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EVALUATION OF MORALITY AS A FACTOR OF CREATIVITY IN FUTURES STUDIES

Master's Thesis

Program of Organizational Innovation and Management studies, state code 621N22003 (code. acc. To
ISCED – 6211LX051)

Vilnius, 2021



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CONFIRMATION OF THE THESIS WRITTEN INDEPENDENTLY

I confirm that the final thesis EVALUATION OF MORALITY AS A FACTOR OF CREATIVITY IN FUTURES STUDIES:

1. Was written by the author independently, it contains no materials of other authors presented as their own, without reference to the actual source.
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SUMMARY

We evaluated Morality as a factor of Creativity in Futures Studies (FS) as no one seemed to have studied morality itself as a factor in one's capacity to study the futures. The relevance of our topic is in uncovering a phenomenon alike to an unnoticed and intimate belief which ostensibly concerns most of us, and to research its consequences, which have never been examined in the past in this way. Our object is Morality and Creativity in Futures Studies and our objectives are 1) to identify morality in FS and its main features, 2) to examine morality in relation to creativity in FS, and 3) to investigate how morality affects creativity in devising futures. Our research methodology consists in a theoretical evaluation through the analysis of previous documents, followed by a quantitative survey and its summary, ended by a qualitative critical and systemic analysis of the results of the research experiment.

Our results hint to a conscious moral intolerance and self-censorship out of beliefs of repercussions, which is also shown by the lack of morally controversial futures ever proposed at work, but also unconscious aspects were observed in the discrepancies between the futurists' self-perception of the moral controversiality of their propositions and the actual moral judgment of other futurists. The self-attribution of sympathy, tolerance and freedom were in contradiction with their responses to scenarios. An archetype appeared, most agreeing with Bell's 1993 obligation (alike to humanitarian utilitarianism and ecology), and were culturally progressist, economically closer to socialism, and socially neutral (democratic) - indicators of a moral regime and warning us of potential moral obliviousness.

We defined morality and coined "moral obliviousness" to explain the phenomena which behaves as an invisible barrier on creativity. There are intrinsic moral conflicts of the futurist in his work and position and moral hindrances and benefits to creativity in FS. The fluidity of morality through time and space support our proposed method of revealing one's moral obliviousness through imaginary moral dilemmas when compared to previous methodologies examined as unfit to our purpose, as well as the general lack of research on this subject matter. We recommend an experiment revealing moral obliviousness and presentism, and propose possible psychological traits linked to creative moralities to be further studied. To reveal moral obliviousness in futurists, a methodology of listed past, present of imagined future dilemmas is to be used as a tool, along with a policy of moral tolerance and freedom against a moral lock-in. Finally, we advise creating a ranking of creative moralities to maximize innovation, opening our present and future to greater potentialities, freed from an imperceptible moral prison and puppeteer.

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INTRODUCTION

Topic: Many futurists, ethicists and ethical foresight methods have been revealing throughout the years the need and relevance for connecting those two fields of morality and FS in one way or another (Floridi & Strait 2020, 77; Owen et al., 2013, 27; Poli, 2011, 409; Boenink et al., 2010, 34; Swierstra & Rip, 2007, 19; Ketola, 2006, 27). But none seemed to have studied morality itself as a factor in one's capacity to study the futures.

The novelty of our topic is in revealing a phenomenon similar to an invisible and personal dogma which seemingly affects most, and to search for its effects, both which have never been studied before in such matters. This subject is of an important problem as these beliefs are chains to our potentials, which are deep in all of us and kills our capacity to study the futures even before we are even trying to do so, unable to be conscious of them as if they were invisible.

Amongst all the futures envisioned, all are developed with specific factors and methods, some leaning more towards one side than the other. Everyone admits that factors of future foresight differ from one to another, and that some are more or less impactful variables. Now, how does one explain how there seems to be a certain dividing line when you come to morality? There appears to be no explanation. Maybe if it is to the scrutiny of science and ethics, then it suddenly becomes an inflexible value and there is absolute truth about it, it is untouchable. **How does one's morality influence his capacity to study the futures?**

In future foresight, there are differences between all the variables used up to now. These have proportions which can be defined, measured, and used to devise a greater variety and impactful potential futures. Here about morality, there is seems to be an ongoing general tale of presumed beliefs potentially ripping down the richness of potentialities, under a veil of moral obliviousness and pressured unawareness, possibly discolouring every sphere of futures studies. A shroud made of seemingly unquestioned pure assumptions, built upon assumptions, ostensibly resting on no sure basis.

Aim of the Thesis: Evaluate Morality as a factor of Creativity in Futures Studies

Research Object: Morality and Creativity in Futures Studies

Research Problem: What are the effects of Morality on Creativity in Futures Studies

Objectives:

1. Identify morality in futures studies and its main features.
2. Examine morality in relation to creativity in futures studies.
3. Investigate how morality affects creativity in devising futures.

Methods of work:

1. Document analysis
2. Quantitative Survey & Summary
3. Qualitative Critical & Systemic analysis

We will aim at evaluating morality as a factor in FS theoretically in five points. First, we will discuss about what is morality in itself and not how to be moral as this is not our aim, but also how one might reveal to himself and in others their own morality, as well as its various expressions. Secondly, we will proceed to show how a certain moral obliviousness might be pointed out in many parts of society as well as in FS themselves, imputing their own morality, seemingly without noticing it. Thirdly, we will express the potential conflicts which might arise or did from devising futures through or to different moralities. Fourthly, we will look in depth in the likely hindrances and benefits born from different kinds of moralities, setting it as a potential factor one's creative possibilities in FS. Finally, our fifth subsection will focus on how morality tends to change through time to legitimate the exploration in divergent morals but also to free oneself from moral presentism in FS, as well as showing how one's moral freedom from society and others might enhance his capacity to broadens his thoughts about potential futures.

Then we will expose the inadequacy of most previous methods used in FS before explaining the reason why we chose to perform a typical quantitative method through censusing worldwide futurists and ask them various questions related to our subject and in order to reveal it, before doing a qualitative analysis of the results to interpret the data in line with evaluating morality as a factor in FS.

Finally, we conclude through a synthesis and summary of all three parts of the thesis before proposing the potential points to further study and improve on as well as the consequences of our claims and results. We used 13 figures and 50 references. Main keywords are Morality, Creativity, and Futures Studies.

1. THEORETICAL EVALUATION OF MORALITY AS A FACTOR OF CREATIVITY IN FUTURES STUDIES

1.1. The reality of Morality

1.1.1. Impracticality of the definitions of morality

As discussed in our introduction, we will first and foremost define the two keywords of *Morality* and *Ethics* in order to dissipate potential misapprehensions, as these terms often have differing meanings. While these might not be everyone's, they are the definitions we will be using in the whole paper and every mention of them will apply to these solely.

We will take the definitions as presented through Swiestra and Rip's 2007 research. Because when and as most tend use the terms of "*ethical*" and "*unethical*" to indicate what must be done or is *good*, and what must not be done or is *bad*, this articulation would make them lose all practicality for this thesis's objectives, notably as it diverts attention to many issues explained below, as well as the conscious discussion about what *might* be good instead. Here, these definitions possess useful expressions for the purpose of this thesis:

"[Morality] The set of values and norms that a specific community considers very important, because they refer to legitimate interests, mutual obligations and/or views of the good life. [...] Ethics is the reflection and debate on the relevance and status of (parts of) morality; ethics, that is, is reflexive morality." (5-6).

Also, we will simply add to this a clarification of what is studied here. As "*one's capacity to study the futures*" equally means to investigate, analyse, and *imagine a great amount of different possible futures which might happen*, this latter aspect which is here summarized as one's creativity in FS. Here, we seek to reveal how one's set of morals will influence *one's capacity to study the futures*, **or** *to create diverse scenarios / creativity in FS*. These two sentences are taken here as synonymous, the first being an indirect description of the second, which is a direct description of the act of studying the futures.

1.1.2. *Morality as one's invisible propagandist*

Now with this definition, where does this morality, this set of values and norms amongst each community, usually stem from?

According to Swiestra and Rip again, morality is an *unproblematic acceptance*, or in other words *moral routines* which once sprouted forth as conscious solutions towards conflicted interests or rights, or also as general answers to moral questions such as: What is a good life, as for the individual or the group? These morals then became routines, where afterwards, **the average person usually obey them without thinking about them, and even pursue these discrete values and norms unconsciously**. For example, one's conscious questioning on whether or not killing an annoying colleague is *normal*, would be a proof of one's *abnormality* within most human societies of today.

Then, how do we become aware of them? **Most of us will become cognizant of those moral routines solely when others disobey them, or either when those routines do not provide good enough answers for novel problem anymore, or at last when a *moral dilemma* develops through conflicts between those said routines** (5), from which new technology might often be a causal link as an example.

Therefore, morality is here also categorized as mentioned above - as an unproblematic acceptance - while on the other hand, ethics will be its antipode, rather marked by its intrinsic explicitness as well as its birth from controversies. In a way coined by the authors, morality is a "*cold*" *ethics*, while opposed to it ethics is a "*hot*" *morality* (6). Here it is through the discussion of those previously unproblematic and accepted moral routines that we end up performing ethics, where for example typical values alike to economic growth, safety, sustainability, and health would be "cold" while on the other side of the coin, transhumanist enhancements or embryonic stem cell research would be and are today "hot". **These cold ethics are to most at present an unquestioned consensus thus part of most people's morality, while these hot morals right now are subject to debate and very much conscious in most minds or would be when presented with such information**. As much as one day in certain societies, honour, sacrifice or tribalism were unquestioned and pursued, while the thought of safety might not have been at all, or even be questioned as in conflict with those values of sacrifice or honour for example.

Thus, to summarize, morality mostly lives in matters of unspoken principles, traditions and habits, where those integrated moral norms and values only turn explicit when in one way or another, they

are challenged by something, in an antagonistic conflict or just transgressed. Then, when these moral norms get away from their self-evident attribute, "ethical issues" arise. Here, "ethical" is the expression of any sort of articulation, including controversy, of what once used to be morally unconscious.

Along this line but on a more temporal scale, the visionary ideas of some futures by the means of technology often suggest that morality will come along with technology, which implies a **"moral futurism"**, **where most individuals' morality changes and adapts along their science, while today all ethical assessments of the novelties of science are judged through today's moral norms and values, which rather shows a "moral presentism"** (Swierstra et al., 2009, 135-136), which can therefore have an effect on how decisions are made in these situations.

Now that we have broadly defined and discussed morality in itself and its various derivatives and ways to reveal itself, we will try to use those aspects in order to reveal within modern societal and from FS as well the seemingly oblivious morality which tend to show itself throughout the acts and positions taken. This can also be put in the similar trope of *"normal science"* which is the regular work of scientists when they theorize, observe and experiment within a settled paradigm or explanatory framework, without questioning or challenging the underlying assumptions of that theory (Childers and Hentzi, 1995, 110), here applying it to morality itself.

Moral obliviousness diverts quite strongly from the more common term of *moral blindness*, whereby the latter it states one's inability to see the immoral aspect of an element. It is here a rather different perspective from which we draw ours, where we derive it from the intrinsic unconscious unproblematic acceptance attribute of morality itself. Instead, moral obliviousness is one's unaware articulation of an opinion without the ability to see it took for granted its baseline moralities - i.e., **"unwittingly advocating for morals pertaining to a generally unquestioned consensus"**.

1.2. Moral Obliviousness in Society & Futures studies

We can see impacts of moral obliviousness in many aspects of society. When Ilkka Pyysiäinen in 2004 claimed religion to be alike to a utopia and therefore an indirect method of future research (54), we can see that both managerial and corporate values have transformed to be more and more spiritual (McCormick 1994, 6), even if one claims to be aspiritual, atheist or any sort of secularity, they still are seemingly influenced by their religious past but also present of their current society. Ketola in 2006

asserts religion as inseparable from history, sociality and culture, and that religion re-entered politics and business in his 2006 research (29). One of such examples could be found in 2006 Nobel Prize Winner M. Yunus' idea which were based upon his own Hindu values (of reliability, generosity, and moderation), and since 1974 has given micro-credits to increase impoverished females' reemployment through his Bank (Grameen). But another example could be taken from Nokia's 2004 Chief Executive officer Mr. Pekka Ala-Pietilä's book where he draws from his Lutheran teachings the various values of being humble whether succeeding or failing, in order of excusing, justifying, or explaining one's actions (29). **Thus, we can indeed see how many individuals have pushed forth certain morals to base their organizations which are at heart with their baseline religion, whether conscious of it or not.**

In the fields of FS, Ketola in 2006 asserted that an alliance of leaders against "fundamentalist" religious beliefs would protect against their desire to "take the world apart" (34). Here is a clear moral stance which while it might be a conscious one, is here further revealing its obliviousness when in his ending question within his conclusions where he asks if: *"futures researchers [could] promote global virtue ethics to make these foresight strategies for a good life for everyone happen"*, **limiting his views towards those common utilitarian moralities and without having to question them, where his overall solution seemingly derives from such goal intrinsic and consensus to many societies today.**

In 1972 at John Carroll University, during the 1st national conference in the United States on teaching about the future, James Dator first initiated the concept and term of "future generations" as a criterion for FS where it is translated as mental exercise into thinking what a future generation might ask what one could have done to improve their own current situation. Edith Brown-Weiss in her *In Fairness to Future Generations* (1990, 8) also compared parents-children relations to present/future generations', supporting one must insure they will possess an environment, otherwise "violating" their rights. Here we can see but also expect moral presentism imputed to future generation, as if they would have the same morals as of today. This could be compared and reveal its importance in how most of the ancestors of today's societies had wildly different morals yet often a care for future generations, while those same ancestors are generally morally rejected by modern moral standards for the most part in the Western world, and therefore why wouldn't it be the case for today and its future? **Here again is a potential example in how moral obliviousness deriving from moral presentism could affect FS in their incapacities to see their own morality as a potential factor of their prescription.**

In the 1976 Dubrovnik Conference, Boulding was making a case for a "global civic culture" (1988, 1), while along a similar line Kidder tried to reveal "universal human values" (1994, 1), and finally Collier & Wanderley in 2005 associate "good" businesses, whether being local or global, with their commitment with human rights (1), all these examples were probably well-intentioned but always seemingly blinded by that same inability.

Bell, in 1993, tried to codify a professional code of ethics, striving to imitate those of specially trained roles such as doctors or lawyers. But here he derived one obligation, which he told to be from the most general purpose of the futures field: "*to maintain and improve the wellbeing of humankind – alive and not yet born- as well as life sustaining capacities of the earth*" (6). **Here is a strong moral stance towards utilitarianism and perceived ecology which was falling along the line of moral obliviousness.**

The world Futures Studies Federation (WFSF) claims itself to be limited with financial capability (Slaughter, 1999, 849), while being more inclusive, progressive, and cultural. Slaughter justifies their need for hard funding as in his eyes its role is a fundamental service to humanity, as they argue moving beyond the older Western models and its limited interests, areas and agendas (Slaughter, 1999, 850). Without a direct criticism but as a question in relation with our aims, **did Slaughter and possibly the WFSF question themselves whether those values are indeed a service to humanity, or did they just derive it out what they consider to be implicit morals and consensus?**

Douglas in 2003 argues also from a universalistic perspective seemingly unquestioned when she points out that the pursuit of truth does not trump all other values as we do not allow testing biochemicals on children without any "*moral limits*" (from which morals?) on methodologies while it would be best to understand their full consequences on humans (why then specifying on children before?). While of course there might be also other reasons we do not do so, from this moral perspective she claims that truth is not so worthy to us (but who is us?), as well as costs we (and who is we?) are not ready to pay for knowledge (64). She goes further as to say that because everyone is "human" (who's definition of human?) they all share responsibility as a moral agent, and thus scientists should not be excused from it as well. Finally, she thus asserts that the search for truth must be weighed against other "goods", all of them being linked to a moral presentism, such as quality of life, environmental health or basic human rights (66). But **here possibly lies again an underlying seemingly oblivious morality in which this judgement comes from an unquestioned morality that can be or was contested or just not present in other societies, past or present, where the human itself might had different definition than that of today's.**

The Anticipatory Action Learning (AAL) method, which is a tool to discuss about the future, claims to be aimed at converting ideas into acts through a participatory, democratic, and non-hostile process aimed at changing towards a preferred future (Ketola, 2006, 33). Here again **we can see an underpinning morality towards equality of opinion and peacefulness, which was not put into question as part of the moral presentism taken for granted within its core purpose.**

In many cases we could find an unquestioned aim at developing processes which are to be ultimately democratic, such as to reflect on what types of future(s) they want science to bring to the world. While often asking the right question (for our aims), "what values these are anchored in", yet answering with one seemingly morally oblivious; "*whether the negotiations of technologically enabled futures are democratic*" (Owen et al., 2013, 34). Or "how the intentions and motivations of [science's innovations] can be democratically defined?" **They ask questions opening the door for many thinkable futures before already closing most of them intrinsically through their appearing moral obliviousness.**

It might be imputed that all these examples were not morally oblivious, and even rather at the forefront of questioning their own moral consensus of their time. While such interpretations are indeed always complicated to prove, one could do a mental experiment, and think of what kinds of moralities, at that time, would have truly been at the polar opposite of such viewpoints in FS, before imagining what would have been the consensus reaction to the moralities deriving from such proposed ideas. For example, as one can expect most people of today not pertaining to such values, to which extent did the moral ideologies deriving from those who lost World War 2 were expressed and developed in those FS of these eras, and if they have been, did they flow fluidly without any concerns and dissensus? Or would had it been seriously questioned throughout various manners, notably their intrinsic moralities? While this might be an extreme point to most today, and that other examples could had been taken, even some not related to any of this but totally novel, this should not be argued against through a discrediting dichotomy, and here solely serves the purpose of exposing the potential moral obliviousness of many. This example is not to be taken as a counter argument to our moral obliviousness by creating a false dichotomy between these ones and the present ones but only **serves as a case which reveals morals obliviousness by creating moral dilemmas in order to shake it out of its inherent unproblematic acceptance.**

As an introduction to the next subsection, we will now see how as the example given above, such dissensus might create many evident conflicts of interests within oneself but also one's employer or society.

1.3. Fears & Tensions from Morality and Exploitative Morality

Many conflicts can arise in FS, notably because of the perspective of morality, as simply put by Inayatullah in 2015 after mentioning a workshop were "the exploration of alternative futures and the clarification of the vision led to division" (Inayatullah, 2015, 289), as well as that "fearing alternative futures, CEOs often request not to explore true alternatives but to impose a particular future" (290). As one aspect of future foresight is to give sets of possible futures for their employer, **this situation creates a common dilemma in which to survive, one must follow up to a point their breadwinners, and thus more than often delivering results along their employer's ambitions** (Ketola, 2006, 28) – and therefore similarly to his morality. As asserted in the same author, associating the 1516 Thomas More's Utopia as the foundations of FS, "*if you seek to create a new world you must destroy the old*", therefore the futurist's employer might be more than often in a rhetoric opposed to the futurist's intrinsic destructively creative endeavours. **Through this inherent need of divergence from the hegemonies and dogmas, the futurists often decide to exclude those futures which align with the status quo** – "preferable future" or "eutopia" (Stevenson 2006, 668) – **and rather redirect themselves towards those possible, potential, or probable only.**

In another aspect, with the politicisation of scientific fields since the 2007-08 global financial crises where states now depend more and more on science and innovation for their economic growth (Davis et al., 2013, 963; de Saille, 2015, 152; and Medvecky, 2016, 1), these dilemmas might arise even more and have much greater impacts on the futurists' potentials. Demands are set to focus on societal needs, but also on policymakers to guarantee a public support for science, and **therefore potentially placing a greater emphasis on the relevance of the status quo in science, as well as its moral judgment and input.**

Lastly, **the morality of one might be in conflict with the one of the many** - science may appear to produce desirable overall consequences but at the same can be in conflict with the moral convictions about duties and rights protecting interests of individuals or minorities threatened by the majority's interests through consequentialism. As with the example of human testing for example, where "cruel" experiments could benefit public health (Swierstra and Rip, 2007, 14). **To these various situations, a certain**

moral Machiavellism did and might occur, where one uses or adapts to consensus morals in order to survive or attain one's goals.

Many world leaders accept religions and morals as potential tool, using them for their own benefits in a Machiavellian manner. George Bush, coincidentally where resources could be captured (oil wells), divided the world in axes of "*good*" and "*evil*" (North-Korea, Iran and former Afghanistan), most of which have some likeness in their monotheistic religions while those others with great trade opportunities for American businesses such as polytheistic India or atheistic China were not put in such moral categories, which could show such use of religion as a tool for political and economic reasons, as much as previous president Lincoln, Ottomans sultans, Viking kings or Roman emperors did (Ketola, 2006, 30). Here some futurists could or do behave in a similar manner whereas a consultant has the option of adopting the professional values and morals of his clients while still harmonized within his professional code of ethics (Slaughter, 1999, 846). Of course, **relying on such solutions might have its own shares of consequences on one's creativity to study futures** which we will go deeper in the next subsection throughout various examples and situations leading to potential hindrances or benefits of creativity in consequence of one's moral obliviousness.

1.4. Morality's Two Sides

1.4.1. Morality as a hindrance to future foresight

As briefly talked above, a code of ethics for FS has been tried to be developed since the 1976 Dubrovnik 5th World Conference on Futures Studies. The relevant aspect of it for our thesis lies in the proposition to **have an obligation to express your underlying presuppositions on which your work is based upon, what future realities you want to promote, and what are your base values**. Here at first, if one has intrinsic morals beyond the consensus or his employer's or peers, he could either transgress the code in order study the futures with a wider array of moralities or **submit to it but provide a narrowed-down and possibly less developed futures as those might otherwise be alienated from his foreign perspectives**. Another obligation as well is **to develop and test with other theories as well as**

in divergent perspectives than your one (Masini et al., 1976, 22) Here, **the sole hindrance would be dependent on one's fear of repercussions from within his own field through the proposition of potential futures with diverging variables.**

On these two broad obligations were added another from Bell in 1993, as he stated that "truth" is paramount and pursuing to produce and uphold a society in which open and free enquiry is necessary for the proper conduct of future research, **which therefore might create even more conflicts of interest within the futurist between fear and his perception of truth.** But he also mentioned another obligation, that it should be open to public, respect, and fairness towards everyone, and recognizing human dignity (7). Here, while **this point might at first also contradict the concept that truth is paramount as some might develop moralities in which one's truth do not rely on those aforementioned values, is also incompatible with all the various 1976 obligations as one cannot entirely delve in other's theories if there aren't recognizing those above (mostly) humanitarian values.**

There are many potential hindrances to creativity stemming from one's morality. The dilemma of the possible and the desirable can illustrate an aspect of it, where such controversy exists between "*knowledge*" and desires and fear, as those last two about the future often do not relate to our knowledge or might even refute it – our fear might overstate the danger of a situation or on the opposite lessen them because of our hopes (Masini, 2000, 25-26). Therefore, **our own moral fears and hopes might blind us in studying the futures we are afraid of or vice-versa.**

One's utopias tend to only be legitimate in one's own eyes, but this can be lost in dialogue. The intrinsic contradiction of utopias is in their incapacity to either auto-criticism or just others' (Nandy 2004, 3). **They are therefore condemned by essence to their single viewpoint which cannot be doubted without losing its property of being a utopia.**

Then, one could also find a dilemma of control, as David Collingridge first shared the risks of "technological lock-in" in 1980, where the innovation itself may be so locked into society it might have no interest or even power to do anything about it (11). Here if one extends this to the individual futurist as well, **his own moral lock-in might prevent his interest and power to innovate divergent futures.**

Another aspect would be in teaching futures itself. Here, if one thinks there is no future, or simply one which autonomously turns for the better or worse without our action, has been argued that one would not have any reasons to learn about it, understand and solve its problems or try to change anything as it will do so by itself anyway (Glenn, 1997, 731). Or in other words, one's self-perception of personal

power, how one believes he can make a difference. Here Glenn claims that **the teaching of futures as well as methods to think about them might impact the student's belief about them, or the futurist throughout his selected (self-)education and philosophy.**

One example shown is that if only future dangers are taught, then he asserts there would be no reasons to improve the future's conditions and study those future opportunities, impacting their unconscious minds' aptitude to learn and shape the future generations – here citing the example of nuclear war prospects of the 1970s-1990s depreciating the worth of long-term thinking because of the unavoidable catastrophe. Here we could see that to an almost opposite of utopias, **having dystopic or apocalyptic moral views linked to fatality and apathy might become hindrances to creativity in thinking about futures.** Additionally, **having a belief that would morally condemn the search about the future as being sacrilegious or legally similar, will most likely also entails a decrease in one's capacity to explore futures.**

There is also the impact of responsibility on the creativity in studying futures. There are two types of responsibility in today's society, the role responsibility arising from taking a stance in society, and the others to greater interest here, are those that according to some each human moral agent holds – general responsibilities. That aside from being scientists, they are also human moral agents and therefore are to follow the same rule throughout their work, and if so, accepting the load of "general responsibilities" by themselves, or to lose their scientific autonomy by allowing others to take it for them (Douglas, 2003, 60). If such ethical oversight were to be implemented, **the more scientists would surrender their general responsibilities to it, the more they would then do so as well with their autonomy, but this would destroy any residual independence in science** according to the author (65). Ultimately, this argued viewpoint of human moral agency of course derive from a specific morality system which might restrains both the individual's autonomy but as well the overall breath of one's capacity to devise futures. To add to this, **those scientists who will consider broader social implications or other impacts of their work and be affected by such conclusions might create fears in them and therefore blocking or restring themselves or through an authority to various tolerable or allowed perspectives.** This implementation of this point in their work was still a contested debate as of 2003 (62).

Another angle is that of the politicisation science which we talked also about beforehand, where established practices and institutions are persistently and effectively challenged (Brown, 2015, 7). This is a double-edged sword in our case, as **on the one hand it does question a certain status quo by making it a site of ethical struggle, but on the other hand, it just also tends to aim at forming**

another status quo, mostly through the public's or other various field's opinion, **replacing and ultimately chaining scientists once more to another consensus**, especially when politicisation occurs in the scientific world itself. Here, Responsible Research Innovation (RRI) is a tool which can politicise scientific research through the pluralisation of expertise and thus claiming to a broader variety of voices and beliefs, through which the consequences we just mentioned might occur.

After seeing all those potential hindrances in studying the futures stemming from one's morality, we will continue to the antipode and see what kinds of morality might on the other benefit one's creativity in such endeavours.

1.4.2. Morality as a benefit to future foresight

There are many arguments that the pluralisation of views does increase the capacity for devising novel futures, or at least advocate for the freedom of inquiry in such manner, and some have devised advices for future studies to follow in order to promote such values.

Sardar put forth four laws of FS where he poses that because each human might have their own way of being human, there should be different future paths ultimately leading to the full realization of all various humanities, whether cultural, psychological, biological or moral. Another law shows that our worldwide cultural diversity did bring forth various systems of knowledge, ways of life, histories, or success criteria, and therefore that it should remain open to each potentials of this variety. A third law to our interest is how it should be aimed specifically at opening pluralistic potentials rather than being occupied by a monoculture (2013, 43), from which one might explore its deepest corners, but yet also potentially miss all others. To explain further Masini claims in 1994 that the intricacy of alternatives is tightly connected with the various values sprouting from all different cultures (and therefore moralities), and that **to accept such stance is to open oneself to the future potentialities which in turns might enhance one's potential to innovate by exploring all those several moralities** (15).

Lastly, in 2011 Poli reminded us that one of the two assumptions ensuring a greater variety of future foresight is that "the future can be better confronted by opening our minds and learning to consider different viewpoints... One must be ready to consider and address possibly unfamiliar or alien scenarios, **the main outcome of this exercise is an increased capacity to distinguish among possible, probable and preferred future scenarios**" (402-3).

Similarly, even since Machiavelli, many theorists have shown that struggle amongst an intricate multiplicity of perspectives can ultimately be fruitful. Variety, heterogeneity, incommensurability and antipodals – all of them can of course shake the structure of all, but also in another way sustain it in its life and strength, especially in the scientific world when seeking novel solutions, when the consensus' answers are not anymore sufficient to respond to their problems. By investigating each other's realms in a contest for dominance, while remaining in the sphere of dialogue with others without labelling them beforehand as "unreasonable" simply by being on our "*wrong*" side of morality. **This overall reflexive understanding intrinsically eliminates the gullibility of general dogmatic and universalistic principles**, while also acknowledging its own imperfections, and leaving the door open for a rational "*dissensus*" (Swierstra & Rip, 2007, 19) and its potential benefits for studying the futures.

From another side than pluralistic perspectivism, techno-ethical scenarios from NEST-ethics methods do increase the various perspectives for judging them, therefore leading to debate and potential controversy, while not intrinsically written to express whichever would be desirable or legitimate and avoiding an inherent moral direction. **This novel multiplicity has a function of opening consideration for them, thus permitting us to decide whether to remain with our present morality or not in the views of those potential futures** (Boenik et al., 2010, 37). In the conclusion of their 2007 paper and with the lenses of pragmatist ethics, Swierstra and Rip they synthesized that **struggle and learning (*dissensus*) might after all be more productive than models emphasizing consensus** (17).

Then we have few other points coming from various resources from which the derived moral might positively serve one's own innovative power in FS.

There is a potential benefit coming from one side of bringing in the concept of "future generations" from the 1972 John Carroll University 1st national US conference on teaching about the future we talked about before (Glenn, 1997, 732). **It might open one more option for innovation in FS, by exploring what would those believe and desire, but for it to follow the aim of this thesis must always be done away from the usual moral presentism that occurs when trying to "care" for future generations solely through the morals of today**, which might ultimately not be theirs anyway.

Also another point can be made, coming back to how one's worldview about the world's autonomy can influence him, we can see that usually, **those with a great confidence in their personal power to influence the world, as well as morals enhancing such perspective, whether having an optimistic or pessimistic worldview's direction, will have a natural drive to seek out various futures in other**

to express their surplus of will power in one way or another, such as to avoid their pessimistic conclusions, or bring forth their optimistic one (733).

Then, up to the beginning of our analysis, we can extract according to how morality reveals itself from its unquestioned routine status, **one might try to**, through whatever means (actual experiences, mind experiments, etc...), **to challenge his own morality, to reveal it and maybe go beyond his own good and evil in order to allow a greater creativity.**

This could be further explained lastly through a concept deriving mostly from fiction writing but that can be seen in many real life examples, is that of Blue-Orange morality. This might as well help to reveal one's morality, but furthermore explore others. This usually involves characters which have moralities wholly alien to the general human understanding that we would usually not deem them as whether "*good*" or "*evil*". These can be reasonable, and they live on completely varied sets of principles and grounds to get their conclusions (2010).

Here the term itself of Blue to Orange, while other also coin it as Bacon-to-Necktie, relates to an axis where one goes from blue to orange while for most of us these are not opposites at all, whereas one would usually think about black-and-white or blue-to-red/yellow axes for this example. This concept is similar to Nietzsche's Übermensch of the man who creates his own values (1886, 5), his own Blue-Orange set of morals to live by or to an extent to the many divergent moral systems of many animals if one would impute such to them. As one example out of many in nature, dolphins here will help sick or wounded beings, even those not of their species such as humans from sharks, yet the males are casual rapists where they would sometime beat infant dolphins to death to force the mother to mate, as well as some dolphins acting alike to sadists and seemingly slaughter other animals for entertainment. Such behaviour is overall most likely unknowable to humans even if evolutionary theories can translate to our minds some logical utilitarian reasons for them (Blue-and-Orange Morality 2010).

Having the shoulders to bear such sympathetic and tolerant experiments (here defined as understanding another's values without necessarily sharing or feeling them) **as much as the drive to do so will most likely enhance one's capacity to design a plethora of novel futures**, while on the other hand, **one who cannot or would not, might always run the risk of never being able to draw resources from its surroundings or imaginary environs**, whether being neutral towards them or pure in total disagreement with them.

Now that we looked through the potential hindrances and benefits of various moralities in one's capacity in exploring the futures, we will finish our theoretical analysis with our fifth subsection pertaining to the change of morality through time.

1.5. The Need of Moral Freedom

1.5.1. *Morality's instability*

Now we will see how morality changes through time but also how it might be hard or a question of luck to be "*on the right side of history*" in science, as well as its potential impacts according to our research's question.

For example we will take the seemingly robust moral regime of today and its values which judges medical-scientific experiments where subjects of experiments should be able to give their free and educated permission before participating. Could it be conceivable that one day, this practice might change? **Existing moral principles can be interpreted in fundamentally divergent manners, weighted differently or changing in value of importance** (Boening et al., 2010, 1) and thus being "*morally right*" at one point might become wrong another, or vice-versa.

From another perspective which feeds in such direction, we can also see in research that the history of technology and morality are intertwined, and that both interact together (2). **Science on one hand might induce moral transformation, or morals might guide towards certain development of science and technologies.** One question is to know as well to which extent is the role of scientific development in inducing those moral changes, as well **another question pertaining to how will these moral changes impact the overall creativities in FS according to those elements we reviewed above**, but here one might develop these questions further to see the potential impacts leading to future's futurists moralities and its derived creativity in pursuing his studies.

Not only science and technology might induce changes, but **it has also been stated that responsibility itself is fluid.** In 2007 by Von Schomberg claims that "*irresponsible science*" rarely comes from an individual, but rather the result of a globalised design by many throughout space and time, termed as and compared to a "*knowledge spaghetti*" (5). Consequently, **responsibility itself is seen a flexible social**

ascription, which changed and evolved over time and ages, this reflecting overall this unstable essence of the norms of society (Owen et al., 2013, 30). This latter aspect is also **an important point to make in order to tolerate the moral experiments we promote in our thesis in order to overall increase our capacity for creativity in FS.**

On example of such change in the concept of responsibility, is that aside from the scientists' typical responsibilities against fraud, falsification of data or plagiarism, a forced re-evaluation from the last half of the century occurred (31), changing this "*contract*" from the consequence of what were potential unplanned and unexpected impacts (Beck, 2000. 212), which according to others must be expected to happen (Hoffman-Riem and Wynne, 2002, 123), whether at temporal or spatial scales such as intergenerational or global ones.

On another perspective of the subject, we can often find retrospective policies applied in order to safeguard society from the comeback of perceived mistakes, to handle and regulate unwanted impacts. But some of them might have an intrinsic flaw. **With extremely uncertain, or poorly considered impacts, scientist might end up taking a chance, hoping to be ultimately omitted from any moral blame by what is called "*moral luck*"** (Williams, 1981, 20), **through the demonstration that there was a lack in the knowledge of the future potential consequences and therefore being unable to judiciously predict them** (Owen et al., 2013, 28). One principle is that it is never known what the extent of the unknown is, a novel toothpaste element might be first thought to be without any side effects, while it might end up producing a new allergy, because allergy test can only detect already known allergies (Swierstra & Rip, 2007, 6). Thus, often **one might simply be "on the right side of history" out of pure luck**, at least according to his own knowledge, but this also show that **whatever is one's current morality, is current scientific work might be praised or blamed throughout the future and that one refraining from acting because of such potential moral blame might reduce his intrinsic aptitude for designing novel futures.** Therefore, moral routines cannot be relied unquestioningly as novel science will also turn them into ethical discussion, such as with contraceptive pills from which general behaviours and morality adapted to it (6), ultimately shifting the Overton's window of opinions (the average breadth of the status quo's accepted range of views).

There must also be an emphasis on the change and development of moralities, as present moral principles tend to be interpreted in radically distinct manners, considered differently, or also simply become more or less valuable. This must be done **to avoid moral presentism, but as well to help futurists discern which novel moralities or interpretations of those already fully expressed might**

appear throughout the scientific development of their time or the future (Boening et al., 2010, 9), and to which extent these might impact their own or others' abilities to innovate.

Here, by showing how moralities might change over time, we create a reflexive distance from both today's but also various potential future moralities. The conclusion to draw here is that **the current moral norms cannot be supposed to be valid criteria to judge the desirability of future developments, whichever they might be.** Also, as we will see in various methodologies below, moralities are usually gradual and slow rather than radical and sudden, whereby the moral presentism or futurism which often end up in various devised futures might therefore be avoided. Finally, because if there are no moral norm exempted from a potential transformation, it might as well not be possible to rationally decide which one of any would be "best" (33-34) in FS.

1.5.2. The oblivious moral dogma of future studies

Roberto Poli in 2011 sees no reasons such values often cited in FS, that the most general purpose of the futures field is "to maintain and improve the wellbeing of humankind – alive and not yet born- as well as life sustaining capacities of the earth" (Bell, 1997, 158), **are specifically connected with the work of the futurist,** advocating they should not be restricted to them alone, ultimately concluding from his analysis of values of three kinds that none were being specifically connected or pertaining exclusively to them, as well as being applied to everyone else anyway (Poli, 2011, 409). **Focusing one's purposes on this sole aspect would be submitting oneself to moral presentism as well as locking other's potential futures, including those not yet born, imputing them one's current narrowed morality.**

Overall, **regarding the issue of the general scientist's moral responsibility in his own work, the typical response has been the same since the Freedom of Science movement of the early 1940s** (Douglas, 2003, 59). **Here and then, scientists enjoyed "a morally unencumbered freedom from permanent pressure to moral self-reflection"** (Lübbe, 1986, 82), this which has been questioned many times and that we will see at the end of this section through a recent example.

Also, in some cases, some role responsibilities have a potential reduction of their general responsibilities such as with defence lawyer which are not obligated to report previous illegal acts that they learned about their client. Those are covered in the confidentiality between lawyer and client, while everyone else

would have to otherwise (Douglas, 2003, 60), showing some alternative to these responsibilities. Here we would therefore ensure a morally free scientific work, thus **enabling the possibility as well to explore different futures through different moral lenses without any fears of repercussions, at least according to the scientific community of that time.**

This Freedom of Science movement can be best summarized with Bridgman's argument in 1947, a Harvard physicist and Nobel Prize:

"The challenge to the understanding of nature is a challenge to the utmost capacity in us. In accepting the challenge, man can dare to accept no handicaps. That is the reason that scientific freedom is essential, and that the artificial limitations of tools or subject matter are unthinkable" (153).

Here, the knowledge scientists generate is far too precious to assign moral or societal responsibilities to them. **They should both have independence and being principal decision-makers as well as exempt from pondering hypothetical outcomes of their work even when they penetrate beyond their sphere of science.** Here his argument is more about seeking "truth" whatever this is, but we have no direct interest in this in our aims, as **we rather use it to seek "potential future truths", and that those responsibilities will often act as barriers to us, most of which we are not even aware of and thus even kill our chances to see alternatives even before we might consider them, being morally oblivious to them.**

One factor which might help ensure free and open inquiry in the matter of morality, would be the meta-values – values about other values. These ultimately support **to create as well as sustain a society capable of backing such values for research activities** (Poli, 2011, 409), **as well as keeping one's self in check with one's and other values.** Science and innovation have not only generated awareness, experience, and significance but also questions, dilemmas and unintended and unwelcomed effects (Owen et al., 2013, 27). The answers to disasters have been one of ruling products of science, typically after these have become apparent (28).

But as throughout Douglas' paper advocating for an alternative, where scientist should not work in isolation from society but rather accept general human responsibilities (2003, 67), as well as the many examples before this paper and throughout the subsequent years since today, **there has been many situations where** - excluding scientific controversies disavowing scientific role responsibilities against fraud and dishonesty - **many have been ostracized for their work directly or at the moral**

implications they might suggest, whether by the general society or sometimes the scientific community itself.

Here we will just mention the latest one in date being the He Jiankui affair who made the first genome-edited babies in 2018 (Greely, 2019, 1) from which him and two of his collaborators were indicted through both legal but also ethical controversies (Cyranoski, 2019). We will not support or infirm his actions through our own moral values, but rather **point out how his own moral framework or imagination of such permitted him to open and explore** (here physically rather than the typically hypothetical fictive futurists' work) **a future that most in the scientific community but also in others refrained from doing or ever thinking about**, as one can see through the widespread scientific and media disagreement with his actions (Kolata & Beluck, 2018). **Who knows how moralities will change in the future and how he will be judged in 50 or 100 years?** While to an extent we could know how he would had been judged if he was able to perform the same research but a 100 years ago, with potentially very different results as similar activities pertaining from eugenics was seen as a progressive view to adopt in the 1920s (Thomas, 2019) while it had also its own part of oppositions and controversies but rather small in comparison.

Here in FS, we are not performing physically those scientific work for the most part, but simply exploring and devising future potentialities, from which our own moralities might help or hinder us to do so.

While all these five different subsections might entail a praise towards a form of moral relativism, we will develop in the conclusion a rather different approach to this whole enterprise of morality as a factor in FS around the concept of moral perspectivism instead. But beforehand, we will review the various previous methodologies of FS and surroundings fields to potentially evaluate such factor and its impact, their absence of taking it into consideration, slight understanding or potential usefulness.

2. METHODOLOGICAL EVALUATION OF MORALITY AS A FACTOR OF CREATIVITY IN FUTURES STUDIES

2.1. The Unknown Variable of Future Foresight

2.1.1. *Lack of research & Antagonism towards morality in future foresight*

There have been many ways, traditions and methods which only skimmed the main issue raised by this thesis and that we will share in order to raise the potential issue this might involve. First, Sardar distinguishes five main traditions of FS, three which most likely goes against the overall values expressed here, one seemingly not involved with our issue while another which has aspects of it indirectly and probably out of moral obliviousness as well an antipodal goal. The first three, **the critical, the empowerment-oriented and the integral/transdisciplinary traditions, all seemingly having hegemonic tendencies which goes against our purposes, and the latter also, while upholding claims to inclusion of diversity, apparently doing it towards certain specifical moralities and ultimately out of moral obliviousness** as they would most likely not include the diverse morals from which some of them uphold values in opposition to theirs, a "*selective*" diversity. **The empirical tradition** which is mostly dominant in the US and focuses on trend analysis, prediction and forecasts, which **might have interest in our thesis, but without having directly searched any of our specific concepts to our knowledge**. Then lastly, **the cultural tradition** which mostly stemmed from the WFSF we discussed before and already disassociated slightly, which does have a pluralizing approaches to futures as we mentioned earlier, as well as claiming to be open to all dissenting possibilities. But yet they **are also fonder of civilizational and planetary futures, from which we would most likely distinguish ourselves as having no connections with such**. Then lastly there are also **various future movements which are in most cases probably antagonistic or on the other only specifically interested in certain of the moralities explored as they tend to focus on empowering their selected communities** (Sardar, 2010, 49-50), which might or might not fight the way we want to study morality.

Then when we review all three types of FS prospective studies and research, prevision, and foresight, where we also see this lack of concern with our own, except for last one offering a potentiality. **Prospective studies and research** encompass all FS and tend to be extrapolation of tendencies to utopia, while we might be interested to do so after we evaluated the impact of morality as a factor of creativity in FS to progress further afterward, it **does not truly access our demand**. **Prevision** is mostly linked to the principle of questioning "What if?" and ends up with probabilistic affirmations, relatively scientific enough to be considered a controversial aspect of all FS. Aside from question "What if morality was a factor of creativity in FS" which is rather a question to the methodologies of future studies themselves than one towards the study of a future in particular, **this type is again an a posteriori tool to our issue**. Then lastly **foresight**, from which one seeks the fruit of the past's influence and the present's choices, wills, and acts (Masini, 2000, 20). We already talked about its latter aspect on the choices, wills and acts made from seeming moral obliviousness or moral presentism, but we did not study their products, we rather analysed one of their roots and therefore **does not seem to comply to our needs either**.

2.1.2. Methodological lack of focus & Potential candidates for evaluating morality's effect.

Then we might redirect ourselves towards the manner FS deals with ethical problems which is done in three different ways, but from which only the first to are to our interest in our subject. The first one deals with the intensity of the foresight as well as the justifications and objectives which inspired its achievement, and here we will mostly paraphrase what Inayatullah worked on. Causal Layered Analysis (CLA) states the present is characterized by phenomena working at different levels of depth, duration, and visibility. The most superficial phenomena are the most visible and short lived, and the opposite is true for deeper phenomena. distinguishes four levels of phenomena, litanies (fashionable behaviours, styles), social causes, world visions and myths. Litanies are the most variable social phenomena, superficial, short-lived, and visible, while myths behave as constantly active forces raising greatest resistance to modification, deep, almost permanent and tending to invisibility. Social causes are structural phenomena, while world visions, Weltanschauungen are close to ideologies (2004, 8). **Here we might be able to use these layered analyses but rather by applying to one's morality directly rather than their primary purpose ascribed to ethical conflicts.**

The second way is similar to what we have done here beforehand. It tries to aggregate FS and ethics

through the idea that morals are a baseline resource to futures, that futures come out of ethics itself, but also that no action can be possible without a sense of the future, interlacing both concepts (Poli, 2011, 404). **Here on our side, we specified on aspects of how morality might influence not the future directly, but the studies of them.**

We can also distinguish from the moral aspect in the different dimensions of one's character, where we might take an interest in one of the fifth dimensions categorized by Hartmann and Kinneging. The dimension of anticipation, that is the scope of one's vision the future one may accede, where everyone "looks ahead" (2017, 10), but the difference between each individual being the depth and breadth of his gaze, which in our case is studying the morality as one of the factors of such disparity.

In the conclusion of Poli's 2011 research, **the literature, to him, seems for the most part silent on the majority of the concerns he raised, and that much effort is required, which we do find similar conclusions as well on our own side of the matter and do to an extent.** He finalises that the link between FS and morality, the relation between morality and the future, and the problems associated with the concept of creating a deontological code in FS, show that these and ethics have much to learn from each other, and that an organised exchange amongst the two fields can be of mutual advantage (409), which we will hopefully help further in certain of its aspect by our own research.

Scenario Methods which are "descriptions of possible futures that reflect different perspectives on the past, the present and the future" (Notten et al., 2013, 424), might at first glance seem a potential tool for our subject of research as its aims at developing futures, its processes of scheming them and their features vary greatly, **yet while society in this method is conceived as being changeable, morality here is still not thought as a dynamic factor** (Boening et al., 2010, 6), which is a major drawback for our purpose. Here again, each scenario has a standardized morality where none of the disparate future envisioned have any moral controversies or disputes written into themselves, while the interest or hesitancy of the public's decisions has also few explanations deriving from morality as a criterion, which could have been pertinent to us. Cheered scenarios are as such because the scientific developments may contribute towards the already existing goals and morals, while on the other hand the disapproval of them are solely explained by the violation of the present moral regime (7) – **which therefore rather already shows the moral obliviousness of this methodologies and has not much to provide for our objectives.**

One method from which we could draw inspiration from in order to reveal morality out of its unproblematic acceptance and one's general moral obliviousness towards the current moral regime would

be through generating moral controversies as from NEST-ethics (ethics of New and Emerging Science and Technology) (Swierstra and Rip, 2007, 4), by the exposure of an inventory of tropes and patterns in past ethical controversies. This can be achieved through two or more ethical arguments which by being together ultimately provoke each other into existence. **Here these conflicts are solely based on technological ethical controversies (Boening et al., 2010, 11), we would have to add to this, or even solely focus on moral controversies themselves, and not only on past ones but also present and potential future ones that we could derive out of sympathetical imagination of other's position such as we talked about the concept of future generation and to avoid moral presentism.**

One potential aspect to restrict the value of morality as factor, is not rather in how it would affect one's creativity to devise futures, but rather in whether those moralities have any plausible chances to occur in any of these said futures anyway, so that it discards the relevance of having such creative moralities. This could potentially be achieved through the method of the plausibility of resolutions. Here it is through the consideration of past answers and present trends in morality in debate and decision-making that we will estimate which resolution of those futures might occur, also noting that changes in morality will mostly be on micro rather than macro-levels. (13). **But still, it always remains a matter of plausibility, and rejecting morality as a creative factor solely on this basis might be too costly to constrain oneself through such decisions, and therefore it does not help with the purpose of our thesis.**

There are various levels of moralities and their speed of change, categorized here as macro, meso and micro levels. Macro-level moralities are slow to change and consist of abstract morals which have proven themselves through time, such as autonomy for example. Meso-level moralities are faster to change, and are moralities materialized into established procedures regulated with rules termed "*moral regimes*", where those above abstract morals are rendered concretely, from autonomy into informed consent for example. Lastly, micro-level moralities are the fastest to evolve, and very precise ones taken care of locally in "niches", debated and discussed (9). **One important skill to have is to keep all these various types of morality when imagining future moral changes, but also about the futurist's in order to know which of his morals pertains to which types of categories.**

Unfortunately, as we saw above, there seems that there are no direct methodologies to study the issue of our thesis, that of evaluating morality as a factor of creativity in futures study, or at least not from the fields of future studies, interdisciplinary endeavours might be required in order to either find an already produced methodology to then apply to our specific situation, or to devise a new methodology

from the start but by gathering resources from many other fields, which will have to be done in further study of this issue.

2.2. Qualitative & Quantitative Research

As we explained from the many previous methodologies of FS not fitting our research design specifically, we therefore opted to evaluate morality as a factor of creativity in FS through a quantitative research mostly in the form of an online census of our target - worldwide experienced futurists from various groups - to represent potentially the best expertise of the subject as well as diverse life experiences related to our raised issue, thus we went to ask such questions to the world's leading futures organizations. Here, while we do ask and study morality which tend to be core to qualitative research, we aimed specifically at turning those answers into numbers we can draw inferences from, through then more inductive methods. A qualitative interpretation and perspective of those results was then performed to reveal the main issue of potential moral obliviousness and moral hindrances and benefits to creativity in FS. We will analyse them to extract themes out of the evidence to present a clear picture of it.

We made a form through Google Forms' service where we asked our questions to expert futurists from the WFSF (World Futures Studies Federation), JFS (Journal of Futures Studies), and IFTF (Institute For The Future) through an online poll sent the 01/12/2020 to the various organizations as e-mails or posts, and closed the 10/12/2020 after receiving no more answers for 3 days, using voluntary sampling as random selection was not at our means.

We first asked general questions under the ethical code of futurists, first some related to their self-identified or assigned status (Name, Sex (0.a), Age group (0.b)). Names were optional to input in order to reduce potential stress to submit to a moral norm or fears of recognition, and for the age group we separated in those of 14-21 ("adolescence"), 22-29 ("young adulthood"), 30- 39 ("adulthood"), 40-59 ("maturity"), 60 and more ("senior hood"). We chose to divide the typical adulthood into further degrees as we thought it might have some relevance for further insights.

Then we also asked for their advocacy on cultural, economical and societal self-assessment on one's politico-moral positions (0.c-0.e). Progressivism to Traditionalism, Socialism to Capitalism, and Anarchy to Authority, all on a gradient of 5 in which 3 represented either a neutral position or bits of both.

We thought might have found some potential directions to study our question through all these general situations and opinions of the experts. We chose three axes to give a more clearly defined position.

We retrieved all the data in the form of an excel sheet which we translated in the various graphs as mentioned below. The data was kept as full number rather than percentages as the number of participants was below a 100.

Before the last, we asked them how important 8 specific values are to them, which are inspired from Schwartz and Bilsky's 10 Universal Values as they defined them as "*conceptions of the desirable that influence the way people select action and evaluate events*" (1987, 550), which is similar enough to our definition of morality. We narrowed 4 values down to 2 as those values can be categorized more broadly into one rather than two. All of them were described in a non-connotated manner for neutrality's sake. The options ranges from 1 (less important) to 5 (most important) on the values which were all defined, and shared in here in the annexes, of Security, Tradition/Adaptation, Generosity, Tolerance, Self-Direction/Freedom, Exploration/Stimulation, Achievement and Power. Those were thought to potentially be a key insight in how each of those values would correlate in one's creativity through its potential derived moralities.

Then lastly, we narrowed it down with more related question still linked to their self-assessment of their various traits linked to what we perceived would be pertinent.

We will now review and justify each of the questions asked.

1.a) "***How empathetic do you perceive yourself to be?***"

Rated from 1 (Almost not) to 5 (Extremely).

Here, to avoid misunderstanding of such term as we actually did, we defined it as such under the question itself: "*One's capacity to understand (but not necessarily feel) other's viewpoints and positions on a matter, and to take someone else's position rather than one's own to view and solve a problem.*" After further review, the more accurate term should had been sympathy rather than empathy, but the definition was what we aimed at nonetheless. This question will be particularly relevant when tied to further answers to potentially reveal how one perceive himself to be sympathetic yet maybe act differently in relation to specific situations which will be asked after.

1.b) "***How much do you think your morals have guided you in your work?***"

Rated from 1 (Almost not) to 5 (Extremely).

Again, we decided to define morals to avoid further misunderstanding. *"One's general worldviews of what is good and bad, right and wrong, and where the world should be going and acts to help so"*. Unfortunately, the definition we chose for our census was different as the current one we defined in our theoretical analysis as we worked on both at separate times and depth. The difference might not be too significant but remains one as such to consider in our analysis of the results. The relevance of this question is similar to the one above, in order to perceive how the futurists, judge the impacts of their own morality in their work, compared with how it might have actually as potentially shown through further questions.

Lastly, we asked a question directly linked to Bell's obligation aiming at creating a futurist's code of ethics in order to perceive to which extent it is a consensus or dissensus amongst those polled, and therefore affecting the relevance of all next questions notably pertaining to the potential moral obliviousness we have explained and explored beforehand.

2.a) ***"To maintain and improve the well-being of humankind – alive and not yet born- as well as life sustaining capacities of the earth.***

"How much does this sentence equates with your general values?"

Rated from 1 (Almost not) to 5 (Extremely).

Then when we finished gathering general information about potentially relevant traits, we started asking various actions one would take in various scenarios related to our thesis's question. Many of these questions were not seemingly related to our raised issue, to maybe reveal what made be hidden by the futurists, conscious or not of it, such as moral obliviousness. All the next questions could be answered from the range of 1 (Almost never) to 5 (Almost always) aside from the third which will be described then.

3.a) ***"If a person came to you with devised futures so immoral to you, how would often you consider them?"***

This question had two purposes, one personal and the other more toward FS. First at perceiving to which extant does the participant's morality consider what is immoral or not (a restrictive or uncommon morality might perceive much more immoralities), as well as to find out within them how many time in FS, within their each's respective moralities, are immoral futures presented in a general way. This one is particularly related to the previous question about one's self-perception of one's one capacity for sympathy.

3.b) ***"How often do you come up with futures which are vastly different from your morals?"***

The goal here was to see how much the average futurist explores futures which are divergent from his own morality (whether they be out of the consensus or not). This question, in relation to all other data points such as one's values, was aimed at producing some probable correlations.

3.c) ***"How deep do you explore those widely different futures?"***

Rated from 1 (A brief instant) to 5 (Up to the core).

This one is a direct follow-up to the last and had as purpose to determinate how much one is willing to allocate his resources to those futures widely opposed to his usual morality, and up to which point is he willing to imagine what goes against what he is morally driven by.

4.a) ***"How often have you proposed such futures to peers/clients/employers/etc...?"***

The primary aspect of this was to see the proportion of one's perceived immoral futures proposed to clients, and many of them would restrain themselves to propose them or on the contrary.

4.b) ***"How often have you seen such futures being proposed by others in your field?"***

From these answers we wanted to know to which extent do "immoral" futures occur. As many people might have different conclusion on what is immoral, this could maybe show how strong or weak is the moral regime of FS, whether it being closer to a consensus or dissensus.

4.c) ***"I have experienced someone else's morals shaping/guiding his work or judging mine."***

This last one has a similar goal as the latter but is also more related into how morality might forcefully or indirectly shape FS as seen throughout these futurists' work experience.

We then asked for questions related to the futurists' experiences at work as well as their own opinions on others pertaining to morality in FS. The next three questions were rated from 1 (Almost never) to 5 (Almost always).

5.a) ***"I have _____ upheld what seemed then to be accurate yet did not align with my morals."***

5.b) ***"I have _____ discarded what seemed then to be accurate yet did not align with my morals."***

These first two questions were both aimed at revealing to which extent does one's morality is not aligned with his client(s)'s as well as one's ability to question oneself with novel data, or at least to encounter information contrary to one's current morality.

5.c) "*I _____ feel that truly acting according to my morals would hinder me in my work.*"

This is another one similar to the two precedent but specifying directly to which point one's morality would hinder their work according to their own subjectivity. This is directly related to the research question, but on an aspect more reality to one's feeling of potential repercussions solely - fear.

6.a) "*On a scale from 1 to 5, how much do you think your morals help you at being more creative?*"

6.b) "*On a scale from 1 to 5, how much do you think your morals hinders you at being more creative?*"

Rated from 1 (Totally unrelated) to 5 (Heavily improving (1)/hindering (2)).

These two questions are entirely focused on the research question and have therefore a direct value to it and whether the futurists previously thought about or not beforehand will provide some insight according to their own experience. The next 5 questions were rated from 1 (Strongly disagree) to 5 (Strongly agree).

7.a) "*I think some values are unforgivable and should not be a part of futures studies.*"

The first question aimed at showing what the general opinion on moral censorship amongst futurists was. This can also be used in order to show moral presentism if those who advocate for such censorship have moralities along the consensus. Ultimately, if we are correct that certain moralities can have an effect on creativity in studying the futures, and that the advocacy of censorship is towards those which are fruitful to such interests or not, one could further study to see the consequences of such stances against the future of FS' efficacy.

7.b) "*I think there is currently a moral consensus in futures studies.*"

The second one first asks the experts their opinion on such subject, which can then be compared with our analysis. It can help us to get an average opinion to this question in relation to ours and therefore improving our future conclusion.

7.c) "*I have strong oppositions against the status quo and cannot stress explicitly my values, future realities I desire to promote and my underlying presuppositions.*"

Here this third question is very interesting to us and potentially other researchers. It will help to see if futurists can perceive a moral regime, and if they are able to follow the 1976's first obligation of the code of ethics or if their morality are too outside of the consensus to fully respect their responsibility as a member of the future study.

7.d) *"I think futures studies should be free from general responsibilities."*

Our fourth question directly asks the attitude of futurists towards the proposed general responsibilities that we analysed earlier. It will both help us to see their underlying morality, and therefore in relation to all other questions their potential moral obliviousness.

7.e) *"Futures studies ARE free from general responsibilities."*

This fifth question asks what the futurists think is the current status of FS in its relationship with general responsibilities, and through their previous responses, we could further deduce their own moral aspects out of it, their relationship with such moralities and overall, towards a moral regime and obliviousness.

2.b) *"To maintain and improve the well-being of humankind – alive and not yet born- as well as life sustaining capacities of the earth. Now, how much does this sentence equates with your desires for Futures studies' aims?"*

Rated from 1 (Almost not) to 5 (Extremely).

This was our last question akin to 2.a put at last as a wrap-up and aside for another one for potential feedbacks and comments. The first was asking if it corresponded with their general values, while this one asks for their desires for the future of FS. This one is also important in showing those same principles of morality such as presentism, obliviousness, as well as a potential regime which might be occurring after we will review the results.

2.3. Issues Encountered

As we had a little over 3 months due to various events to entirely write our thesis, design an experiment, collect the data and synthesise everything, there are few flaws which might have been avoided without the time constraint, but for others we should anyway take full responsibility. First, there were many issues linked with the design of many of the questions themselves, sometimes in their technical aspects, and other in their phrasing. All the questions about the responders' 8 values could become irrelevant as it was missed to have each of the value being excluded from each other, to show a ranking of all in order of importance. What potentially happened is that as they were all formulated in a neutral

or positive aspect, almost all of them were answered as being the most important, thus possibly making it irrelevant to use. Also, there might have been a misunderstanding of the value of Tradition and Security. Security was here defined as being more about personal stability within society (close group), while Tradition was closer to one's potential sacrifice for stability of society itself, aiming at respecting the cultural ideas of it. The result might be the consequence of the term used often connotated with values of the past which might have been misinterpreted as to adhere to those values. Here Tradition was aimed at describing one's position on current traditions and societal cohesion.

Also, some questions were on the other hand too positively or negatively connotated and probably shifted the answers towards the common most desirable way to respond, consciously or not, such as with the question about one's self-perception of one's sympathy, where answering in the negative would be an act of humility or depreciation, even if sincerity is most likely present - which is anyway one of the biggest yet uncontrollable flaw of such experiments, the human factor that we acknowledge here – this was an intrinsic flaw to it as one but expect most respondent answering positively regardless of actual capacity. 1.b questions might also have been misunderstood in its aim, as it tried ask how one though his own morals shaped his work, rather than if he/she was "*ethical*" when doing so. On a similar note, the poll was voluntary, and it is possible that certain moralities were more represented than others because of this specific variable, as for example the moralities linked to those who like and need to help others and people in need (graduate students) might be overrepresented. Lastly, the two questions on one's honesty against his own morality were redundant not dissimilar enough.

3. RESEARCH OF MORALITY AS A FACTOR OF CREATIVITY IN FUTURES STUDIES

3.1. Results

Various analyses were done between the different general information asked (Age, Sex, Economical/Social/Cultural orientation and 8 Values) to perceive potential bias or even potentially aimed at possible correlations. All results were collected and translated directly into figures without any data treatment, aside for the 8 values in order to achieve some level of significance. To do so, the collected answers from 1 to 5 here only were averaged for each value, and then put into their exponentials in order to give a better visual representation of the trend.

We obtained the data points of 27 voluntary participants from the futurist groups of WFSF, JFS and IFTF, 9 females (33.6%) for 18 males (66.6%) as seen in figure 3.1.2.1. All the participants were above our second age category; with 3 aged between 30-39 (11.1%), 10 between 40-59 (37.0%), and the majority, 14 over 60 (51.9%) as seen in figure 3.1.2.2

Most participants responded having culturally progressive values (16 – 59.3%), an equal number having more neutral or neutral cultural values (5 and 5 - 18.5% and 18.5%), only one with slightly traditional cultural values (3.7%) and no one associated themselves with traditional cultural values.

On the economical axis, results were slightly more nuanced, with 3 responding for being economically socialist (11.1%), 11 being slightly socialist (40.8%), 8 being neutral (29.6%), 4 slightly capitalist (14.8%) and 1 capitalist (3.7%). Finally, on the social axes, none were advocating on either extreme of anarchy or authority, but 10 were slightly in favour of anarchy (37.0%), the majority, 15, were neutral (55.6%) and only 2 were slightly in approval of authority (7.4%) (see figure 3.1.2.3).

Data from questions 1.a and 1.b were mostly skewed towards "A lot" (4), for which 7 (25.9%) and 13 (48.1%) responded "Extremely" (5); 18 (66.7) and 13 again (48.1) for "A lot" (4); and then only 2 (7.4%) and 1 (3.7%) for 3 or "Average"; as well as none for answers 2 "Not much" or 1, "Almost not" – see figure 3.1.2.4.

Answers to questions 2.a and 2.b were similar but event more towards "Extremely" (5), with 18 (66.7%) and 17 (63.0%) responding as such; 5 (18.5%) and 6 again (22.2%) for 4; and then only 4 (14.8%) and 3 (11.1%) for 3 or "Average"; as well as none for answers 2; and only 1 (3.7%) in 2.b in 1, "Almost not" – see figure 3.1.2.5.

Responses to questions 3.a to 3.c are mostly skewed towards 3 and 2 "Sometimes" and "Rarely". Respectively, only 2 (7.4%), 5 (18.5%) and 3 (11.1%) answered 5 or "Almost always"; 3 (11.1%), 7 (25.9%) and 11 (40.7%) for 4 or "Often"; 11 (40.7%), 5 (18.5%) and 7 (25.9%) for 3 or "Sometimes"; 4 (14.8%), 6 (22.2%) and 5 (18.5%) for 2 or "Rarely"; and finally, 7 (25.9%), 4 (14.8%) and 1 (3.7%) responded 1 or "Almost never" – see figure 3.1.2.6.

From 4.a to 4.c we can see a mixed pattern, where 5 (18.5%), 1 (3.7%) and 1 (3.7%) answered 5 or "Almost always"; 8 (29.6%), 3 (11.1%) and 16 (59.3%) for 4 or "Often"; 5 (18.5%), 12 (44.4%) and 5 (18.5%) for 3 or "Sometimes"; 6 (22.2%), 10 (37.0%) and 3 (11.1%) for 2 or "Rarely", and ultimately 3 (11.1%), 1 (3.7%) and 2 (7.4%) for the last option, 1 or "Almost never" again – see figure 3.1.2.7.

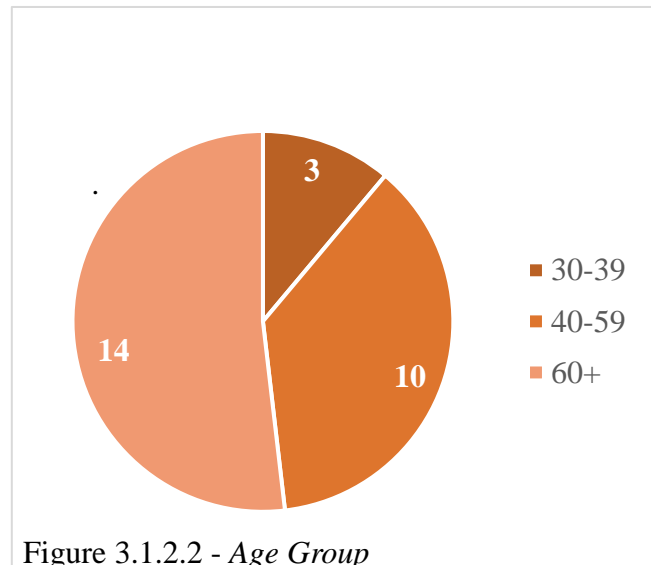
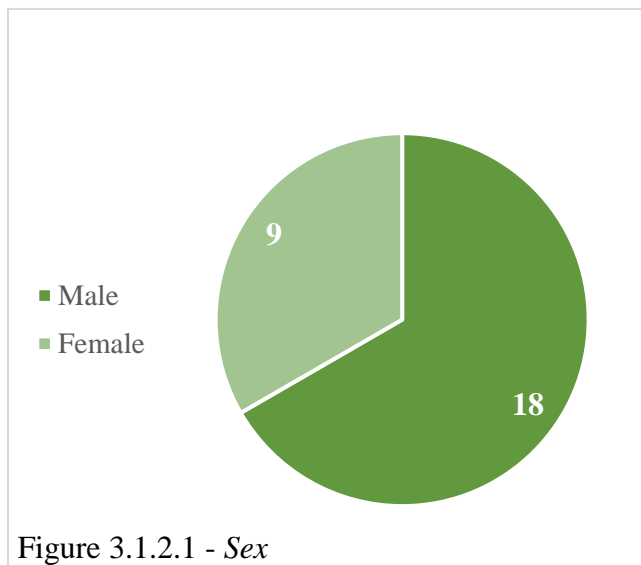
When looking at 5.a to 5.c that the first and second are almost opposite, with the third having a quite wide spread with one exception where no one responded 5 or "Almost always", while 3 (11.1%) have in both 5.a and 5.b. For 4 or "Often", respectively from 5.a to 5.c, 8 (28.9%), 4 (14.8%) and 7 (25.9%) have given this answer, 10 (37.0%), 8 (28.9%) and 5 (18.5%) for 3 or "Sometimes"; Followed by 5 (18.5%), 4 (14.8%) and 6 (22.2%) for 2 or "Rarely; And finally 1 (3.7%), 8 (28.9%) and 9 (33.3%) for 1 or "Almost never" – see figure 3.1.2.8.

Before the last 6.a & b show opposite patterns, 9 (33.3%) and 0 for 5 or "Heavily influencing", 12 (44.4%) and 1 (3.7%) for 4 or "Influencing"; 4 (14.8%) and 3 (11.1%) for 3 or "Somewhat influencing"; 0 and 13 (48.1%) for 2 or "Not much influencing"; and finally 2 (7.4%) and 10 (37.0%) for 1 or "Totally unrelated".

And lastly, the 7.a, b, and c were mostly agreed on while 7.d & e were more disagreed on, and all with a good portion of neutral answers. They were respectively answered for 5 or "Strongly agree" by 4 (14.8%), 0, 1 (3.7%), 3 (11.1%), and 0 respondents again. 8 (29.6%), 10 (37.0%), 8 (29.6%), 3 (11.1%) and 4 (14.8%) for 4 or "Agree"; 7 (25.9%), 10 (37.0%), 9 (33.3%), 3 (11.1%) and 7 (25.9%) for 3 or "Neutral"; 2 (7.4%), 4 (14.8%), 5 (18.5%), 7 (25.9%) and 11 (40.7) for 2 or "Disagree"; and to 1 or "Strongly disagree", 6 (22.2%), 3 (11.1%), 4 (14.8%), 11 (40.7) and 5 (18.5%).

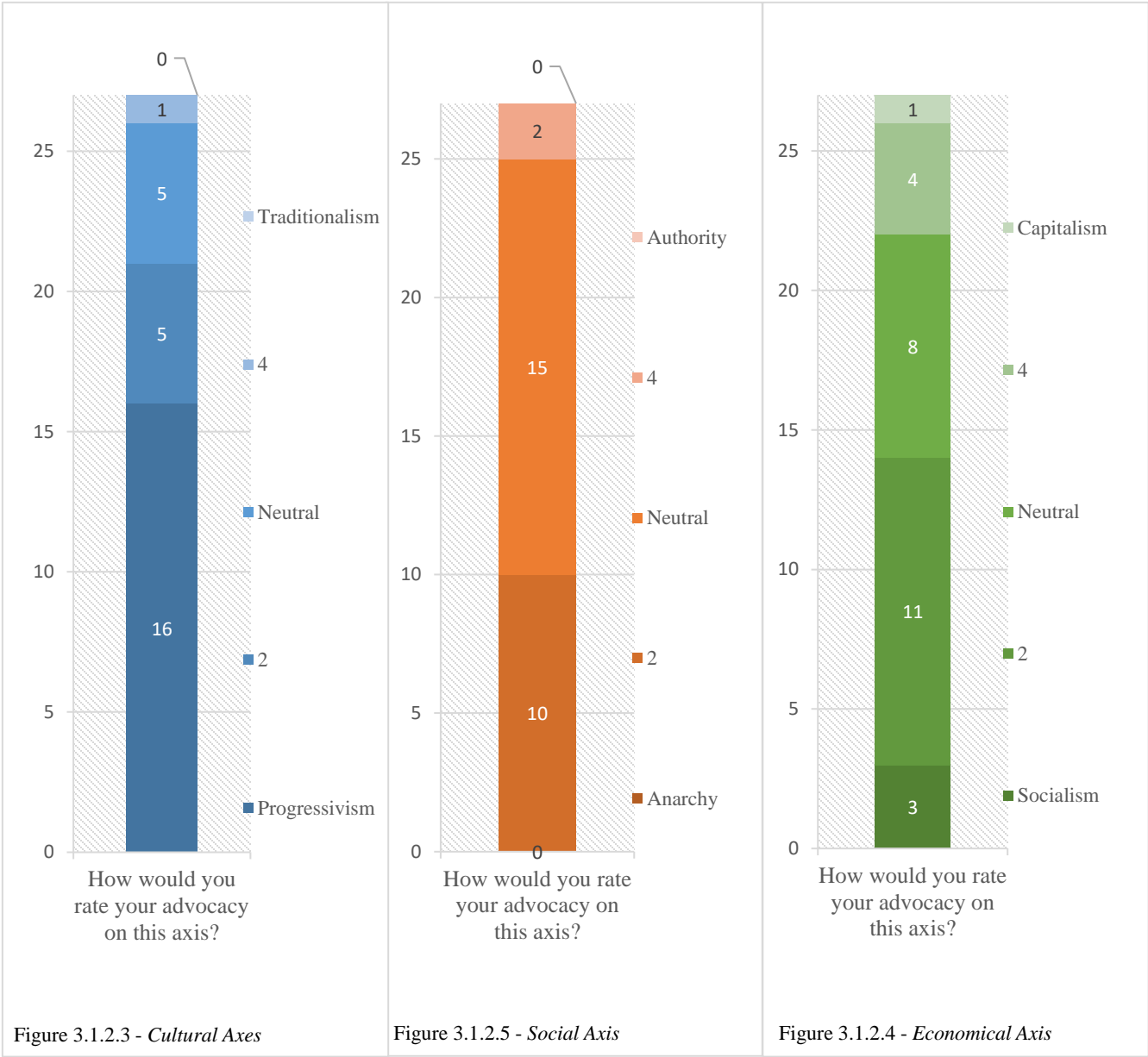
3.2. Empirical analysis

According to our results we can see we received twice more male respondents than females (see figure 3.1.2.1) which might be representative to the current average membership of those organisations, the closest study researching these representations alluding to this difference in 1992 by Jim Dator (3), as well as Cindy Frewen the head of the Association of Professional Futurists (AFP) estimating a third being made of women and Amy Zalman, CEO of World Future Society (WFS) here approximating it at 23% (Rose, 2015). For our age group, we have not found any direct study on this perspective and **our results shows mostly older futurists**. This might introduce some potential biases in how the studied moralities are represented as one might guess the general moralities have changed through generations as we saw above, still as data showed the few younger ones did not seem to have much different answers, but of course this would need a greater sample size

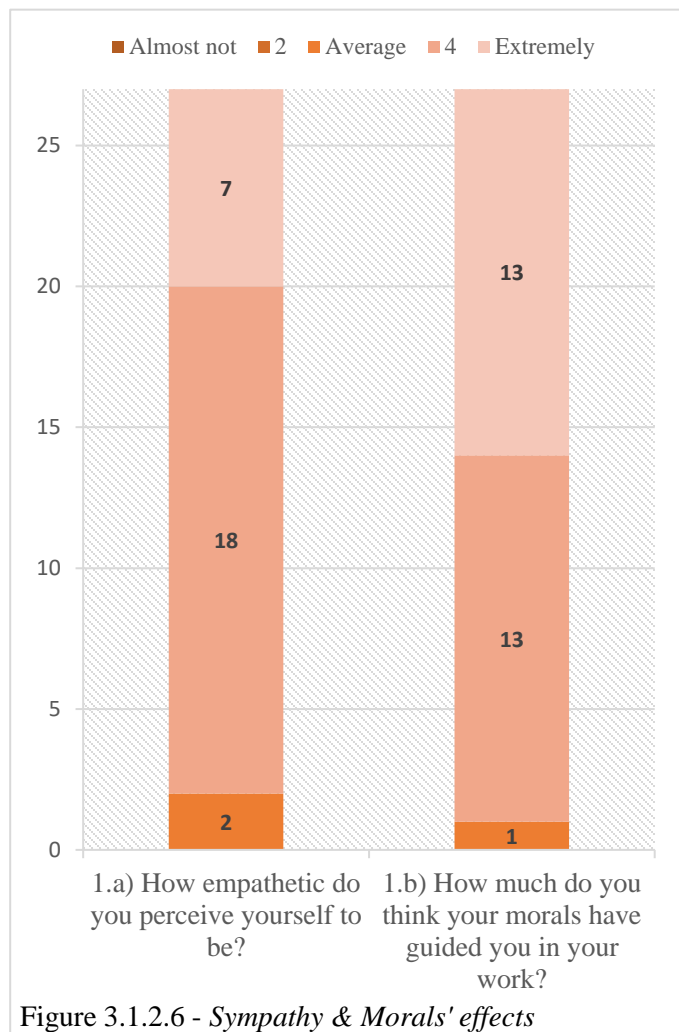


Our three axes of culture, economy and sociality might show an interesting representation of who constituted our sample. There is incredibly strong majority of them which answered having the upmost progressive values towards culture (figure 3.1.2.3), which contrary to a potential objection, is not necessary to possess in order to study the futures – especially as it was cultural progress rather than for example technological ones. The latter might be harder to reconcile with especially as they might also be related, but yet possible as with Faye's 1998 concept of "Archeofuturism" who aimed not without

controversies against his era to reconcile technological sciences with "*archaic*" values (Ancient Greek) in a futurist work (Faye, 2010, 1). While there might be other examples, this one suffices to also justify the possibility to study futures yet holding authoritarian or anarchist social views contrary to the general trend of our answers which sits at a neutral point between both (figure 3.1.2.5), quite reminiscent of our current democratic status quo. Then economically, the respondents were slightly more spread yet still being overall mostly economically neutral to socialist with few advocating for more capitalistic views (figure 3.1.2.4). **To summarize our results in these questions, our typical respondent was therefore culturally progressist, economically closer to socialism, and socially neutral towards authority and anarchy, a mark of democracies.**



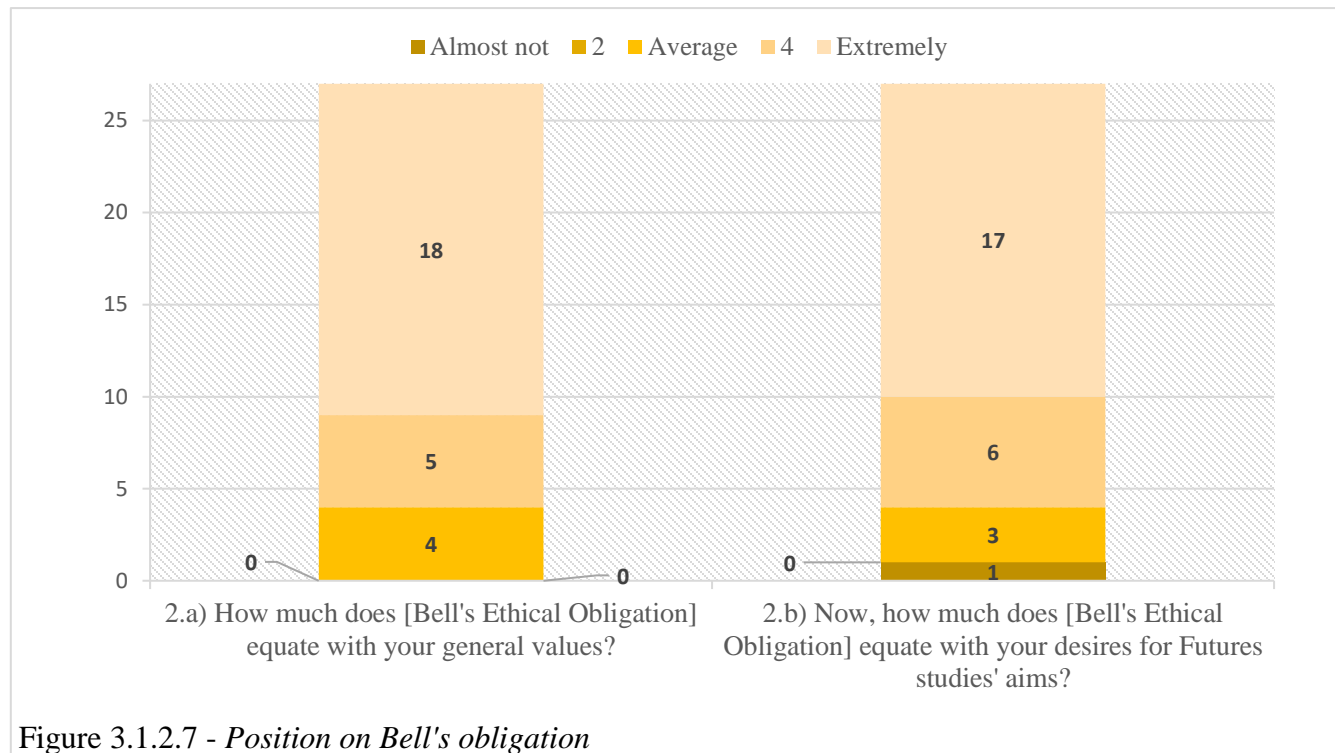
This does show the overall potential moralities which, if our sample was representative, might hint to a general consensus in FS in those three designed axes and its consequences for studying the future, and therefore the lack of a true dissensus whether the respondents perceived it or not – potentially reveal an ever more important moral obliviousness as we guessed would be present in our theoretical analysis. More importantly, these results will increase in pertinence when compared to the answers to 7.a, b & c and perceived consensus in FS.



While the first question has intrinsic positive bias as explained above, the second remains more objective but also a bit vague, **both have been responded vastly positively** (figure 3.1.2.6). Still the responses to the first can and will be compared with those from the 8 Values questionnaires, notably that of Tolerance, as well as questions 3.a & 7.a as they also pertain to that same capacity of sympathy and tolerance. And the second question here will be compared to 6.a & b as well as 7.b & c as they are all linked to the concept of morality's potential influence in one's work. We will also compare it to 2.a & b to see how, as they mostly stated to be influenced by their morality in their work, to which extent they agree the values of 2.a and would like to promote it as in 2.b, potentially revealing an overall moral consensus in FS, or at least in our sample.

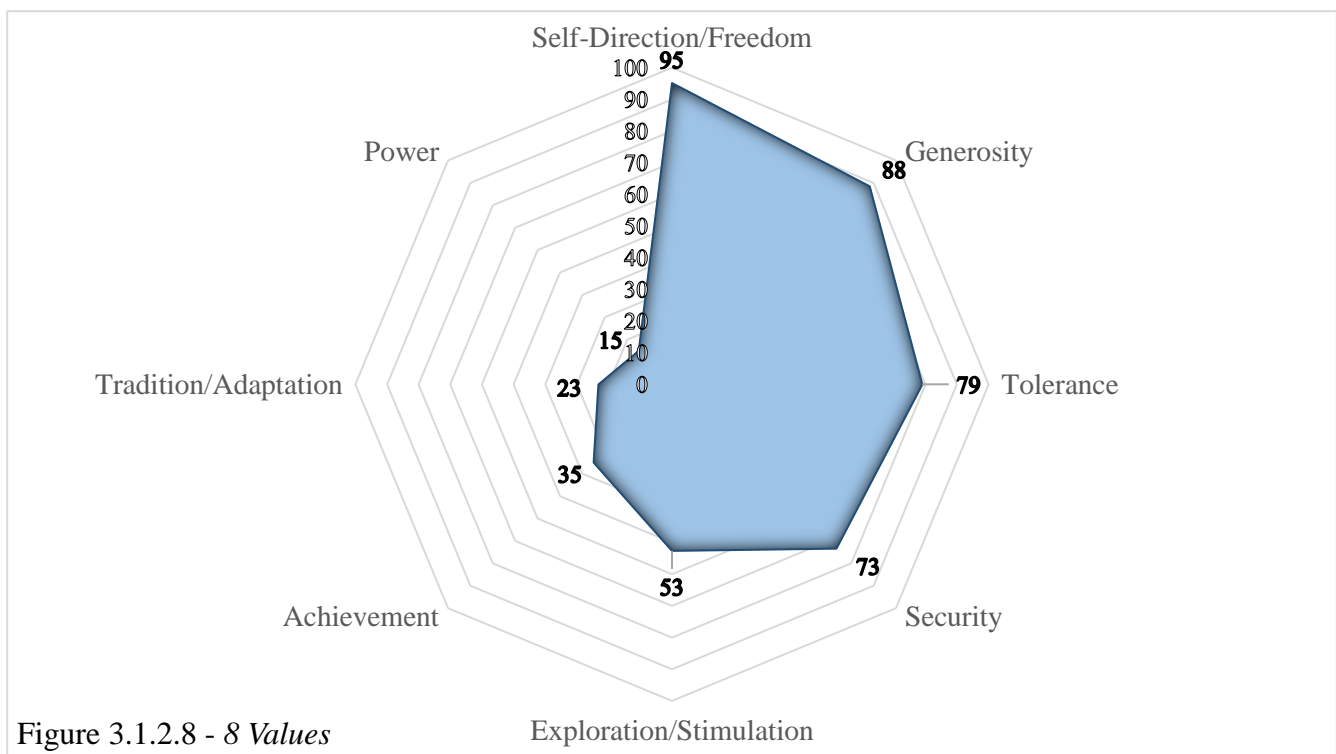
As we can see, to both questions 2.a & b they answered extremely positively (with one outlier in b) (figure 3.1.2.7), therefore **this might produce within FS a moral regime** along Bell's Ethical Obligation for his futurists' code of ethics, from which, whether oblivious or not, could also introduce a narrower breadth when attempting at studying the futures or when one wishes to proposes those against the moral status quo. Also **this could be used in order to determin whether certain positions or**

devised futures are coloured of moral presentism or futurism by comparing the intrinsic morals of the given futures with those of Bell's obligation for futurists.



While our questionnaire about one's perceived most important value had some flaws as we mentioned above, our data still shows an interesting general pattern of which kinds of values seems to be over- and underrepresented, if not in FS, at least in our sample (figure 3.1.2.8).

The first value topping all others is the one of Self-Direction or Freedom (1st). Here respondents claim caring the most about their independence of thought and action, choice, creation and exploration. This seems quite necessary in relation with the essence of FS, yet this might be put into questioning especially in relation to questions 1.b, 3.a, 4 & 5.c, 6.a & b, and 7.a, c & d. All these questions have strong links with the value of Freedom (of inquiry), yet **the comparison between the answers to those questions and the self-attributed importance of this value amongst the will seem to be in contradiction**, as we will see with each response independently, and more likely pointing to other values being more important than that of Freedom, such as Generosity (preserving and improving those of our "closed [moral] circle"). The connection with 1.b might be excluded if our statement about its inherent issue is true. Overall **the score of Generosity (2nd) doesn't contradict the above answers**, and also will be used to explain the answers to 3.a.



Interestingly, the current ranking of Tolerance (3rd) amongst these values will seem to go against the results of 3.a & 7.a where those questions did also to pertain to tolerance, and which, according to the definition we gave with the value (see annexes), displays a contradiction as **on one side showing a high tolerance in the 8 Values questionnaire as well as a high sympathy in 1.a, yet answering in more intolerant manners to 3.a and 7.a** (according to the same definition), as we shall see below.

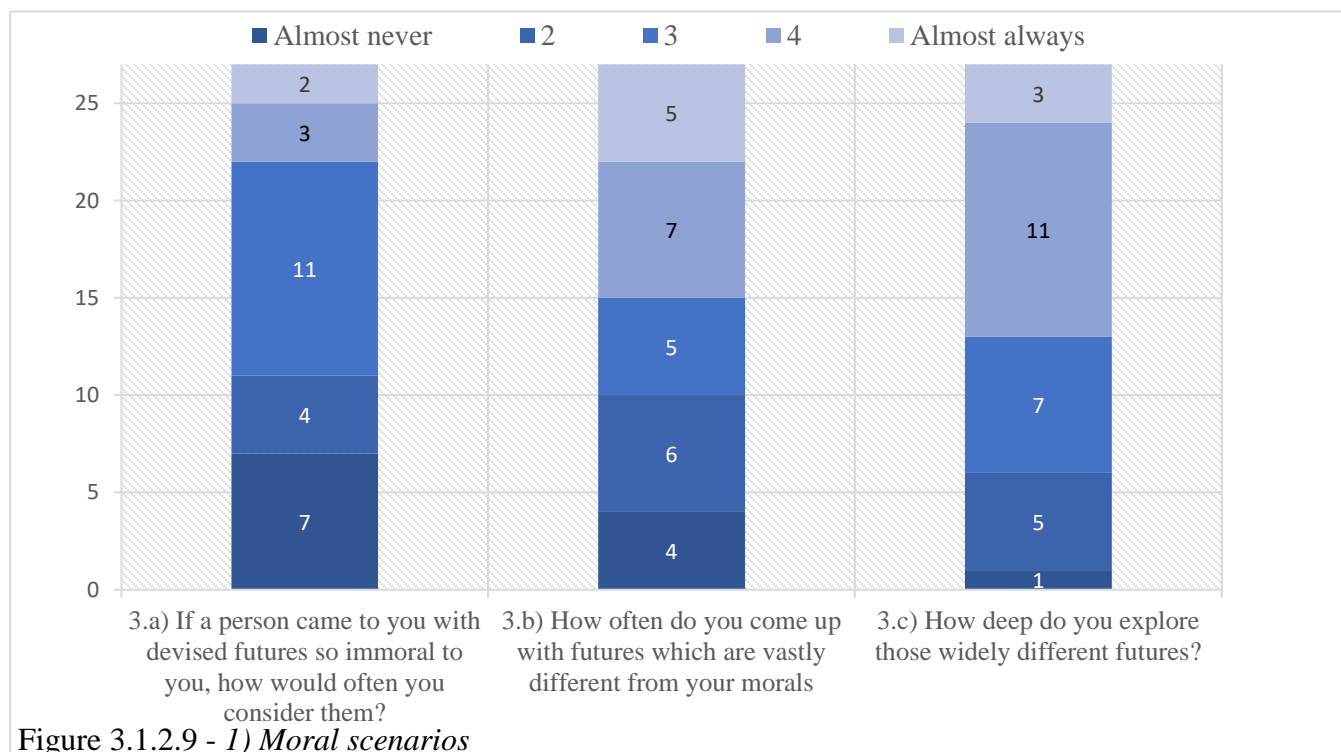
Security also has a high score compared to others, yet this would seem to be counter-productive to a futurist's ability to explore potential futures. As we saw in our theoretical analysis, one key dilemma of the futurist is his almost inevitability with clashing against society, and therefore Security seems to be too high of a value (4th in rank) if this was truly be the case as it aims at the safety, harmony and stability of society. We could and will also use this result to explain the collected answers to 3.a, b & c and 7.a, c & d.

The 5th value is that of Exploration or Stimulation, here this value only has half of its essence which would be to our interest – the intrinsic excitement to newness and the challenge in life, while the other half is more related to pleasure itself – still, **one could have guessed that futurist would rank this value of Exploration higher, being excited to explore futures themselves and challenge the status quo for its own sake, yet this was an average response and on the low end**, which could also be used to explain the answers to 3.a, b & c.

Achievement (6th) has not much relevance to our subject other than one's desire to be successful within society's standards and potential devotion and moral obliviousness to them, the other thing one could draw from the answers would be that **futures from which moralities deriving from ambition might not be often researched as being foreing to most**, but not much else will be discussed here.

Tradition or Adaptation here is 7th on the line the result seems contradictory with that of Security which was 2nd. Yet even with the distinction mentionned in the issues of our research above, the results are hard to interpret as those two values are usually closest together. Still, if we accept them as such, then we would then have to point out how **there is a difference between the sampled's perceived adherence and respect to current norms and their actual actions and decisions when answering questions 3.a, b & c and 7.a, c & d**. The low-score does follow what one might think of how a futurist would value it, contrary to our score of Security, but yet the more direct answers do not on the other hand.

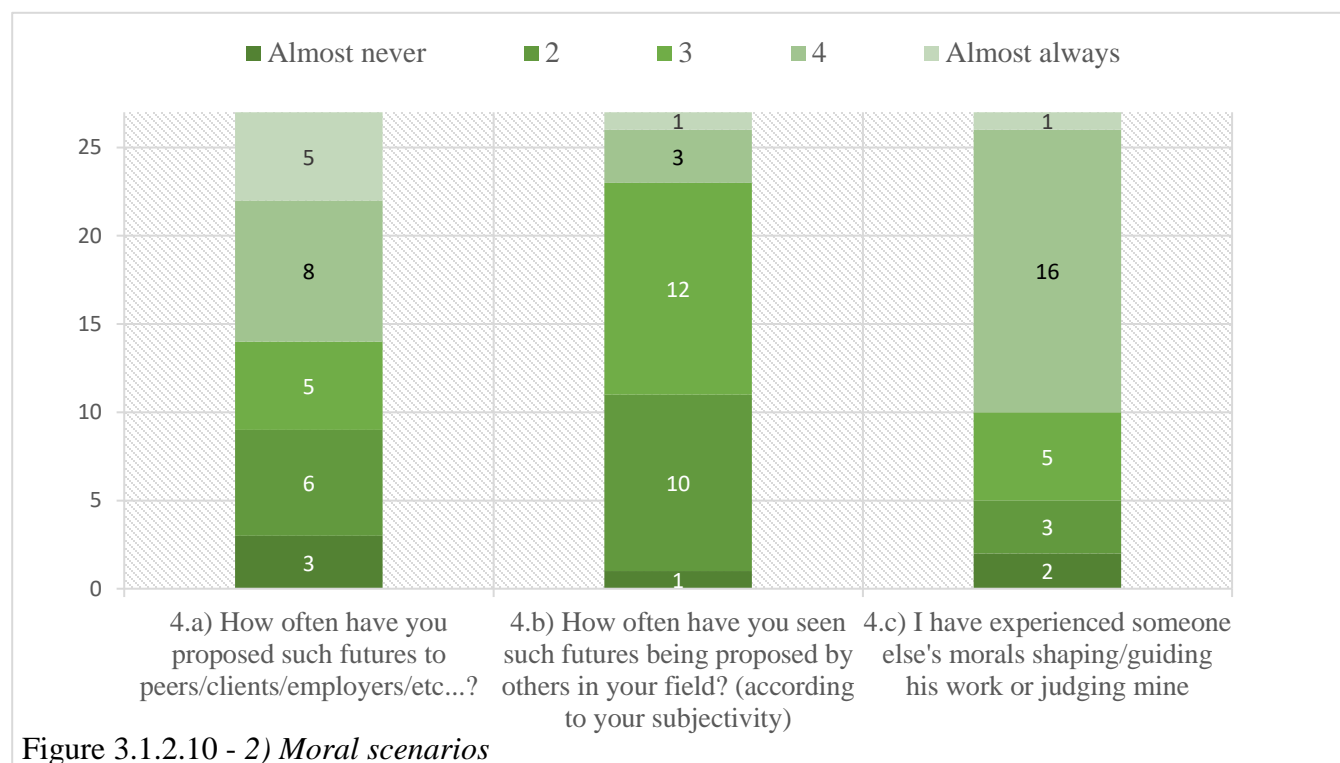
Lastly the 8th, Power is alike to Achievement for our interests, and other than stating **futures where moralities linked to power might be less explored as being more exotic to most futurists**, what was mentionned with it won't be examined further.



Here (figure 3.1.2.9), 3.a has importance when put into relation with 1.a, whereas **most who answered being sympathetic had no interest to consider others' futures they would consider immoral. This goes also against their self-evaluation of Freedom (of inquiry) and Tolerance, as well**

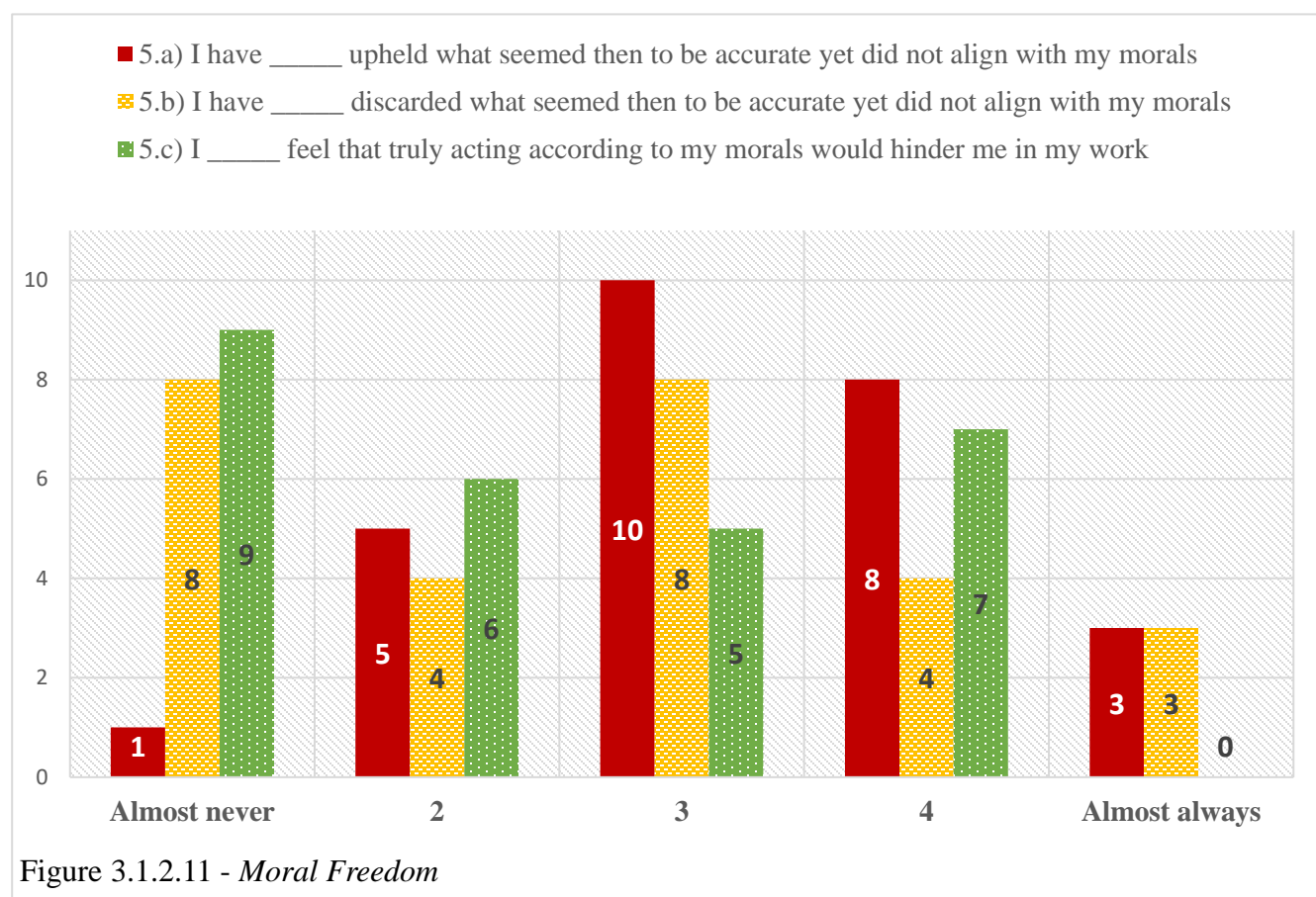
as Tradition, as it seems what is perceived as immoral still is impactful enough to not ponder such futures. On the other hand it could be supported through their score in Security where not considering such might help ensuring a greater stability within their (moral) in-group. Overall this has pertinence to our research question as it does show amongst our sample **a conscious repulsion against the potential futures deemed immoral by one, which might therefore restrict one's capacity to study the futures, whether to even start investigating it, or to continue further when proposed in a discussion.**

3.b & c can be similarly explained with the score of Exploration being quite low, as **there do not seem to be an intrinsic desire to explore morally diverse futures.** Connecting them to our main question, we can still see that according to their own evaluations (whether them being accurate is another question) **they still come up often enough with those morally controversial futures according to their own standards and even do explore them – which seems in slight contradiction with 3.a** as all three questions pertained to similar one's subjective vastly immoral futures.

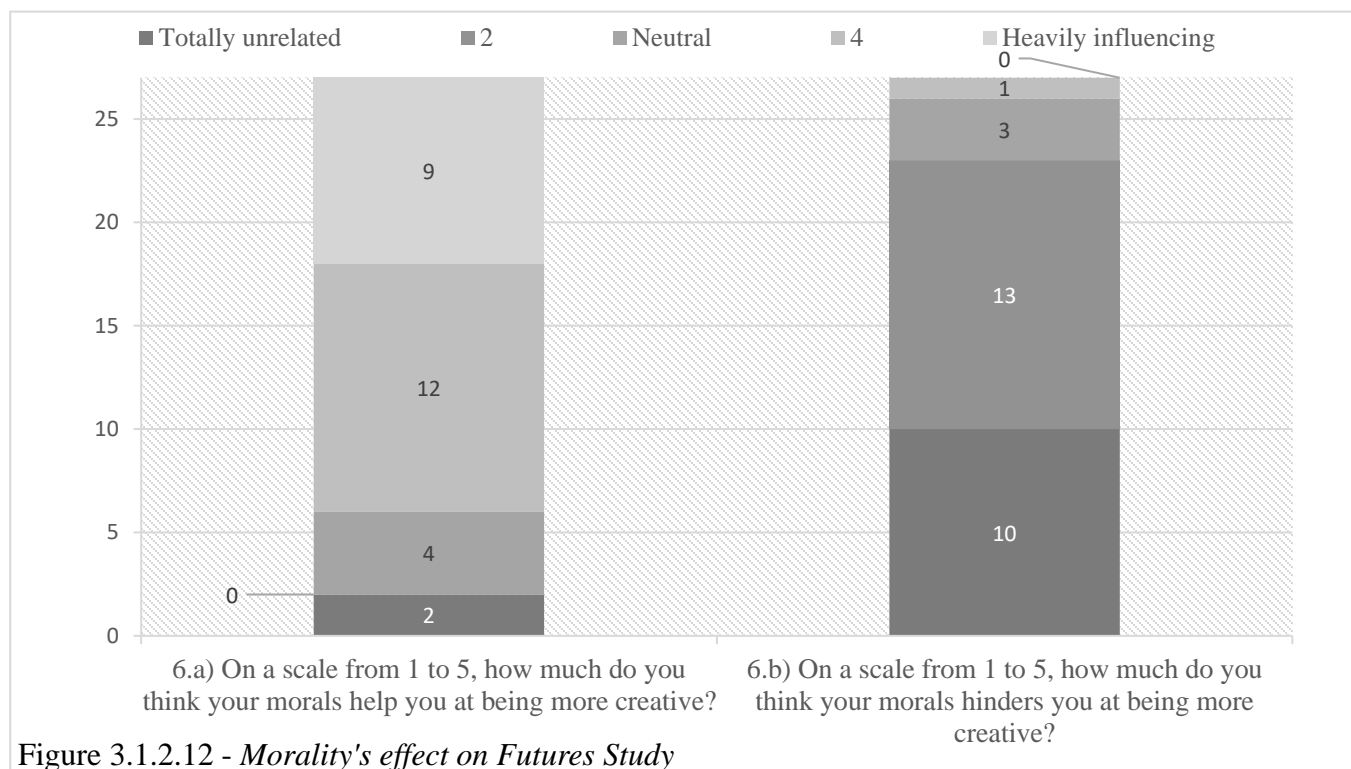


The next three questions 4.a, b & c (figure 3.1.2.10) were relevant to see the potential hindrance one's moral futures might cause to uphold these in front of colleagues or clients according to the current and local moral regime. For 4.a we can see widespread responses, which still implies **many times such "immoral" futures were not presented at all, and interestingly enough, 4.b here shows that those same ones were almost never proposed by others, revealing a discrepancy and therefore a possible**

moral consensus, as those who answered positively in 4.a did not actually correspond to controversial morals according to all respondents from 4.b – they might think their future is morally provocative yet to the scrutiny of the most of the field they are not. Of course this interpretation has a flaw in that the morally provocative futures proposed in 4.a might not actually have ever been seen by the respondents of 4.b and the discrepancy might just be a result of people working in different areas, still this would be unlikely, but to keep in mind. Questions 4.c, connecting with 1.b in how respondent's moralities are self-perceived to impact their work, also show a clash with their 1st value of Freedom (of inquiry), furthermore, the answers seem to show people think they are morally judged in their work, yet in reality according to 4.b no one seems to see any controversial moral futures proposed, and this could not be because of a sort of "moral repression" as the answers from 4.a do claim proposing such morally divisive futures. Therefore in conclusion we could think that some futurists think they are contentious, and that they are judged as such or actually are judged as such, but ultimately there are very few morally controversial futures which are proposed according to everyone's scrutiny.

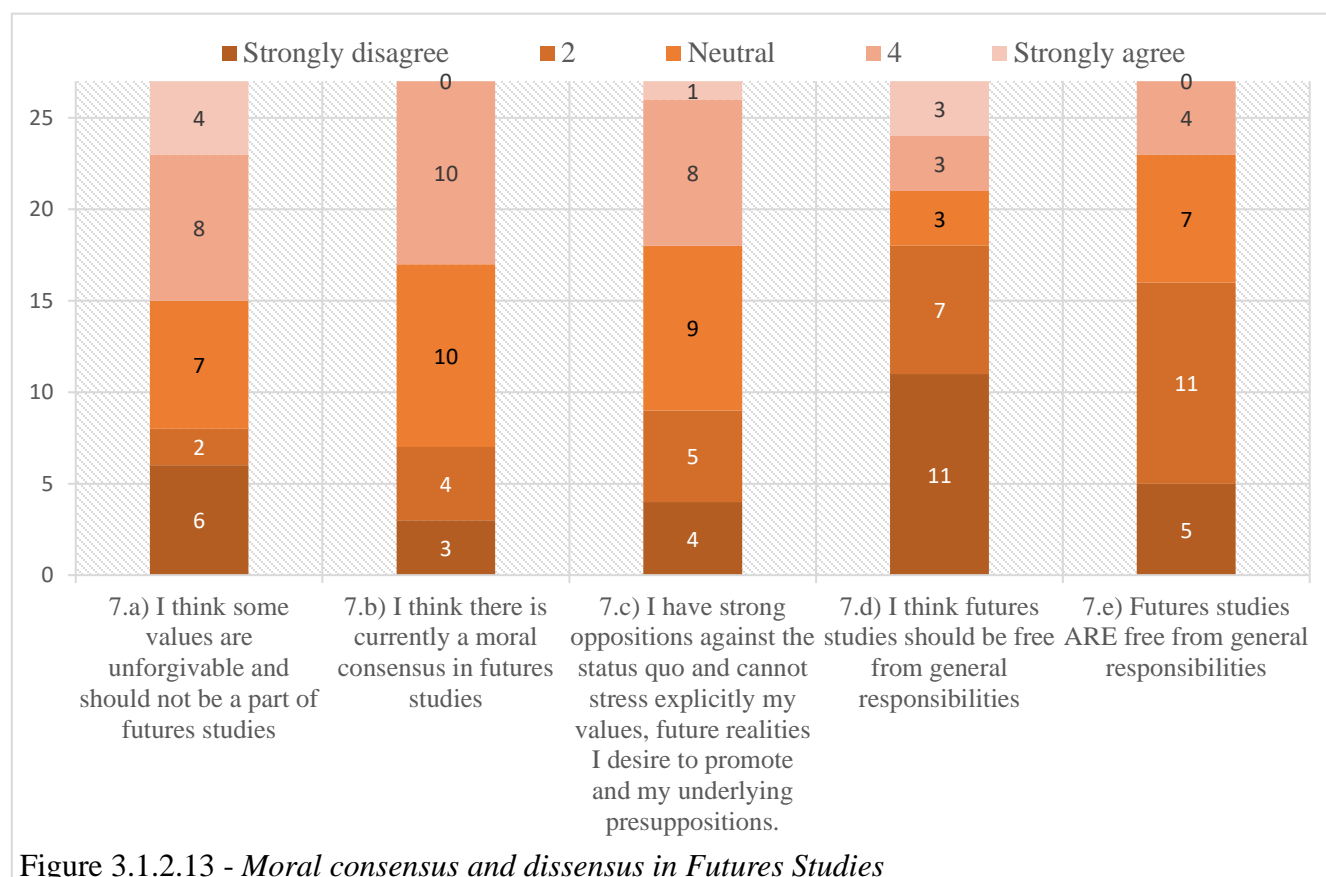


As 5.a & b had a mistake in their formulation, we can and should solely use parts of both response to potentially draw some usefull information from them. We could see if those questions were well understood that **there was a minority of futurists who almost always rejected what seemed to be accurate then, but yet did not align with their morals**, and that from both questions the majority of futurists were giving average answers rather than what would one think when thinking about the professional code of ethics, where if honesty where above morals both results would have been heavily skewed on the left for 5.a and on the right for 5.b. While these answers do not show a moral obliviousness, they do show how, **consciously, one's morality might discard accuracy to preserve itself, and therefore impact how one will study the futures, and here in a more negative aspect when related to how widespread the futures will be designed**. This, while in 5.c the respondents gave a mostly opposite answer. Even if we discard the results of 5.a & b, the answers given in c do show to an extent **most futurists will rarely to often consciously feel that acting trully according to their own morals would hinder them in their work – and here therefore hinder their studying of futures**, but here it can be linked to fears of repercussions solely.



6.a & b aimed here at focusing this previous answer to our specific research question. In a **most futurists answered their morality had a positive effect while in b most said it had no relation to their creativity** (figures 3.1.2.12). What is to be done here is to put it in relation to answers from 1.b,

3.a, b & c and 5.c where in the first they did answer they felt their morals where guiding them in their work (but in 6.a & b consciously stating solely in a positive manner), while in 3.a, b & c we saw precisely that their morals' impact was to strongly discard perceived immoral futures, as well as overall rarely thinking about and exploring morally diverging futures, ultimately **showing a potential general moral obliviousness, consciously giving answers which under further scrutiny reveals contradicting answers.**



In our last set of questions, we can see that **almost half of respondents mostly or strongly agreed that some values are unforgivable and should not be a part of FS** at all (7.a in figure 3.1.2.13). First, this goes against the high ranking of the values of Freedom, as well as Tolerance that we collected as well as one's self-perceived capacity to sympathy in 1.a, showing potentially a discrepancy between what one pretends to be yet actively disavow not seemingly understanding their position, of course sympathy is not acceptance, but the difference between their ranking of values and 2.a has some merit to be pointed out. Then when we put these answers against those strongly agreeing and advocating of 2.a & b, we can easily think that the values opposite to those of the 1976's conference would be part of those considered as unforgivable, this might not be the case but a potential relation to keep in mind. 7.a also

helps explaining the results of 3.a, b & c for one of the possible whys of discrediting, not coming up with and exploring morally divergent futures. Still there was also a sizeable amount of respondents who strongly disagreed with 7.a which does show some balances to the above conclusions.

7.b shows **a trend of neutrality to agreement that there is a (conscious) moral consensus in FS**. When related to 2.a & b, when can see that at least those values mentioned are probably part of this presumed consensus in our sample.

7.c indicates that **a third of respondents feels being against a status quo and unable to obey the the obligations requested by the 1976's conference also showing their perception of a moral regime in FS**, while the remaining have either a neutral stance or actually no confrontation against the status quo, therefore being a part of it and potentially not able to see the moral regime – whatever one think this status quo might be, but we can relate parts of it being of the same values as those mostly promoted in 2.a & b.

7.d shows that **two-thirds of futurists think that FS should not be free from general responsibilities**, and therefore are in accordance with the propositions of what Douglas' paper tried to promote in 2003, and today in our sample, also shows a prevalence in FS. But 7.e also displays that **according to the same people, FS have not yet officialy reached in its actions the desired level of accountability in the futurists' general responsibility**, while answers from 5.c and 7.c already show feelings of moral repression on many futurists, and 4.b seemingly alluding to the fact that morally controversial futures are also rarely proposed at all. **Here these are mostly conscious moral hinders to creativity in FS** rather than a direct connection to a moral obliviousness.

3.3. Synthesis of the Experiment's Results

In synthesising all our results, we will show first in how consciously, then potentially subconsciously, many instances in which one's morality hindered one's creativity in matter of studying various futures, before then pointing out the moral obliviousness throughout our collected answers.

The conscious moral hindrances to creativity in FS can be particularly revealed through the lack of consideration towards the futures' morals that the futurists themselves considered to be immoral according to their own subjective values.

Then, a second conscious aspect of these hindrances is one's self-censorship because of one's belief (or

actual experience) of potential repercussions because of the morally controversial futures (according to his/her own judgement) one could propose, challenging a perceived moral regime, and that, whether it truly being the cause of it or not, is shown through the results from our samples where few of such futures were ever proposed amongst the futurists' community up to today.

The potentially subconscious aspects can be exposed in the general inconsistencies we pointed out throughout the results, for example where there is a potential discrepancy between how futurists consider how morally controversial their futures are, as well as how they think they are morally judged because of it, in relation with the actual lack of morally controversial futures perceived as such by futurists. Another general one is between the self-perceived sympathy and their ranking of the values of Freedom and Tolerance against the answers given in scenarios about tolerance, freedom of inquiry and sympathy (notably 1.a, 3.a & 7.a).

Then as there was an overwhelming agreement and promotion of 2.a & b (the values of Bell's obligation), as well as a general type of futurists coming out of the three axes evaluated (culturally progressist, economically closer to socialism, and socially neutral (which one could equate with democratic)), and the similar self-ranking of values, one can but expect to see a general moral regime within this sample and if representative, amongst futurists in general.

But one can also guess a moral presentism along those same line where the novelties of the futures studied would be analysed only through today's (or at least the sample's) moral norms and values, as well as a possible moral obliviousness. Notably in 4.b, which has also seemingly shown in the lack of perception of morally controversial futures proposed, as it could be interpreted almost fitting our definition of moral obliviousness, where the futurists "*unwittingly advocated for morals pertaining to a generally unquestioned consensus*". Taking again our first example to easily remind most who we usually expect aren't into the next-mentioned morals - to which extent were some of Axis' moral ideologies expressed and/or developed and if they have been, if they did flow fluidly, without any concerns and/or dissensus. Again, this example is not to be made as a false dichotomy between those values but solely as a thought experiment which could reveal morals obliviousness by generating moral dilemmas shaking it out of morality's inherent unproblematic acceptance.

CONCLUSION

1. We first explored morality and its various expressions and saw what kind of definitions of morality would satisfy our needs to research morality as a factor of creativity in FS, and that morality is an unproblematic acceptance or routines which are obeyed unconsciously by most, as "cold ethics", unless some sorts of conflicts arise against it making us cognizant of such, as through moral dilemmas creating "hot morals", then making it very much conscious to all.

We explored the concept of "moral futurism" in which it is assumed without much basis that people's moralities would follow along their science, which we also put in contrast with "moral presentism" where in comparison, most novelties tend actually to be judged blindly through present norms instead.

Finally, we coined the term of "moral obliviousness" - unwittingly advocating for morals pertaining to a generally unquestioned consensus - and made it one of the key aspects we studied throughout our thesis

2. We then regathered potential examples of this moral obliviousness, first in how many individuals have acted and created systems in society inadvertently through their morals even when from a presumed and presently secular or aspiritual society.

This trend had been similarly highlighted in FS where common utilitarian moralities are presented without any mentions of an argument as if those morals were consensus.

Then we also pointed an example of moral presentism and obliviousness in how futurists want to care about future generation but according to their present morals as if these, yet unborn generations would not be questioning their predecessors in the future as most do today with their own ancestors. One further moral presentism was exposed in that even methods to study the futures possess an underpinning and unquestioned morality (notably towards peacefulness and equality of opinion) taken for granted.

Other examples of obliviousness were shown in non-profit futures organizations promoting moralities as if they were implicit. More were revealed in the desire to impute general responsibilities to scientists as "human moral agents" without care for defining the moral concepts of what a human is while this change throughout eras and cultures.

Before the last we hinted to the way the design of certain methods tends to ask the right question (regarding our thesis's aim) but answers them in ways which then veil a plethora of futures covered by a moral obliviousness.

Lastly, we made a thought experiment using a potential moral dilemma in order to show how all these above analyses were probably products of moral obliviousness and not entirely conscious ones as our imaginary scenario instead greatly shakes morality out of its inherent unproblematic acceptance in comparison to any of the moralities exposed up to then.

3. This led us to expose the common dilemmas of futurists in their field, fears and tensions following from their breadwinners' actual desires in contradiction with the fundamental need to divert from the status quo or at least not for the most part towards the same as their client(s). This was extended to how nowadays demands are focused on societal needs and policymakers and therefore public support which are by essence representations of status quo stakeholders, and how the morality of one might conflict with the one of the many.

Ultimately a certain moral machiavellism need tends to (or should for survival) appear in futurists, adapting themselves, but as doing so might impede themselves and their clients, ultimately in restraining their creativity in FS.

4. We followed by pointing out examples of moral hindrances to creativity in FS. In the 1976 Dubrovnik 5th World Conference on FS, we saw that the obligation to reveal one's desires, morals and presuppositions can enter in conflict those of his employer's but also other futurists, especially if one has fears of potential repercussions, whether real or imagined. Then another obligation called for values alike to humanitarianism yet the pursuit of truth, but some moralities might put these two in contradictions, and because of it one might then not explicitly tell his values if they aren't alike to those humanitarian ones.

We also saw that our own moral fears or hopes might misdirect us in FS, and that utopias cannot be doubted and therefore condemning themselves to a single viewpoint.

We showed that a moral lock-in might occur preventing all novel interest and power to study the futures, and that how one was taught about the futures or methods to study them can impact them, where fatalism and apathy can be hindrances to creativity, but also beliefs which morally condemn the search of the future (being sacrilegious for example).

In the end we revealed how giving futurists' general responsibilities would be sacrificing their

independence, and that those even simply considering the existence of such responsibility might be afraid of the moral repercussion of their FS and be bridled to only tolerable or allowed perspectives. Lastly, we saw that the politization of science might also just end in replacing an old status quo with a new one chaining futurists furthermore.

5. After hindrances we looked at the potential helpful moralities to creativity in FS. Generally, the pluralisation of views and future potentialities were here considered as benefits, and that by addressing them, one might increase his own innovating skill through the exploration of various moral futures, also helping in distinguishing possible, probable, and preferred futures and whether one's current morals are worthy or not. One can also eliminate the naiveté of dogmas and universalism through a respectful and reflexive dissensus between different moral realms if one does not rely on morally discrediting others – ultimately concluding here that struggle and dissensus are more productive than models emphasizing on consensus.

We have shown through the concept of future generation as one additional moral factor which broadens one's potential, but yet without forgetting not to fall into moral presentism and trying to ascribe to these generations our present morals.

Then we saw how confident and perceived powerful moralities, whether positive or pessimistic in their worldview, will increase one's capacity for studying futures.

Lastly, we expressed how by challenging one's morality through controversial moralities, one might be able to reveal one's moral obliviousness to increase his ability to study futures otherwise runs the risk of ignoring untapped resources.

6. Before our last theoretical evaluation, we looked at the instability of morality and its pertinence to our subject matter. Here, existing moralities can be interpreted, weighed or translated differently, which must be stressed in order to avoid moral presentism and to discern moralities themselves and to which extent they might impact them, but also on another hand that science might induce moral changes, or the reverse where moralities might direct towards a certain type of innovation. Similarly, responsibility is fluid and flexible, changing throughout eras and cultures, both potentially justifying trying to envision morally controversial futures.

Otherwise, we saw that a futurist might hope being omitted from moral blame through moral luck, being on "the right side of history" out of randomness which further adds to our above points.

Ultimately, we summarized that moral norms cannot be supposed to be valid criteria in FS to judge

a future over another.

7. Lastly in our theoretical side, we mentioned how all the presumed values ascribed to FS have apparently no intrinsic reasons to be so, and that doing so would be submitting to moral presentism and narrowing oneself down.

Also, that for much time the scientist was free of all moral responsibility, as truth (here termed by us as potential future truths) was considered then to be paramount and aiming to ensure a society with those morals would then make him autonomous and able to explore all sorts of futures - officially unbridled from hypothetical outcomes. Otherwise, these would act as invisible barriers to most of us, destroying all chances to see alternatives before one could even perceive them as such – through moral obliviousness.

And to show this impact we mentioned a recent event, the Hi Jiankui affair and his ostracization by the media and the scientific community, while his moral framework permitted him to open and explore (physically) futures that others either refrained from doing or even thinking about, before pointing out that the current condemnation might had been different whether such similar experiment would had been done a 100 years ago or in the future when thinking about morality's intrinsic fluidity.

8. Before our actual research, we reviewed various methodologies and saw their unsuitability to our question. All the 5 traditional schools of study are for one reason or another away from us, similarly with the 3 types of FS.

Layered analysis could be applied but to one's morality directly rather than its actual purpose as we seek to study one's morality and not how morality might influence the future. We saw how the literature is silent on our concerns, and that scenarios' methods show a moral obliviousness as it does not take it as a dynamic factor.

Then NEST-ethics could be used but without forgetting to add present and potential future ethical conflicts to past ones in order to avoid moral presentism and reveal moral obliviousness.

Then before the last point, we rejected the potential lack of plausibility as a discrediting argument against imagining controversial moral futures as being possibly too costly, and lastly that all the various types of moralities should be kept in mind when imagining moral futures to know to which categories does the futurist's morals pertain to as well, and to act accordingly.

RECOMMENDATIONS

Therefore, we can draw few recommendations in order to proceed further, both in order to study in greater depth the phenomenon we revealed as well as its effects, but also towards futurists themselves taking it into consideration in order to broaden their scope and depth, but other scientific fields linked to innovation might have interest in it.

1. First, as a potential novel research project, one could do an experiment where the sampled would rank certain morally filled futures in how they would advocate for them, how morally controversial they think they are, and then have the same sampled ones judge the other's moral controversy in their futures in anonymity.

Here the data might be able to reveal a moral presentism and obliviousness according to how one perceives himself to be morally controversial in the futures they propose or advocate for in comparison to how their colleagues perceives them to actually be, but there are many other experiments which can be imagined for this aspect.

2. Finding empirical values defining the concept of creativity and doing an experiment in FS might also be another path to develop further now that the two concepts have been linked and hinted at being related.

According to what we found to be positive or negative towards creativity, potential related psychological traits such as conformity, schizophrenia (disordered thinking and behaviour), megalomania (one's belief about one's own power to affect the world), paranoia (anxious or fearful feelings and thoughts often related to persecution, threat, or conspiracy, but also imagining diverse arrays of potentialities), tolerance (the ability or willingness to tolerate the existence of opinions or behaviour that one dislikes or disagrees with), sympathy (understanding someone else's suffering rather than feeling it) and a general detachment, are all examples which could be taken into account in further studies.

3. As a solution to our thesis's question to whether one's morality is a factor of creativity in studying futures or not, we propose that it is, and therefore that it must be taken into account in order to free us from chains to our innovative potential that most of us are not even able to perceive

because of their intrinsic property of unproblematic acceptance.

4. There must be made lists of moralities and derived scenarios from the past, present, and potentially in the future in order to, as an exercise or to be include as a novel methodology to develop, create moral dilemmas which would then have greater chances to reveal one's moral obliviousness.
5. Also, a policy of moral tolerance and freedom alike to those of the Freedom for Science movement must be upheld in FS to first prevent a moral lock-in in the field and the futurist himself, but also to ensure the greatest freedom of thought in the matter of studying diverse futures through varied moralities with fears or invisible barriers to futurists.
6. Then, by empirically studying the effects of various moralities as factors of creativity in studying the futures, a system and a ranked model, and therefore if desired, a direction to follow might be put into existence in order to maximize the innovative potential of each futurist in their field, ultimately opening our present and future to much greater potentialities freed from an imperceptible moral prison and puppeteer.

LITERATURE AND SOURCES

1. Beck, Ulrich. "Risk Society Revisited: Theory, Politics and Research Programmes." *The Risk Society and Beyond: Critical Issues for Social Theory*, 2000, 211–29.
<https://doi.org/10.4135/9781446219539.n12>.
2. Bell, Wendell. "Professional Ethics for Futurists: Preliminaries and Proposals." Academia.edu, 1993. https://www.academia.edu/6132731/_Professional_ethics_for_futurists_Preliminaries_and_proposals_.
3. Bell, Wendell. "Foundations of Futures Studies: Human Science for a New Era Volume II: Values, Objectivity, and the Good Society." *Long Range Planning* 30, no. 4 (1997).
[https://doi.org/10.1016/s0024-6301\(97\)84590-6](https://doi.org/10.1016/s0024-6301(97)84590-6).
4. Blue-and-Orange Morality. TV Tropes, August 2010.
<https://tvtropes.org/pmwiki/pmwiki.php/Main/BlueAndOrangeMorality>.
5. Boenink, Marianne, Tsjalling Swierstra, and Dirk Stermerding. "Anticipating the Interaction between Technology and Morality: A Scenario Study of Experimenting with Humans in Bionanotechnology." *Studies in Ethics, Law, and Technology* 4, no. 2 (2010). <https://doi.org/10.2202/1941-6008.1098>.
6. Boulding, E. *Building a Global Civic Culture: Education for an Interdependent World*. Syracuse: Syracuse University Press, 1988.
7. Bridgman, P. W. "Scientists and Social Responsibility." *Scientific Monthly*, vol. 65, no. 2 (1947): 148–154. <https://doi.org/10.1080/00963402.1948.11460173>.
8. Brown, Mark B. "Politicizing Science: Conceptions of Politics in Science and Technology Studies." *Social Studies of Science* 45, no. 1 (2015): 3–30. <https://doi.org/10.1177/0306312714556694>.
9. Collier, Jane, and Lilian Wanderley. "Thinking for the Future: Global Corporate Responsibility in the Twenty-First Century." *Futures* 37, no. 2-3 (2005): 169–82. <https://doi.org/10.1016/j.futures.2004.03.027>.
10. Collingridge, David. *The Social Control of Technology*. New York: St. Martin's Press, 1982.
11. Cyranoski, David. "Should Scientists Toy With the Secret to Life?" *The New York Times*, January 28, 2019. <https://www.nytimes.com/2019/01/28/opinion/crispr-genes-babies.html>.

12. Dator, Jim. "Women In Futures Studies And Women's Visions Of The Futures -- One Man's Tentative View." *The Manoa Journal of Fried and Half-Fried Ideas*, January 2, 1994, 40–57.
13. Davis, Michael, and Kelly Laas. "'Broader Impacts' or 'Responsible Research and Innovation'? A Comparison of Two Criteria for Funding Research in Science and Engineering." *Science and Engineering Ethics* 20, no. 4 (2013): 963–83. <https://doi.org/10.1007/s11948-013-9480-1>.
14. de Saille, Stevienna, and Fabien Medvecky. "Innovation for a Steady State: A Case for Responsible Stagnation." *SSRN Electronic Journal*, (2015): 1-23. <https://doi.org/10.2139/ssrn.2685948>.
15. de Saille, Stevienna. "Innovating Innovation Policy: the Emergence of 'Responsible Research and Innovation.'" *Journal of Responsible Innovation* 2, no. 2 (2015): 152–68. <https://doi.org/10.1080/23299460.2015.1045280>.
16. Douglas, Heather E. "The Moral Responsibilities of Scientists (Tensions between Autonomy and Responsibility)." *American Philosophical Quarterly* 40, no. 1 (2003): 59-68. <http://www.jstor.org/stable/20010097>.
17. Eveleth, Rose. "Why Aren't There More Women Futurists?" The Atlantic. Atlantic Media Company, September 4, 2015. <https://www.theatlantic.com/technology/archive/2015/07/futurism-sexism-men/400097/>.
18. Faye, Guillaume. *Archeofuturism: European Visions of the Post-Catastrophic Age*. London: Arktos Media, 2010.
19. Floridi, Luciano, and Andrew Strait. "Ethical Foresight Analysis: What It Is and Why It Is Needed?" *Minds and Machines* 30, no. 1 (2020): 77–97. <https://doi.org/10.1007/s11023-020-09521-y>.
20. Glenn, Jerome C. "Psychological and Ethical Considerations When Teaching Futures Studies." *Futures* 29, no. 8 (1997): 731–36. [https://doi.org/10.1016/s0016-3287\(97\)00053-0](https://doi.org/10.1016/s0016-3287(97)00053-0).
21. Greely, Henry T. "CRISPR'd Babies: Human Germline Genome Editing in the 'He Jiankui Affair'." *Journal of Law and the Biosciences* 6, no. 1 (2019): 111–83. <https://doi.org/10.1093/jlb/lbz010>.
22. Hartley, Sarah, Warren Pearce, and Alasdair Taylor. "Against the Tide of Depoliticisation: the Politics of Research Governance." *Policy & Politics* 45, no. 3 (2017): 361–77. <https://doi.org/10.1332/030557316x14681503832036>.
23. Hartmann, Nicolai, and Andreas A.m. Kinneging. "Moral Values," 2017. <https://doi.org/10.4324/9781315124766>.

24. Hoffmann-Riem, Holger, and Brian Wynne. "In Risk Assessment, One Has to Admit Ignorance." *Nature* 416, no. 6877 (2002): 123. <https://doi.org/10.1038/416123a>.
25. Inayatullah, Sohail. *The Causal Layered Analysis (CLA) Reader: Theory and Case Studies of an Integrative and Transformative Methodology*. Taipei: Tamkang University Press, 2004.
26. Inayatullah, Sohail. *What Works: Case Studies in the Practice of Foresight*. Tamsui, Taipei, Taiwan: Tamkang University Press, 2015.
27. Ketola, Tarja. Foresight strategies and practices based on regional religious values and global virtue ethics. *Fennia* 184: 1, (2006); 27–36. Helsinki. ISSN 0015-0010.
28. Kidder, Rushworth M. *Shared Values for a Troubled World: Conversations with Men and Women of Conscience*. San Francisco: Jossey-Bass Publishers, 1994.
29. Kolata, Gina, and Pam Belluck. "Why Are Scientists So Upset About the First Crispr Babies?" *The New York Times*, December 5, 2018. <https://www.nytimes.com/2018/12/05/health/crispr-gene-editing-embryos.html>.
30. Lübke, Hermann. "Scientific Practice and Responsibility." *Facts and Values Martinus Nijhoff Philosophy Library*, 1986, 81–95. https://doi.org/10.1007/978-94-009-4454-1_6.
31. Masini, Eleonora Barbieri et al. "Report on Working Group 1, 5th Annual Conference on Futures Studies." *WFSF Newsletter*, (1976), 22.
32. Masini, Eleonora Barbieri, and Fabienne Goux-Baudiment. *Penser Le Futur: L'essentiel De La Prospective Et De Ses méthodes*. Paris: Dunod, 2000.
33. Masini, Eleonora Barbieri. *The Futures of Cultures*. Paris: Unesco, 1994.
34. McCormick, Donald W. "Spirituality and Management." *Journal of Managerial Psychology* 9, no. 6 (1994): 5–8. <https://doi.org/10.1108/02683949410070142>.
35. Nandy, Ashis. *Traditions, Tyranny and Utopias: Essays in the Politics of Awareness*. New Delhi: Oxford University Press, 2004.
36. Nietzsche, Friedrich. *Also Sprach Zarathustra*. Leipzig: Fritzsche, 1886.
37. Notten, Philip W.f Van, Jan Rotmans, Marjolein B.a Van Asselt, and Dale S Rothman. "An Updated Scenario Typology." *Futures* 35, no. 5 (2003): 423–43. [https://doi.org/10.1016/s0016-3287\(02\)00090-3](https://doi.org/10.1016/s0016-3287(02)00090-3).
38. Owen, Richard, Jack Stilgoe, Phil Macnaghten, Mike Gorman, Erik Fisher, and Dave Guston. "A Framework for Responsible Innovation." *Responsible Innovation*, 2013, 27–50. <https://doi.org/10.1002/9781118551424.ch2>.

39. Poli, Roberto. "Ethics and Futures Studies." *International Journal of Management Concepts and Philosophy* 5, no. 4 (2011): 403. <https://doi.org/10.1504/ijmcp.2011.044985>.
40. Pyysiäinen I. Utopian kartta. In Fingerroos O & T Taira (eds.). *Uskonnon paikka. Kirjoituksia uskontojen ja uskontoteorioiden rajoista* (2004), 53–70.
41. Sardar, Ziauddin. *Future: All That Matters*. London: Hodder & Stoughton, 2013.
42. Schwartz, Shalom H., and Wolfgang Bilsky. "Toward a Universal Psychological Structure of Human Values." *Journal of Personality and Social Psychology* 53, no. 3 (1987): 550–62. <https://doi.org/10.1037/0022-3514.53.3.550>.
43. Slaughter, Richard A. "Professional Standards in Futures Work." *Futures* 31, no. 8 (1999): 835–51. [https://doi.org/10.1016/s0016-3287\(99\)00039-7](https://doi.org/10.1016/s0016-3287(99)00039-7).
44. Stevenson, Tony. "From Vision into Action." *Futures* 38, no. 6 (2006): 667–72. <https://doi.org/10.1016/j.futures.2005.10.009>.
45. Swierstra, Tsjalling, and Arie Rip. "Nano-Ethics as NEST-Ethics: Patterns of Moral Argumentation About New and Emerging Science and Technology." *NanoEthics* 1, no. 1 (2007): 3–20. <https://doi.org/10.1007/s11569-007-0005-8>.
46. Swierstra, Tsjalling, Dirk Stemerding, and Marianne Boenink. "Exploring Techno-Moral Change: The Case of the ObesityPill." *The International Library of Ethics, Law and Technology Evaluating New Technologies*, 2009, 119–38. https://doi.org/10.1007/978-90-481-2229-5_9.
47. Thomas, Bradley. "The Progressive Ideas That Fueled America's Eugenics Movement: Bradley Thomas." FEE Freeman Article. Foundation for Economic Education, March 7, 2019. <https://fee.org/articles/the-progressive-ideas-that-fueled-america-s-eugenics-move-ment/>.
48. Von Schomberg. "From the Ethics of Technology towards an Ethics of Knowledge Policy & Knowledge Assessment." Publications Office of the European Union, June 20, 2007. <https://op.europa.eu/en/publication-detail/-/publication/aa44eb61-5be2-43d6-b528-07688fb5bd5a>.
49. Weiss, Edith Brown. "In Fairness to Future Generations." *Environment: Science and Policy for Sustainable Development* 32, no. 3 (1990): 6–31. <https://doi.org/10.1080/00139157.1990.9929015>.
50. Williams, Bernard. "Moral Luck," 1981. <https://doi.org/10.1017/cbo9781139165860>.

ANNEXE 1 – RESEARCH'S GOOGLE FORM

Section 1 of 5

Evaluation of Morality as a Factor of Creativity in Futures Studies

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⋮

This will be done in 3 sections after a classical classification of respondents. 1st is a categorization of your values and motivations, 2nd is made of short scenarios linked to the theme, and 3rd of a census on experiences about morality as a factor in futures studies, followed by one last important question for us.

Name

This is entirely optional, even if names will never be mentioned in the thesis, and all results are anonymous as well.

Short answer text

Biological Sex *

☐ Male

☐ Female

☐ Other...

Age Group *

☐ 14-21

☐ 22-29

☐ 30-39

☐ 40-59

☐ 60+

How empathetic do you perceive yourself to be? *

Empathetic according to this definition: "One's capacity to understand (but not necessarily feel) other's viewpoints and positions on a matter, and to take someone else's position rather than one's own to view and solve a problem."

	1	2	3	4	5	
Almost not	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremely

How much do you think your morals have guided you in your work? *

Morals according to this definition: "One's general worldviews of what is good and bad, right and wrong, and where the world should be going and acts to help so".

	1	2	3	4	5	
Almost none	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremely

How would you rate your advocacy on this axis? *

	Progressivism	2	Neutral or both	4	Traditionalism
Cultural axis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How would you rate your advocacy on this axis? *

	Socialism	2	Neutral or both	4	Capitalism
Economical axis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How would you rate your advocacy on this axis? *

	Anarchy	2	Neutral or both	4	Authority
Social axis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

After section 1 Continue to next section



Values & Motivations



Here we are asking you how important are each of these values for yourself. All of them were described in a non connotated manner for neutrality's sake. It will be useful to see potential correlations with the next two sections.

Security *

The safety, harmony and stability of society, of relationships between groups and individuals and of oneself. Here we find the values of ensuring general and family security, the reciprocity of favors, a sense of belonging, the preservation of social order, health and cleanliness.

	1	2	3	4	5	
Less important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most important

Tradition/Adaptation *

Respect, commitment, acceptance of the customs and traditional cultural ideas present and or moderation of acts, inclinations and impulses that may disturb or harm others and violate social expectations or norms. Here we find the values of respect for traditions, parents and elders, devotion, acceptance of one's life, humility, and moderation, self-discipline and politeness.

	1	2	3	4	5	
Less important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most important

Generosity *

Preserving and improving the well-being of those with whom one is often in personal contact (closed circle). Here we find the values of helpfulness, forgiveness, responsibility, honest loyalty, mature love for others and true friendship.

	1	2	3	4	5	
Less important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most important

Tolerance *

Understanding, appreciation, tolerance and protection for the well-being of any man or people regardless of their deeds and beliefs, and of nature. Here we find the values of pure egalitarianism, of being one with nature cruel or not, and of openness to all perspectives even as opposed to one's own values.

	1	2	3	4	5	
Less important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most important

Self-Direction/Freedom *

Independence of thought and action, choosing, creating and exploring. Here we find the values of freedom, creativity, independence, determination of one's own goals, curiosity and self-respect.

	1	2	3	4	5	
Less important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most important

Exploration/Stimulation *

The excitement, the newness and the challenge in life, and or the pleasure and sensory gratification of oneself. Here we find the values of having an exciting and varied life, daring and or experiencing the pleasure and enjoyment of life.

	1	2	3	4	5	
Less important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most important

Achievement *

Personal success through the demonstration of skills according to social standards. Here we find the values of ambition, influence, capability, success, intelligence and self-respect.

	1	2	3	4	5	
Less important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most important

Power *

Social status and prestige, control or regency of people and resources. Here we find the values of social power, wealth, the preservation of one's public image, and leadership.

	1	2	3	4	5	
Less important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most important

To maintain and improve the well-being of humankind – alive and not yet born- as well as life sustaining capacities of the earth. How much does this sentence equates with your general values? *

	1	2	3	4	5	
Almost not	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremely

After section 2 Continue to next section

Section 3 of 5

Scenarios of futures studies



⋮
If a person came to you with devised futures so immoral to you, how would often you consider them? *

	1	2	3	4	5	
Almost never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Almost always

How often do you come up with futures which are vastly different from your morals *

	1	2	3	4	5	
Almost never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Almost always

How deep do you explore those widely different futures? *

	1	2	3	4	5	
A brief instant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Up to the core

How often have you proposed such futures to peers/clients/employers/etc...? *

	1	2	3	4	5	
Almost never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Almost always

How often have you seen such futures being proposed by others in your field? (according to your subjectivity) *

	1	2	3	4	5	
Almost never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Almost always

I have experienced someone else's morals shaping/guiding his work or judging mine *

	1	2	3	4	5	
Almost never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Almost always

After section 3 Continue to next section

Section 4 of 5

Experiences & Questions about futures studies & morals



Here we will use the term of morals according to this definition: "One's general worldviews of what is good and bad, right and wrong, and where the world should be going and acts to help so".

I have ____ upheld what seemed then to be accurate yet did not align with my morals *

	1	2	3	4	5	
Almost never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Almost always

I have ____ discarded what seemed then to be accurate yet did not align with my morals *

	1	2	3	4	5	
Almost never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Almost always

I _____ feel that truly acting according to my morals would hinder me in my work *

	1	2	3	4	5	
Almost never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Almost always

On a scale from 1 to 5, how much do you think your morals help you at being more creative? *

	1	2	3	4	5	
Totally unrelated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Heavily improving

On a scale from 1 to 5, how much do you think your morals hinders you at being more creative? *

	1	2	3	4	5	
Totally unrelated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Heavily hindering

I think some values are unforgivable and should not be a part of futures studies *

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I think there is currently a moral consensus in futures studies *

While opinions may diverge within it, there is a general consensus of what is good and bad, and to be seeked or not, etc...

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I have strong oppositions against the status quo and cannot stress explicitly my values, future realities I desire to promote and my underlying presuppositions. *

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I think futures studies should be free from general responsibilities *

General responsibilities are opposed to role responsibilities. The first are those which everyone in society must respect, while the latter is linked to one's role, profession, etc... Here we ask about general responsibilities and not role ones.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

Futures studies ARE free from general responsibilities *

Here we ask your opinion about the status of futures studies regarding this question.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

After section 4 Continue to next section

Section 5 of 5

Thank you very much for your time and answers!



Here is one last question which is has a slight twist from a previous one. Please do not go back to change the first as this would ruin a variable researched here.

To maintain and improve the well-being of humankind – alive and not yet born- as well as life sustaining capacities of the earth. Now, how much does this sentence equates with your desires for Futures studies' aims? *

From Bell's 1993 attempt to define a Futures code of ethics.

	1	2	3	4	5	
Almost not	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremely

Anything else you would like to share? Experiences, Scenarios, about the form itself, recommendations or your personal feedback, or to get in contact with me to discuss further? (Optional)

Long answer text

ANNEXE 2 – GOOGLE FORM'S COLLECTED DATA

Biological Sex	Age Group	How much do you think your empathetic morals do you perceive yourself to be?	How much do you think your morals have guided you in your work?	How would you rate your advocacy on this axis? [Cultural axis]	How would you rate your advocacy on this axis? [Economic axis]	How would you rate your advocacy on this axis? [Social axis]	Security	TraditionA	Generosity	Tolerance	Self-DirectionF	Exploration	Stimulation	Achievement	Power	being in humankind – alive and not get born-as well as life sustaining capacities of the earth. How much does this sentence equates with your general values?
Female	30-39	4	5	Progressive	Neutral or both	Neutral or both	5	5	5	5	4	4	4	5	4	4
Female	40-59	5	5 sm	Progressive	Neutral or both	Neutral or both	5	5	4	5	5	4	4	4	2	5
Female	40-59	4	5	Progressive	Neutral or both	Neutral or both	5	4	5	4	5	5	5	3	2	5
Female	40-59	5	5 sm	Progressive	Neutral or both	Neutral or both	5	4	5	5	5	5	5	5	5	5
Female	40-59	4	4 sm	Progressive	Socialism	Neutral or both	5	4	5	4	4	4	4	4	3	4
Female	40-59	4	Neutral or both	Neutral or both	Neutral or both	Neutral or both	5	4	5	4	4	4	4	4	4	5
Female	40-59	4	5 both	Neutral or both	Neutral or both	Neutral or both	5	4	5	4	4	4	4	4	4	5
Female	40-59	3	4 both	Progressive	Neutral or both	Neutral or both	4	4	4	5	5	5	5	4	3	4
Female	60+	5	5 sm	Progressive	Neutral or both	Neutral or both	4	4	5	3	5	2	4	4	3	5
Male	30-39	4	4 sm	Progressive	Neutral or both	Neutral or both	4	2	4	4	4	4	4	3	2	3
Male	30-39	5	4	Neutral or both	Neutral or both	Neutral or both	3	2	5	5	3	4	4	2	3	5
Male	40-59	5	3 both	Neutral or both	Capitalism	Neutral or both	5	3	5	5	5	2	3	3	3	5
Male	40-59	5	4 sm	Progressive	Neutral or both	Neutral or both	4	4	5	4	5	4	4	4	3	5
Male	40-59	4	4 sm	Progressive	Socialism	Neutral or both	3	1	4	5	5	5	5	3	2	5
Male	60+	4	4 sm	Progressive	Neutral or both	Neutral or both	4	4	5	4	5	4	4	5	4	4
Male	60+	4	4 sm	Progressive	Neutral or both	Neutral or both	5	1	4	5	5	4	4	3	2	3
Male	60+	5	5 sm	Progressive	Neutral or both	Neutral or both	5	3	5	5	5	5	5	5	3	5
Male	60+	4	4 sm	Progressive	Neutral or both	Neutral or both	3	2	4	5	4	3	3	3	2	5
Male	60+	4	5 both	Neutral or both	Neutral or both	Neutral or both	4	3	4	4	4	4	4	4	2	5
Male	60+	4	5 both	Neutral or both	Neutral or both	Neutral or both	5	5	5	4	5	4	4	3	3	5
Male	60+	4	5 sm	Progressive	Socialism	Neutral or both	4	3	4	4	5	5	5	3	1	5
Male	60+	4	5 sm	Progressive	Neutral or both	Neutral or both	3	2	3	5	4	4	4	4	1	5
Male	60+	4	5 sm	Progressive	Neutral or both	Neutral or both	3	2	5	4	5	3	3	2	2	4
Male	60+	4	4	2	2	2	5	4	5	4	5	4	4	4	3	5
Male	60+	3	4 sm	Progressive	Neutral or both	Neutral or both	4	2	4	3	3	4	4	2	3	3
Male	60+	4	4 sm	Progressive	Neutral or both	Neutral or both	5	1	4	5	5	4	4	3	2	3
Male	60+	4	5 sm	Progressive	Neutral or both	Neutral or both	5	3	5	5	5	5	5	5	3	5

ANNEXE 3 – 8 VALUES TRANSFORMATION

	Self-Di- rection /Freedom	Generos- ity	Toler- ance	Security	Explora- tion /Stimula- tion	Achieve- ment	Tradition /Adapta- tion	Power
Average	4.6	4.5	4.4	4.3	4.0	3.6	3.1	2.7
Exponen- tial	95	88	79	73	53	35	23	15