way beyond the actions of government. Bottom up initiatives like Transition Towns, Shakti Grameen, the wonderful work by people like Marcel in Haiti and Willy [Smits] in Indonesia: all that is essential, but it will never be enough by itself.**
- 73. Unless governments own and drive the transformation, acting on behalf of taxpayers and voters - that is, on behalf of society - the transformation simply will not happen.**
- 74. If our guiding doctrine, culturally embedded within so many of our institutions, is that the structure of the economy is for the market not the public through its conscious agency to decide, with government acting on its behalf, then we are bound to fail.**
- 75. That is the real climate problem.**
- 76. The tutelary priests have recently had a pretty good opportunity to repent, to apologize, and seek redemption.**
- 77. Five years ago, they allowed the Marie Celeste – that is, us - to sail into some choppy water, didn't they? As a result the output of my country's economy is now close to 20%, one fifth, below what they would at that time have told us to expect. How's that for a theory whose forecasts are used to decide policy?**
- 78. Everybody knows that the business as usual, leave it all to the market approach has reached the end of the road. That, as Stewart [Wallis] has just**

**set out so clearly, if we want to prosper, we have to empower our governments to shape the market, to build resilience and nurture the sources of future prosperity. Everybody knows that that the Emperor has no clothes.**

- 79. Everybody, that is, except the Emperor. That's the thing about the Emperor with no clothes - he really doesn't get it.**
- 80. When faced with a choice between power and truth, those who have power will generally cling to it.**
- 81. The problem we have with climate change, the real climate problem, is exactly the same problem that Paracelsus faced all those years ago.**
- 82. And so is the solution.**
- 83. And now I must apologize to non-Europeans in this room. Please raise your hand if you are not from Europe so I can say I'm sorry. [5 hands raised]**
- 84. I don't mind if you stay and listen, but what I am about to say next is really for Europeans. We cannot have a serious conversation with the rest of you until we have had a heart to heart with ourselves.**
- 85. So, Fellow Europeans. We now find ourselves living in a lost continent.**
- 86. Our publics have lost confidence in our elites which, as Martin Wolf pointed out in the Financial Times last week, have failed us but are in denial about it.**

- 87. We are more divided than we have been in our lifetimes, as nations and across our continent.**
- 88. We built social settlements after our last European war to protect the weak and maintain the conditions for prosperity by sharing it. But those settlements are now crumbling under the current fiscal pressures, and because a politics of division and envy is being allowed to take hold. In some countries, shamefully, it is being actively stoked up by politicians and the media.**
- 89. We feel we are in the grip of historic forces, climate change is just one of them. Our leaders seem barely to comprehend those forces, still less to know how to respond to them.**
- 90. And while most of those leaders, perhaps understandably, have had their hands full managing the crisis day-by-day and sometimes hour-by-hour, the political rationale that built postwar Europe is dissolving. Never in my lifetime have so many Europeans had so little love for the European idea.**
- 91. There is no glue holding us together, no sense of where we are going together. We are afraid of what tomorrow will bring; no longer inspired by vision and will to do whatever is necessary to make it better than today.**
- 92. We are lost.**
- 93. What we need to do to rediscover ourselves, and what we need to do to fix the real climate problem are one and the same. That's because both problems have the same root, the hegemony of a**

**dogma that cannot acknowledge let alone solve our real problems.**

- 94. Europe certainly has no monopoly on the idea that reality exists and that through a constant effort better to comprehend it we can improve our condition, that we actually can have some control over our destiny, that the future is something we can build, not something that just happens to us.**
- 95. But over hundreds of years, from the Dark Ages to the Enlightenment, we forged our version of that idea. Just walk around old Lucerne, cross those wonderful wooden bridges, and you see the traces. It gave us our culture and came to define us as a continent. In that sense it is a European idea. It is because we have forgotten it that we have become lost.**
- 96. And it's because we have forgotten it that at the moment we seem unable to summon the will to do what it will take to deal with climate change.**
- 97. And by the way, by talking about Europe, I'm not belittling the importance of the choices to be made by America, China, Japan and everyone else. We and they all need to complete the same transformation and through our diplomacy to hasten it globally. But all transformation starts at home, "ask what *you* can do" as JFK put it. If we want to strengthen the forces of transformation elsewhere, we need to be doing ourselves what we would ask of others.**
- 98. I'm not suggesting - how could I by a tranquil Swiss lake on a Sunday afternoon in January - I'm not suggesting that we rush outside and build a**

**pyre and start throwing onto it the collected works of Robert Lucas, Milton Friedman and all the other Avicennas of market supremacism. Come to think of it there are attractions....**

**99. ....but that would actually be barbaric, and our condition in Europe is such right now that the burning of a single book could start a fire that we can't put out. I'm not being flippant when I say that; it really is.**

**100. But we do need to heed what Paracelsus was telling us.**

**101. Paracelsus was often likened to his near contemporary Martin Luther and he railed against the comparison. But I have always suspected that he was protesting a bit too much.**

**102. Both men knew they were protagonists in a political struggle; and that the first rule of power is that it is never given, it always has to be taken. They knew that it doesn't matter how certain you are about what needs to be done, nor what resources you have to do it with, none of that matters unless you can summon the will, the courage, the genius to take the all important first step.**

**103. That step has to be an act of theatre, an assertion of will, a liberation. What burns in the flames is not just the book of the painted monkeys; it is all the caution, all the irresolution, all the repression of the self that has held you back hitherto. Fire transforms.**

**104. We now need a Paracelsus moment. I don't know what it will look like or when or where it will take place.**

**105. But I do know the question for all of us who want to see it and to bring it closer.**

**106. If you want this to happen, then the question you must ask yourself is: "how can I be Paracelsus? What can I do - in Davos this week, in my institution, by public intervention, what can I do to show myself and everybody else that the power of the painted monkeys is what it is, an illusion, a sham, a confidence trick, and that the cage in which they have imprisoned us is not locked, it never was, all we ever needed to do if we wanted to leave was just walk out the door, just walk out the door, and we can do that right now. Just walk out the door, right now."**

**107. I said, in the world of the painted monkeys there is no tomorrow. But actually, nor in that world does yesterday really exist. There is only today. Now, now, now.**

**108. The pernicious doctrine takes away our will by erasing our history, wiping out the lessons we have already learned about who we are and how to be together in the world. It's actually - as it turns out - the painted monkeys themselves who have been throwing books on the fire.**

**109. Paracelsus not only had no quarrel with Avicenna. He probably quite admired him. He certainly knew that in a sense he stood on Avicenna's shoulders.**

**110. We now stand on the shoulders of Paracelsus and all those who came after him, who built a continent layer by layer that was capable of learning the lessons, sometimes hard and bloody lessons, of the past. Now at last the smoke is beginning to clear and we can start to see again all those broad shoulders, a sea of broad and sturdy shoulders, beneath our feet.**

**111. And what is more, we can now at last cast off our own generational burden, our shame, we can stand tall again, we can reach for the hands of those who come next.**

**112. And lift them up. And lift them up. And lift. *Us.*  
Up.**