

1. Tsukuba conference poster

2. Hello,

My name is Jean-Jacques Ruppert and I am here on behalf of the Luxembourg based Applied Vocational Psychology and Policy research unit.

3. The other author of this talk is Andreas Frey, the rector of the University of Applied Labour Studies of the Federal Employment Agency, in Mannheim, Germany. Andreas has asked me to present his apologies to you for not being here with us today due to another commitment he could not change.

4. I am now going to present you with our thoughts on “Counselling for The Future”.

5. The kind of counselling we are focussing on is career guidance and counselling such as is practiced in educational and vocational training institutions, and in Public Employment Services. To paraphrase Mark Twain, we believe that *“the reports of the death of work, and subsequently the death of career guidance and counselling”* as announced by some academics, *“have been greatly exaggerated”*.

The world of work has obviously never borne much resemblance to the scene depicted in this glorious painting by Ford Madox Brown. Nevertheless Andreas and I are convinced that work can not only provide a roof over your head and food on the table, but it can also give you job satisfaction and grant you personal fulfilment. Work might furthermore offer you a sense of belonging to a community and bind a disparate society closer together. And finally, work might even give meaning to a life.

6. So what about the future of work?

7. A lot has been written about work, its future or the lack thereof, / ...

8. ... / not least by Jeremy Rifkin in his seminal book ‘The End of Work’.

9. But already in 1930, the British economist John Maynard Keynes worried in his essay ‘Economic possibilities for our Grandchildren’ about what he called

a “new disease”... i.e. “technological unemployment ... due to our discovery of means of economising the use of labour outrunning the pace at which we can find new uses for labour.”

You could of course disagree with John Maynard Keynes and you may well be right to do so because industrialisation has indeed not eliminated the need for human intervention and furthermore the fact, even today, that an occupation **can** be automated does **not** mean that it **will** be. If in the developed economies, machines have largely replaced workers in most industrial plants, this does as yet not apply to those industries in the emerging economies - not least because in these countries labour is frequently still comparatively cheap.

10. The rise of the robots has recently received much prominence in the media, / ...

11. ... / and if God has any second thoughts about having created Man, / ...

12. (detail from fresco)

13. ... / it now really looks as if Man is also beginning to have some serious reservations about his own creation, the robot.

14. These fears are echoed by a number of recent publications such as ‘The Race Against The Machine’, / ...

15. ... / where you find this quote: “There was a type of employee at the beginning of the Industrial Revolution whose job and livelihood largely vanished at the beginning of the 20th century. The population of *‘this type of employee’* actually peaked long after the Industrial Revolution, in 1901, when 3.25 million were at work. (...) But the arrival of the internal combustion engine in the late 19th century rapidly displaced these workers, so that by 1924 there were fewer than two million. There was always a wage at which all

these *'workers'* could have been remained employed. But that wage was so low”

16. As you may have guessed, this employee was the horse and we can easily foresee a situation where people, despite being willing and fit to work, have no economic value as employees. And it is above all “the middle class of middle skilled and middle income” employees and workers whose jobs are most at risk. This should get the alarm bells ringing with policy-makers because the middle-class, a 20th century phenomenon, that has been hugely instrumental in bringing about important political and social advances, is not going to go down without a fight and the potential risks associated with more antagonistic, unstable and potentially dangerous politics ought to be taken very seriously indeed.

17. In their most recent publication ‘The Second Machine Age’, / ...

18. ... / the authors repeat the concern that “computers and other digital advances are doing for mental power ... what the steam engine and its descendants did for physical power.”

19. And in his book ‘Rise of The Robots’ Martin Ford neatly illustrates how the link between work and productivity has been broken by robots / ...

20. ... / leading to what Ilija Trojanow has called ‘Der Überflüssige Mensch’, ‘The Superfluous Man’. We should however point out that there **are** some critics such as Robert Gordon of NorthWestern University in the States who reject the comparison between the first industrial revolution and the 2nd Machine Age as too simplistic.

21. Economists Stewart, De and Cole of the consultancy firm Deloitte also paint a more balanced picture and think “that “machines ... seem no closer to eliminating the need for human labour than at any time in the last 150 years.”

22. One of the most powerful academic papers on this subject was written by Carl Benedikt Frey and Michael A. Osborne who estimated the probability of computerisation of 702 detailed occupations. They found that 47% of occupational jobs are at a high risk of being automated - above all so-called “white-collar” occupations, and this over the next decade or so.

23. And to illustrate how computerisation actually works, here is an example: in 1968 the job of bridge toll collector was created at the Golden Gate bridge in San Francisco; in 2013 the introduction of electronic licence-plate recognition caused 17 employees to be redeployed or retired, with another 9 losing their jobs.

24. By the way, one of the first academics in field of career guidance and counselling to raise this issue was none less than Tony Watts who in his 1983 book ‘Education, Unemployment and the Future of Work’ looked into various possible futures for work as well as their implications for education and for what was then called ‘orientation’, today’s career guidance and counselling.

25. So what about Counselling for The Future? / ...

26. ... / and what should counsellors do?

27. The American-Canadian essayist William Gibson said over 20 years ago that “The future has already arrived. It’s just not evenly distributed **yet.**” Well, we are very much afraid that the future will **not** be evenly distributed - **full stop !**

28. Hence it might be wise to heed John Maynard Keynes’ warning that “There will be no harm in making mild preparations for our destiny.” whatever it may be / ...

29. ... / because the likelihood that many people will be swept onto the labour scrapheap is unfortunately very real / ...

30. ... / and this time round, technology is going to do to cognitive and non-routine jobs what industrialisation did to manual and routine occupations in the 19th century.

31. We should nevertheless remember that hype is an inherent part of futurology - and that technology still has a long way to go before robots will replace humans.

32. We should also take comfort in the fact that not everything that **can** be automated necessarily **will** be automated, ... or accepted.

Hence counsellors should support their clients in cultivating those skills and competences where humans currently still have a comparative advantage.

33. Counsellors should encourage their clients to **choose** a sector or job that is not subject to the head-to-head race against the machines, / ...

34. ... / **focus** on so-called soft competences / ...

35. ... / and **specialise** in more emotive occupations that are **as yet** unsuited to machines such as love counsellors, yoga instructors or artists.

36 Furthermore, in making sure that their practice is truly transparent, counsellors can also contribute to their clients acquiring a realistic outlook to the future.

37. Counsellors should remind their clients that they have to be curious / ...

38. ... / and that they should **always stay** curious because curiosity is one of the most important building-stones for life-long learning.

39. There will of course still be jobs in the future, but as Tyler Cowen, an economist at George Mason University in the US stresses in his book:

'Average is Over'.

But the workforce in developed economies is likely to be divided into a small groups of highly skilled core workers whose expertise will be complementary to that of the machines, and the rest, who will be condemned to the peripheral

employment treadmill of what the LSE anthropologist David Graeber calls “bullshit jobs.”

40. As a lack of information is no longer the real issue, counsellors should ensure that counselees acquire the necessary skills to negotiate their way through ever more abundant and ever more complex information. Furthermore, they will have to tune into the decision-making strategies of their clients in order to accompany them in their decisions.

41. And what should policy-makers do?

42. Policy-makers should of course continue to invest in education but put a greater emphasis on creativity and interpersonal skills / ...

43. ... / and promote policies to boost entrepreneurship in order to invent new industries and to create new jobs for **humans**.

44. Finally, what about the future of counselling, what about the future of our own jobs? Well, according to Frey and Osborne, the occupation of ‘Educational, Guidance, School, and Vocational Counsellors’ is ranked 45th out of the 702 jobs they looked into, with a probability of computerisation of 0.0088 - so our jobs look pretty safe indeed. This does not really come as a surprise as companies will be vying for “talent”, and counselling in order to attract, to manage **and** to retain talent, will be of the utmost importance and should safeguard our jobs for the foreseeable future.

45. This brings me to the end of our presentation and I leave you with a picture showing Andreas and me arguing about what the future will hold in store for us !

46. Thank you very much for your attention.

ad 28: in [Economic possibilities for our Grandchildren](#), 1930

ad 39 (STRIKE!, August 17, 2013)

ad 40: for more information on peripheral versus core employment we would like to direct you to David Lewin's "The Dual Theory of Human Resource Management and Business Performance: Lessons for HR Executives", Chapter 33 in Mike Losey, Sue Meisinger, and Dave Ulrich's 'The Future of Human Resource Management: 64 Thought Leaders Explore the Critical HR Issues of Today and Tomorrow.' (John Wiley & Sons, 2005)