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1. Introduction

“Since the internet is both an information and communication medium and a new form of infrastructure on which the most varied activities and forms of social life are enacted, there is no easy way to remain outside it. Rather, we should learn as much as possible of its qualities in order to manage it better.”

~Sinnika Sassi¹

For a sociological master's thesis, picking a topic that concerns the internet seems both obvious and problematic: On the one hand, it plays a huge role in modern society. But consequently, the topic is so far-reaching that an analysis needs a focus within that field. However, merely scrutinizing pre-established social phenomena on the internet – for example, racism on the internet – presents the danger of misinterpreting the world wide web only serving as a medium of transportation.² While it is also important to analyse pre-existing matters (such as racism) in the digital, there is a distinct sociological quality to the intricacies of the internet and its structural consequences. The consequences and conditions regarding access to it as well as its application cause the internet to induce new societal implications beyond being a tool of convenience and speed. Its effects are of a quality of its own, yet reach far into every fibre of our modern world and its logic, with limited choice for us to truly opt out:³ The modern business world runs on the internet as its logistic network,⁴ and search engines⁵ and social networks⁶ are not only increasing in power, but their algorithms also determine which parts of the seemingly world wide web people actually perceive.⁷ This very facet – how approach and usage of the internet vary among people – is the focus of this thesis.

1 Sassi 2005: p. 697.

2 For an analysis of why this is off the mark, see *ibid.*: p. 694.

3 Cf. Levinson 1999: pp. 150, 154f, Schmutzer 1997: p. 232 (referencing Kapor 1995), Sassi 2005: p. 692, referencing van Dijk 1993, 1999, and Leopold 2013.

4 Sassi 2005: p. 692.

5 Cf. Graham / Schroeder / Taylor 2014: p. 190.

6 The most prominent example for a social network is probably Facebook, at least in Central Europe. (cf. Horchert 2014)

7 Cf. Parramore 2010.

Politically speaking, the relevance of the internet has become canonical.⁸ The EU has introduced the concept of Digital Champions, which are supposed to “*support an integrative digital society*”.⁹ Yet, the means to assess the success of integration are not uniformly defined,¹⁰ and the more differentiated such an analysis is intended to be, the more elaborate and costly it will be. In consequence, studies often focus on sheer access¹¹ or perform a secondary analysis of already collected data.¹²

Thus, despite the Internet’s undeniable and immediate importance for modern society, sociological research and analyses struggle to keep up with the speed of changes in the field,¹³ additionally burdened by the cost of in-depth research and the diversity of development across the nations.¹⁴ There is very little in-depth research on the digital divide in Austria. Previously established long-term assessments regarding media usage could not reflect and adequately grasp the digital logic of the internet. Different theories, often from different backgrounds, were competing, and application-oriented studies often were rather technological in their approach.¹⁵ Even though its self-description sees the Digital Champions looking further than mere differences in availability of access, when the Austrian state secretary of media met with Austria’s Digital Champion, the official report only mentioned the percentage of Austrians who had never accessed the internet.¹⁶ Yet, an evaluation conducted within the frameworks of the aforementioned EU initiative saw Austria ranging above average as far as connectivity goes, but not without issues as far as skills were concerned.¹⁷ However, that conclusion came from a self-assessment question, which is often problematic.¹⁸ This goes to show that even with a broad approach and reach, assembling a complete picture of the situation is a very complicated task.

This thesis was written with the advantage of having access to a nationwide dataset on internet use¹⁹ originally gathered in 2013. It was framed with international

8 Cf. Böcking / Rickens 2014.

9 WKO 2014.

10 See chapter 3.2 for an overview of the various assessments.

11 Cf. Science.Orf.at 2011.

12 For example, see Dudenhöffer / Meyen 2012.

13 For an example how much changes in just one year, cf. Horchert 2014.

14 For example, the role and history of the internet in Central Europe is different from that in South America.

15 Cf. Friesenbichler 2012: p. 17, referencing McNeal et al. 2005. Also see Stark 2009: p. 132.

16 Cf. Bundeskanzleramt Österreich 2013.

17 Cf. WKO 2014.

18 Cf. van Deursen / van Dijk 2010: p. 897, referencing Hargittai and Shafer 2006.

19 I want to thank Prof. Dr. Roland Verwiebe and the Department of Sociology Vienna for purchasing

theories and research information, and hence fills a considerable desideratum in research. While pursuing this goal, this thesis aims to include both expansive theories, such as Bourdieu's habitus theories, as well as particular empirical findings (for example, by van Dijk / van Deursen) and interpretational theories (for example, Kruse's distinction between Digital Residents and Digital Visitors). This is to be able to interpret the findings both from a more global perspective (using the aforementioned theoretical background) as well as to differentiate the more nuanced intricacies of the specific field (applying the knowledge gathered from previous research and decided theories).

All in all, the question raised by this thesis is embedded in a considerable democratic dilemma: Over the last couple of years, the internet has become so important that non-participation in the digital is a less rewarding option for most people with every passing day. On the one hand, the demography of the internet has thus shifted from the tech-savvy user-base it had featured during its humble beginnings over 20 years ago. But on the other hand, are the most promising and rewarding strategies in the new worlds of the internet really accessible for all, or still restricted to certain groups?²⁰ Will the digital era diminish pre-existing gaps, create new ones, or merely widen the old ones?

Or, in one sentence: How intertwined are socio-demographic factors and styles of internet use in Austria?

The thesis will be divided into three parts:

First off, the theoretical background on assessing media usage as well as the state of international research will be presented (chapter 2), and while doing so, hypotheses will be deducted (see chapter 4 for an overview).

Second, the database (chapter 3), the methodological approach (chapters 5 and 7) and the operationalization of the theory (chapter 6) will be explained and detailed.

said database for me.

20 Cf. Litt 2013: p. 613, referencing Warschauer 2003: p. 9.

And finally, the results will be detailed and interpreted according to the theoretical foundation, state of previous research and hypotheses posed (chapter 8). These results and findings, as well as possible future impeti will be summarized in chapter 9.

2. Theoretical and research framework

“The Internet is the fabric of our lives.”

~Manuel Castells²¹

This thesis will be founded on empirical findings as well as on theoretical approaches. The theoretical basis serves to grant an extensive overview of the general societal context as well as to classify the concrete findings with regards to a bigger picture. On the other hand, the empirical findings allow a deeper understanding of the very particular characteristics of the subject matter at hand, as well as allow the sharpening of more general theoretical assumptions in relation to the digital field.

The aim is to prepare tools that allow us to understand what the actions of people imply on a sociological level (validity of analysis), tools to understand why they behave that way (i.e. the principles at work), and tools to analyse what the consequences and implications of this are (change of social order or reproduction). The first part, concerning the validity of interpretation, will prove especially useful for operationalization purposes. The second, regarding the reasons an principles at work, will be especially helpful for the interpretation of data. Finally, the consequences of the cycle observed will be important for understanding the bigger picture and observed interdependencies. Hence, always minding compatibility between them, various sources for the various aspects of these deliberations will be used.²²

First off, Pierre Bourdieu and his theories regarding various forms of capital and habiti will allow us to interpret behaviour in regards to invisible rules to which it adheres, thus both interpreting the “why” and the “what”-dimensions behind people's

²¹ Castells 2001a: p. 1.

²² Meaning, this thesis will not be founded on one major theory, but on various theories as well as on empirical sources.

actions. This also allows us to both comprehend what leads to specific actions as well as what follows them, as Bourdieu sees incorporated social rules beneficial to the status quo. Which is why Bourdieu's theories will also serve as a basis for the basic hypothesis that, at least in terms of social order and hierarchy, little will change, despite the digital ruckus shaking the world.

Both drawing from Bourdieu and criticising him, Martina Löw and her theory of room is also to be covered, for the very simple reason that the internet can be interpreted in many ways: As mere means to an end, or as a space itself (i.e. having an influence of its own). In order to come up with a clear-cut definition as to how internet will be treated in the following, Löw and her analyses on what rooms actually are and what their implications and influences are will be scrutinized.

Much like Bourdieu, Löw sees little room for change, as the structure of social events permeates new fields as well. Thus, both the various theories on digital divide as well as some arguments against the status quo will be examined: Marshall McLuhan and two of his colleagues, Paul Levinson and Bruce R. Powers, raise various arguments pointing out that a lot of things are about to change in the era of digital communication. Since McLuhan's method of analysis is often very peculiar, it often grants a refreshing perspective on what people are actually doing when they, for example, communicate on the internet.

Finally, Jürgen Habermas's work will be used to identify the background and consequences of a certain usage of digital media. His work on a critical public and its importance for the birth of democracy is often alluded by calling digital communities the modern equivalent of the salons of the 18th century,²³ and as such deserves further investigation.

Since a lot of these analyses and deductions by various authors revolve around the same topics, the chapters are structured by theme, not by author. Of course, the theory of habitus is Bourdieu's very own, but even in that chapter, other writers' thoughts will be quoted as well. One prominent example would be the aspect of gender, which will be mentioned in every chapter, but has none of its own – simply because it allows to draw a much more concise picture by applying this dimension in context.

23 Cf. for example Wehner 1997: p. 130.

Several empirical studies have also already been mentioned. The most noteworthy findings of these as well as impulses given as to which aspects deserve further inspection will be included in this chapter. Again, the purpose of these chapters is to introduce specific modes of thought that allow us to understand what must be scrutinized as well as theoretical tools able to grasp and analyse these matters.

2.1. Habiti, capitals and perception of possibilities

“the past remains present and active in the dispositions it has produced”

~Pierre Bourdieu²⁴

With the advent of television came a drastic reduction of cost for educational programmes (in both senses of the term). Hope arose for this to be a step towards equality, closing gaps and propelling the general level of education forward. However, despite the access being free of economic toll, these theoretical possibilities did not result in equal actual usage.²⁵

Skipping ahead in time, to the era of digital media, it is the case again that many hope for it to usher into a world where its new doors are open for everyone.²⁶ But again, media usage differs greatly between various groups of population. The most basic explanation for this being that new media was simply designed with a specific (wealthy) audience in mind.²⁷ But – why does this matter if it is free for everyone?

Pierre Bourdieu's theories allow us to take a step back and analyse the other side as well: The people and the structure of their lives. What could prompt one to resort to such seemingly self-afflicting behaviour – to not use certain options which they are entitled to, henceforth falling (further) behind?

Bourdieu uses the term *habitus* to describe a person's inscribed behaviour. Habitus is acquired “*anti-intentionalistic*”²⁸ and “(p)roduced by the incorporation of a social

²⁴ Bourdieu 2000: p. 64.

²⁵ Cf. Eichmann 2000: pp. 166, 284, 291f.

²⁶ Cf. Warren / Stoerger / Kelley 2011: p. 7.

²⁷ Cf. Eichmann 2000: p. 249.

²⁸ Böning 2009: p. 129, referring to Gebauer 2003: p. 168. German original: “*anti-intentionalistisch*”. If the original quote was not in English, the original will only be quoted if there is a chance of subtleties or rhetorical nuances getting lost in the translation.

structure in the form of a quasi-natural disposition that often has all the appearances of innateness”,²⁹ and is a product of the structure³⁰ and quantity of various forms of capital a person possesses. One of them is economic capital, which means what capital usually implies, i.e. access to money. Social capital encompasses access to networks and connections as well as such obligations, whereas cultural capital concerns education.³¹ Cultural capital encompasses certified cultural capital (e.g. a degree, meaning it is limited to formal knowledge), objectified (e.g. a valuable painting, owning which does not make the possessor an expert of the arts) and incorporated (e.g. knowledge or experiences such as having visited a museum).³²

Furthermore, there is symbolic capital, which is of “*explicit or practical recognition*”.³³ It can be described as a sort of prestige, and symbolic power grants the possessor to dominate in a very subtle manner.³⁴ It triggers a previously incorporated habitus and causes people to behave in a certain way³⁵ – it is never noticed but merely understood that one 'must' act a certain way in a specific situation.³⁶

It must be noted that the theory of capital is very complex. The total volume of capital available is not the only deciding factor when forming a habitus: The structure of available forms of capital as well as the history of such capital – the biography of the individual – also play a role.³⁷ As such, interaction between gender, class position, age, ethnicity, religion, bodily and mental capacities as well as sexual preferences form one's habitus.³⁸ This vast array of indicators is not included in the database which will serve as the basis of this thesis, as such, other means will have to be used.

29 Bourdieu 2000: 169.

30 Cf. Walter 2001: p. 36.

31 Cf. Bourdieu 1983: p. 185.

32 Cf. Walter 2001: p. 36.

33 Bourdieu 2000: p. 242.

34 People are manipulated and forced to a certain behaviour without them even noticing it, as behaving in a certain way is not perceived as a deliberated choice or even a conscious choice at all (cf. *ibid.*: p. 149).

35 Cf. *ibid.*: pp. 169f. This should not be interpreted as immediate and obvious means to make people abide, such as a police officer showing his badge: It manifests itself in much more subtle and sublime mechanisms, such as “*in the logic of feeling or duty*” (*ibid.*: p. 180) in everyday situations. Ultimately, the adopted behaviour is no longer perceived as learned but as 'natural', as in the 'natural' way for a man or woman to walk or talk (cf. *ibid.*: p. 141). Hence, habitus not only reproduces the very social structures that produced it (cf. *ibid.*: p. 145), but makes it appear timeless, leading to self-fulfilling prophecies (cf. *Ibid.*: p. 184).

36 As such, with many of the theories presented here, understanding it serves to allow a comprehension of the structure at work. It is not feasible to assess a depletive habitus profile for individuals based on the dataset used for this thesis.

37 Cf. Walter 2001: p. 36.

38 Cf. Löw 2001: pp. 227f.

Also, since Bourdieu's theories are rather intricate, simply expanding the forms of capital seldom proves fertile, unless one were to re-assess all of Bourdieu's findings, as his theories are closed, so to speak. Although this has happened before,³⁹ it is more in line with Bourdieu's theories to add certain activities and resources to a form of capital. For example, Tondeur et al. perceived skills with information and communication technologies (= ICT) as being a modern part of cultural capital.⁴⁰

Built around the (however multidimensional) available capitals, the resulting habitus is incorporated, being a form of "*bodily knowledge*".⁴¹ Just as one cannot just decide *not* to blush in a situation they have come to know as awkward, overcoming the habitus would require "*a thoroughgoing process of countertraining, involving repeated exercises*".⁴² However, it is unlikely one will ever get as far, as for one, a certain habitus is what is perceived as best fit for a certain mixture and quantity of capital. Thus, unless one has, figuratively, 'come a long way' in their life, both their resources and their surroundings will actually prefer or demand a certain habitus.⁴³ And, furthermore, habitus determines "*the thinkable and the unthinkable*",⁴⁴ which means certain contingencies are never perceived as such – the way one does certain things is perceived as *the* way to do such things, with no alternative even thinkable. Thus, not only which ones are preferable or realistic, but merely, what options one is *aware of* is connected to their habitus.⁴⁵

Although certain uses of digital media are just one click away for everybody, the requirements to actually utilize them are not equally distributed. The ability to even perceive that option, for that thought to cross the mind, is structurally dissimilar, which corresponds with van Deursen / van Dijk's findings:

39 Cf. Thornton 1996, who argued for the introduction of a *subcultural capital*.

40 Cf. Tondeur et al. 2010: p. 162. The results were that "*SES (author's note: socio-economic status) (...) affected computer attitudes, use and competencies, but did not impact upon computer ownership*". (ibid.: p. 164)

41 Bourdieu 2000: p. 128.

42 Ibid.: p. 172.

43 Having 'come a long way' would require one to have arrived and settled in a surrounding to which one's own habitus is only partially compatible, which also makes this outcome less likely: Not only would it be very hard to 'import' certain tasks and rituals into one's daily habit, but doing so would potentially draw animosity from both the current reference group (where one comes from) as well as the members of the group those acts stem from (where one intends to go to).

44 Ibid.: p. 97.

45 Or, as Löw puts it rather drastically: Perception *itself* is bound to the habitus. (cf. Löw 2001: p. 209)

“Structural usage differences appear when particular segments of the population systematically and over longer periods of time take advantage of the serious Internet activities they engage in, while others only use the Internet for everyday life and entertaining activities.”⁴⁶

Applied to the digital world, this means that playing a game on Facebook rather than reading an in-depth paper does not imply a conscious decision against the latter: It is not even perceived as an option to read it, let alone as a naturally appealing one. Neither is it actively chosen to play such games, but understood as naturally. What people do in such situations is adhere to informal rules, not decline possibilities.⁴⁷

However, that is not to say that abolishing the habitus would be preferable. As Bourdieu warned of both extremes, *“(i)f (...) accommodation has the upper hand, then one finds rigid, self-enclosed, overintegrated habitus (as in old people); if adaption predominates, habitus dissolves into the opportunism (...) incapable of encountering the world and of having an integrated sense of self.”*⁴⁸ This means, one can only feel 'at home' in a social sense thanks to one's habitus. But it comes at a price. The principle of distinction makes us feel kinship towards certain things, but also distance to others. To distinct means to classify, identify and differentiate between things or people, or more abstractly speaking, social concepts such as gender roles.⁴⁹ But as distinction also concerns such elementary matters – not only gender and its expectations (taking a further step back: the idea of gender itself), but also what is perceived to be 'right' or 'wrong' - it is not only down to personal opinion. The state acts as a *“somewhat biased”*⁵⁰ umpire. While this ensures collectively shared principles, it also means that even though the criteria for such legislation is not based in a-historic reason but history,⁵¹ it is thus given a hierarchical order and the appearance of being objective.

46 Van Deursen / van Dijk 2014: p. 523.

47 There is also Goethe's more poetic approach: *“None are more hopelessly enslaved than those who falsely believe they are free.”* (Goethe 1809). Originally: *“Niemand ist mehr Sklave, als der sich für frei hält, ohne es zu sein.”*

48 Bourdieu 2000: p. 161.

49 Cf. *ibid.*: p. 134 and p. 141.

50 *Ibid.*: p. 127.

51 Cf. *ibid.*: p. 94. This makes these criteria ultimately normative axioms.

The general belief in objective criteria also results in “*legitimate taste*”,⁵² meaning, the 'right' taste will be widely accepted as such, even by those who do not share it. *Distinction* in this case means to distance oneself from taste defined to be 'lower', whereas *pretension* means to strive to adapt 'higher' taste.⁵³ Distinction is always most sought from those who are perceived to be the closest to oneself - “*social identity lies in difference, and difference is asserted against what is closest, which represents the greatest threat*”.⁵⁴

In short, the parameters for right and wrong regarding taste and behaviour are set by few but accepted by all: Those already in power ensure their habitus will continue to be the one prevailing, whereas other habits might not fare so well, resulting in “*deserving poor*”.⁵⁵ And the ones not favoured by these parameters will not question them, but rather do their best to distance themselves from those who they perceive to be further down the scale. Because those bested maintain the appearance that it is down to individual effort whether one succeeds. There can be no individual glory without individual blame.⁵⁶ But if distance to those 'ahead' of oneself was uncovered to be both meaningless and arbitrary, then so would be distance to those 'below' one. This would mean that none of the successes one had made in life would necessarily have been personal achievements, for they could have very well been the results of other factors. Worse yet, not only would one not be solely responsible for these

52 Bourdieu 1987, quoted via Taubert 2006: p. 206. German original: „*legitimer Geschmack*“.

53 Cf. Walter 2001: pp. 36f. The fact that Bourdieu assumed that there was universal orientation towards one specific ideal, with alternative patterns of ideals being a mere surrogate for those who cannot achieve the legitimate ideal (cf. Bourdieu 1982: pp. 154f), was often criticized. However, he argued that counter-culture might be able to create a valid market for the capital possessed by its devotees (cf. *ibid.*: p. 167), which led to Thornton analysing the logic of subcultural capital (cf. Thornton 1996). While it does not fully settle the argument of modern culture being fragmented and not universally applicable nowadays (i.e. there is not the one canonical culture one can counter), it shows that Bourdieu might have actually seen room for such developments in his theory.

54 Bourdieu 1979, quoted via Ferrier 2014.

55 Bourdieu 2000: p. 79.

56 In fact, this serves as a very potent explanation for the active seeking of individual responsibility of groups originally at disadvantage. See Nafus 2014: p. 674: “*Women in the community (...) expressed embarrassment with being connected to inclusion efforts through their gender, such as support groups for women. Others took it as an occasion to assert that they were the only ones responsible for their own careers.*” Structural inequality is seen as something to prevail against, not something to change: “*participants instead kept intact the possibility that through sheer individual zeal, nearly all paths are open. The notion that there is something systemic about the exclusion of women troubles the powerful sense of agency these women experience through beliefs about choice.*” (*ibid.*: p. 676)

accomplishments, but also a powerless figure in a haphazard game, with no abilities to change one's fortune

This all calls for a belief in the justness and objectivity of the rules. For this, Bourdieu uses the term *doxa*, which marks the “*sphere of the unquestioned and fatefully given*”,⁵⁷ with the specific notion that those currently dominated are rightfully dominated.⁵⁸ Not only is the social order and positioning just, but there exists no thinkable alternative: It is the *only* way.

However, there is also field-specific *doxa*,⁵⁹ which is called *illusio*. Such *illusio* contains “*the fundamental belief in the value of the stakes of the dispute*” and “*does not belong to the order of explicit principles, theses that are put forward and defended, but of action, routine, things that are done, and that are done because they are things that one does and that have always been done that way.*”⁶⁰

Illusio contains both the implicit rules of a field as well as the belief that it is desirable to engage oneself in the field.⁶¹ This means that members of other fields, who do not share this belief in the field can observe the behaviour installed of other fields incredulously, making the belief in the *illusio* seem like a belief in an illusion.⁶²

Illusio thus entails the credo: This is a particular position and belief, but it is the most sensible. This distinction is crucial, because while contesting the rules contained by the *illusio* is not to be expected, at least the rules are perceived as specific. However, according to Bourdieu, *doxa* comes with such a non-reflected assumption of natural truth that it is “*always wrong per se*”.⁶³ One example from the field of internet and technology were the difference between *doxa* and *illusio* is both crucial and demonstrative is that gender *must* not play a role when it comes to judge the worth of a programmer's code.⁶⁴ Not that it does necessarily empirically not – it *must* not.

57 Beer / Bittlingmayer 2009: p. 50. Originally “*Sphäre des Unhinterfragten und schicksalhaft Gegebenen*”.

58 Cf. *ibid.*: p. 49.

59 Cf. Koller 2009: p. 79, referencing Bourdieu 1996b.

60 Bourdieu 2000: p. 102.

61 Volbers 2009: p. 62, referencing Bourdieu 2001f: pp. 19f.

62 Cf. Böning 2009: p. 130, referencing Bourdieu 1998c: p. 143.

63 Koller 2009: p. 80.

64 Specifically, Nafus 2012 discovered this general assumption among programmer of the Open Source scene. For more information cf. Nafus 2012.

Because if gender were to distort the perception of the quality of one's work, the work would no longer speak for itself, and one's personal achievements would be jeopardized, as it was this very *"(constructed) truth status of code (that) secured a person's place"*.⁶⁵ This means that it *"cannot matter because if it did, participants would have to confront their creations as made by social force rather than revealed ontological fact."*⁶⁶ The question is whether this assumption is doxa or illusio.

If it were illusio, the way code is reviewed at the moment is merely perceived to be best practice and just. If it were doxa, it would be assumed that there can be no other sensible way to assess a code's worth. Given the universalism attributed to the determining factors of a code's quality,⁶⁷ it at least seems likely that it really is perceived to be the only way, hence, part of a doxa. So, though it would actually be welcome by these communities for more women to actively engage in them,⁶⁸ to apply measures to include more women would create a bigger problem. It would destroy the illusion of egalitarianism, that *"(g)ender-blind sexism"*:⁶⁹ *"women's absence posed fewer problems than the method to change it."*⁷⁰ In other words, it would contradict the doxa.⁷¹

All of these are various facets of habitus and capital's tendency to rules not being questioned but rather protected. As such, social difference is readily reproduced, and you *"become what you are (and what you have to be)"*.⁷² If one grows up in a household where reading is promoted and comes to recognise it as a pleasant pastime, they will fare better in a school surrounding than those who perceive it as reading alone already being work. The paths to possible success in both cases are paved very different, yet the play-field is perceived as level. Which, again, they *must* be perceived to be in order for the rewards of adhering the rules to be of any value.

65 Ibid.: p. 679.

66 Ibid.: 680.

67 Wrongfully so – cf. *ibid.*: pp. 677f.

68 Cf. *ibid.* p. 670, where it is noted that only 1.5% of the people active in this scene are female (with reference to Ghosh et al 2002).

69 Ibid.: p. 672.

70 Ibid.: p. 674.

71 The doxa is especially prevalent in such Open Source communities, where there is no money to be earned, and thus, emphasis is put on other means of rewards (such as idealism or personal prestige): *"a scant 1.5 percent of F/LOSS participants are women (Ghosh et al., 2002), while women constitute 28 percent of people in technical roles in firms which rely on closed intellectual property arrangements (Evans et al., 2007; Ghosh et al., 2002)."* (Nafus 2012: p. 670)

72 Bourdieu 2000: p. 218.

Similarly, the duty as well as the right to pick up a *legitimate*⁷³ newspaper correlates heavily with education titles.⁷⁴ The same applies to how accustomed and familiar one is with and in certain surroundings in general and is not limited to access to cultural capital.⁷⁵ For example, the further consequences of such varying habitus in later life would be the that those who grow up going to business trips with their parents and being at meetings will adopt to these methods and later on feel much more at home in such a surrounding. This will also be picked up by those in charge of hiring people at such enterprises – they will pick those they feel a kinship to, reproducing social structure, because the people they hire are likely to have a comparable background. Such kinship can be as basic as body language, which is also part of the habitus. The 'natural' way for a man or woman to walk or talk has to be learned and incorporated.⁷⁶ Such differing behaviour of course also includes different media preferences and usage strategies, and can extend to online activities, such as serious discussions.

HYPOTHESIS 1A

The habitus governs seemingly individual decisions. The style of internet usage depends on sociodemographic factors. Clusters will differ by gender, age, cultural capital and the social position.

Relevant variables: Gender, Age, Formal education, Employment status.

However, for a system to provide rules that make it unlikely for people to question or change them is not at all a sign of mischievous or evil nature. It implies self-prevention and stability, but also rigidity as well as universality, which brings forth certain problems. If we assume that such access is so universally achievable that it can be a requirement for the organization of our state, yet it is not as universal as it claims to be, that brings upon a problem for democracy. And indeed, ensuring that every

⁷³ Meaning: Canonically accepted as culturally valuable.

⁷⁴ Cf. Bourdieu 1982: p. 695.

⁷⁵ Cf. Treibel 2000: p. 216.

⁷⁶ Cf. Bourdieu 2000: p. 141.

citizen be educated enough to be able to have an informed opinion and judgement was one of the cornerstones of modern democracy.⁷⁷

Bourdieu's theories remain to serve as a very insightful basis to explain seemingly self-afflicting behaviour and analyse social stratification. They are thus very useful to profoundly analyse behaviour concerning internet usage, and have been applied as such before.⁷⁸ Dudenhöffer and Meyen argued that there were three reasons in particular that made the theory of habitus a good fit: That it was aimed at the analysis of social inequality, strived to overcome the boundaries between structure-centred and actor-centred theories and was well established in media usage research.⁷⁹

2.2. Old difference and new divide

“(E)xclusion from (the Internet and other computer networks) is one of the most dangerous forms of exclusion in our economy and in our culture.”

~Manuel Castells⁸⁰

Going by the logic of Bourdieu, new fields and rooms do not present a new frontier yet to be claimed. Quite contrary, Habitus and capital as well as unequal distribution to the means to shape these fields ensure the reproduction of old hierarchies. But what about mere access?

Martina Löw argues that in order to arrange rooms, one must first have access to them – although not sufficient by itself, this is the most basic requirement.⁸¹ Transferring this question into the digital realm, the question arises how access is divided, and what the consequences of this access divide are. However, some are of the opinion that mere technological access alone will not be the deciding factor to allow for participation on a level that will allow one to keep up with the competition: How one uses the internet is as broad a question as a “*how do you use electricity*” is.⁸² Which

⁷⁷ Cf. *ibid.*: p. 68.

⁷⁸ Cf. for example Dudenhöffer / Meyen 2012 and Tondeur et al. 2010. Also see Walter 2001: p. 41, Taubert 2006: p. 206, and Eichmann 2000: p. 16 for lifestyle research concerning internet usage referring to the concept of habitus.

⁷⁹ Cf. Dudenhöffer / Meyen 2012: p. 10. The results were that “*there are still gaps in internet usage (gender, generation, and education gap)*” (*ibid.*: p. 8) and that a capital gap was to be assumed.

⁸⁰ Castells 2001a: p. 3.

⁸¹ Cf. Löw 2001: p. 212 (with reference to Kreckel) and *ibid.*: p. 40.

⁸² Leopold 2013.

is why there are also theories opting for the inclusion of a second level divide, the skills divide.⁸³ Those championing a skills divide rather than an access divide argue that the binary assessment of internet usage implies “*an element of technological determinism that ignores the social context in which the technology is incorporated*”,⁸⁴ thus the binary model “*lacks sufficient sociological sophistication*”.⁸⁵ The concept of skills divide harkens back to the theory of knowledge gap, which assumes that

„(a)s the infusion of mass media information into a social system increases, segments of the population with higher socioeconomic status tend to acquire this information at a faster rate than the lower status segments, so that the gap between knowledge between these segments tends to increase rather than decrease.”⁸⁶

One basic assumption of the knowledge gap is thus that knowledge is “*considered more important than other benefits, such as consumption and entertainment*”.⁸⁷ As such, it is scholastically hierarchic.⁸⁸

Similar to the distinction between the access and the skills divide, Sinikka Sassi distinguishes between two hypotheses: The weak hypothesis and the strong hypothesis. The former argues that

“(d)ifferences will remain to a certain extent, since people naturally differ from each other”, whereas the strong hypothesis “*suggests that the emergence of the information society will create new social cleavages and strengthen old ones. (...) groups which are already well networked via traditional forms of ICT will maintain their edge in the digital economy.*”⁸⁹

The latter mirrors the assumption of the knowledge gap.

Being aware of the concept of habitus, the weak hypothesis's suggested 'natural' differences are questionable, especially when it comes to the use of a primarily

83 Cf. Zillien 2006: p. 97.

84 Jung / Qui / Kim 2001: p. 509, via: Zillien 2006: p. 93.

85 Webster 2002: p. 97, via: Zillien 2006: p. 94.

86 Tichenor / Donohue / Olien 1970: pp. 159f, quoted via: Zillien 2006: p. 71.

87 Van Deursen / van Dijk 2014: p. 509.

88 For a general critique of the deceptively objective appearance of such assumptions, see Bourdieu 2000.

89 Sassi 2005: p. 686.

abstract object such as the computer. The weak hypothesis also states that the “*temporary gap*” carved by (not) adopting to the new technology early on will “*close eventually*”, which gives it a certain kinship to the access divide. However, that “*disparate skills and the ability to use the internet*” will “*eventually*”⁹⁰ (a hardly objectionable, as empirically non-assessable claim) become equally distributed clashes with both the main point of the access divide as well as with the empirical situation.⁹¹ Hence, as the access divide is both diminishing⁹² and relatively banal in its sociological consequences (*potentially* doing *something* particular on the internet is hardly a solid scientific basis), whereas the skills divide is both widening⁹³ as well as much more in-depth, this thesis will opt for a skill oriented analysis as well as adopting the strong hypothesis.⁹⁴

There are several more distinctions that can be made as to along which axes the division actually lays. In her acute analysis regarding the plethora of potential foci to scan for division, Sinikka Sassi also distinguishes between four different approaches, which “*although in practice (...) often interconnected, are theoretically distinguishable*”: *the technocratic approach, the social structure approach, the information structure and exclusion approach; and modernization and capitalism.*”⁹⁵

The technocratic approach, which focuses on “*technological opportunities*” as well as “*access, competence and content*”,⁹⁶ will not play a large role for this thesis. The same reasoning as against a first level divide applies: The mere availability of internet access is only the first of many steps when it comes to actual use (although an important one as well).

With the social structure approach, “*the point of departure is the existing social structures and the unevenness of internet use*”,⁹⁷ meaning that “*the uses and features*

⁹⁰ Ibid.

⁹¹ Cf. Van Deursen / van Dijk 2010: p. 894.

⁹² Cf. Tondeur et al. 2010: p. 158.

⁹³ Cf. Van Deursen / van Dijk 2010: p. 894.

⁹⁴ Or, to use a strikingly similar historic development: Following the 1920s, radio listeners began to focus more on the actual music played on the radio and “*less on the magic of the instrument that conveyed the music*”. (Levinson 1999: p. 144) Given the fact that the sheer novelty of the medium internet, one so focused on plurality and individual choices, has to have worn off considerably over the last 20 years, it is only reasonable to assume that the style of use is more important than the use itself.

⁹⁵ Sassi 2005: p. 687.

⁹⁶ Ibid.

⁹⁷ Ibid.: p. 688.

of a specific technology stresses society and its societal arrangements".⁹⁸ Here the possibility of a second level divide is seen: *"although access to computers and the internet has soared for people in all demographic groups and geographical locations, the digital divide between the information-rich and the information-poor also persists. For many groups, the digital divide has widened"*.⁹⁹ Such *"systemic inequalities of access map existing and well-known forms of social differentiation very closely"*.¹⁰⁰ Cited factors that carry over are income and education.¹⁰¹ Curious from the perspective of habitus as well as from that of the knowledge gap, it is noted that for

*"the richest groups in society the internet is embedded in the routines of both work and leisure and perhaps has accelerated the blurring of the distinction between the two. For less well-off groups, however, the internet is primarily a communication device, an extension of the telephone and the postal service, and is predominantly used for leisure purposes."*¹⁰²

In other words, what is described here are two very different approaches that seem to concern both the role of technology as well as run through multiple facets of people's lives. Technology alone does not dictate its use so much as do people's unique approach and attitude to it determine its actual use, and thus technology is limited as a *"societal force"*.¹⁰³

What can be gathered from his approach is that access to the internet as well as the ability to use it in prosperous ways is tied tightly to previous distinctions. Financial status is sadly not covered by the dataset used for the thesis, but education is. An analysis of habitus in general is sadly not possible with the used database.

Very much in line with the opening quote by Castells, that exclusion from the internet is *"one of the most dangerous forms of exclusion in our economy and in our culture"*,¹⁰⁴ the information structure and exclusion approach can also provide an

⁹⁸ Ibid., referencing May 2002 and Winston 1986.

⁹⁹ Ibid.: p. 689. This is in harmony with van Deursen and van Dijk's conclusions (cf. van Deursen / van Dijk 2010: pp. 908, 905, 893f).

¹⁰⁰ Sassi 2005: p. 689.

¹⁰¹ Cf. *ibid.* It should be noted that *"particularly sensitive US markers of disparity such as ethnicity"* are also mentioned. (*ibid.*)

¹⁰² Ibid.

¹⁰³ Ibid.: p. 694.

¹⁰⁴ Castells 2001a: p. 3.

insightful perspective. It highlights a different aspect, examining the role of ICT “in a geographical context”,¹⁰⁵ including urbanity of an area, and inquiring about social exclusion. Social exclusion is a rather broad term, by definition including “poverty but also problems in various other areas such as the employment market, democratic activities, the social welfare system and family and social relationships”.¹⁰⁶ Lack of access to the digital sphere and “exclusion of the new lower class from information and communication structures” is bound to drive those people further into exclusion, as a “large portion of this new lower class is very much in the position of an ‘underclass’”.¹⁰⁷ This stresses the dangers for democracy such a development poses, as this “new lower class is deprived of both the obligations and rights of predominantly cultural citizenship”, with “exclusion (...) becoming more significant than exploitation”.¹⁰⁸ Again emphasizing the geographical aspect, it is noted that even within the same city, down-town districts feature high communicational density, whereas suburbs exhibit a medium level of density, and ghetto areas only display a “sparseness”.¹⁰⁹ In general, the “closer the country is to the core, such as France, Germany and Japan, the less self-exclusion there will be and the less it will lead to massive inequality. (...) the greatest inequalities are produced on the periphery.”¹¹⁰ With Austria being close to the core, this means that inequality should play a comparably minor role. Since the only data for such analysis contained by the dataset is the urbanity of the individual's region, this is fortunate. Hence, what will be gathered from the perspective of this approach is that urbanity matters (sadly, inner-city differences cannot be incorporated), and that exclusion can pose to be a danger for democratic participation (and thus legitimization).

HYPOTHESIS 2:

The more urban an area, the better the assumed connection to the internet and the world wide web will be.

Relevant variables: Usage Type with Urbanity.

¹⁰⁵ Sassi 2005: p. 690.

¹⁰⁶ Ibid.

¹⁰⁷ Ibid.: p. 691.

¹⁰⁸ Ibid., referencing Lash 1994 and Lash 2002.

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

In line with this, a study from 2012 found that *“social media (...) seems to offer a channel that supplements established political and civil society organizations, by reaching different and less privileged groups”*,¹¹¹ painting a less drab picture of the online world's impact on democratic inclusion – of course, limited to those already participating online. Plus, another study from 2014 found that *“citizens who write political comments are less likely to vote. It may well be that these citizens are more cynical about politics, especially because these comments are often negative and sarcastic in nature”*.¹¹² So, concluding from these contradicting findings, Kruikemeier et al. are concise with their summary that the *“effects of PIU (author's note: political internet use) are diverse and can be negative as well.”*¹¹³

Finally, there is the modernization and capitalism approach, which is *“more a continuation of, than a distinction from, the (information structure and exclusion approach).”*¹¹⁴ It inquires about the cause of the emergence of information technology, with the *“crucial trends (...) modernization and capitalism”*¹¹⁵ being intertwined: Technology assists *“in controlling and managing very complex modern societies,”*¹¹⁶ and the *“industrial system is increasingly dependent on ICTs as a means of managing the flow of production, distribution and consumption.”*¹¹⁷ And *“(i)f modernization explains the emergence of the net, capitalism can make its consequences more understandable.”*¹¹⁸ This also brings upon a new division of labour, between *“self-programmable, highly productive labour and generic, expendable labour”*,¹¹⁹ where the *“critical quality in differentiating these two is education and the capacity to access higher levels of education”*.¹²⁰ All of this leads to increased inequality, and builds upon already pre-existing individualization of labour and a diminished welfare state.¹²¹

111 Enjolras / Steen-Johnsen / Wollebæk 2012: p. 904.

112 Kruikemeier et al. 2014: pp. 12f.

113 Ibid.

114 Sassi 2005: p. 692.

115 Ibid.

116 Ibid., referencing van Dijk 1993, 1999.

117 Ibid.

118 Ibid.

119 Ibid.: p. 693.

120 Ibid.: p. 692.

121 Cf. Ibid.: p. 693.

As such, not only democratic participation, but societal stability as well, are endangered. However, the scope of this approach is much too broad for the aim of this thesis. What remains, however, is, that certain inequalities are structural, with ICT actually perceived *“not just as another medium, but as an infrastructure in many ways connected to inequalities”*.¹²² Hence, this approach will be used to be aware of societal and democratic endangerment due to further progressing structural inequalities, with ICT being both a result of these inequalities as well as a further cause.

Ultimately, this means that this thesis will analyse second level digital divide matters, along several parameters given by the various approaches just examined. How the internet is used is just as important as that it is used at all, and also, in which way it *can* be used.

2.3. Interacting or interacted?

“the world of multimedia (will) be inhabited by two distinct populations (...): the interacted, and the interacting.”

~Manuel Castells¹²³

Several studies have found that various skills are applied when using the internet. Van Deursen and van Dijk differ between operational internet skills (being able to operate and handle a computer as far as input is concerned), formal internet skills (orienting oneself on the web-pages and in programmes), informational internet skills (looking up information, finding and structuring it) and strategic internet skills (determining a goal and benefiting from reaching it).¹²⁴ This autonomous setting of goals as well as finding a way to achieve them is closely linked to academic habitus in

122 Ibid.: p. 694. This is also very much in line with Martina Löw's assessment of digital spaces – see chapter 2.4.

123 Castells 2001: p. 424, via: Zillien 2006: p. 96. Originally *“die Welt von Multimedia (wird) von zwei unterschiedlichen Bevölkerungen bewohnt werden (...): den Interagierenden und den Interagierten”*.

124 Cf. Van Deursen / van Dijk 2009, 2010, via Van Deursen / van Dijk 2010: p. 896.

principle, and in fact the informational and strategic skills are linked to education.¹²⁵ Only the operational skills-gap is temporary,¹²⁶ but it is the former two which determine one's position in the work field and social life.¹²⁷ As Helsper and Galacz found, (technical) skill alone has very little impact on the actual usage and benefits gathered from it.¹²⁸ In fact, it is primarily those with higher levels of education that use the internet *“for ‘capital-enhancing’ activities, which includes seeking political or government information, exploring career opportunities”*.¹²⁹ Which means that the less educated people miss out on these opportunities, prompting them to fall (further) behind.¹³⁰ De facto, the formal education level has a positive effect on all skills, whereas experience is only affecting operational skills.¹³¹

HYPOTHESIS 3A:

Strategic and Proactive Use of media strongly correlates with academic habitus.

Relevant variables: Formal education with Proactive use.

HYPOTHESIS 3B:

Formal education has a positive effect on technical skills.

Relevant variables: Formal education with Technical Skills.

¹²⁵ Cf. van Deursen / van Dijk 2010: p. 893.

¹²⁶ Cf. *ibid.*: p. 905.

¹²⁷ Cf. *ibid.*: p. 908.

¹²⁸ Via van Deursen / van Dijk 2014: p. 512.

¹²⁹ Van Deursen / van Dijk 2010: p. 511, referencing Hargittai and Hinnant 2008.

¹³⁰ Which is pretty much a textbook example for the Matthew Effect, named so after the passage in Matthew 25:29: *“For unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath.”* (Matthew 25:29, King James Bible)

¹³¹ Cf. van Deursen / van Dijk 2010: p. 905. Interesting enough, higher socio-economic status does not imply higher internet skills (cf. *ibid.*: p. 906), which, due to the constitution of the database at hand, is very convenient, as income was not assessed.

HYPOTHESIS 4A:

Technical Skills do not determine the actual usage.

Relevant variables: Technical Skills with Proactive use, Presence, Social appliance, Educational use.

Sub-classifying the internet skills allows for more specific interpretation of correlations and consequences. Hence, this is not an unusual procedure - for example, Mossenburg et al. also identified “*two components of this skill divide: technical competence and information literacy*.”¹³² However, for this thesis, the level of discrimination will be limited by the database used to process this analysis. It should also be noted, that the aspect of digital literacy harkens back to the general concept of general literacy being useful for structuring information¹³³ and reflection.¹³⁴

HYPOTHESIS 4B:

Technical Skills are higher among younger people.

Relevant variables: Age with Technical Skills.

Communication on the internet has been classified as not a “*technically produced dialogue*”, but rather prompting a “*change of writing and reading processes*”.¹³⁵ While expression of ideas is less restricted by bodily skills in a digital environment,¹³⁶ literacy now takes a more prominent role. The internet has thus been called to be a room for “*cultivation of a so far unknown literacy*”,¹³⁷ and such literacy has even been considered to be equivalent to 'skill' and 'knowledge'.¹³⁸ However, the general idea of literacy not only depending on education but also being of huge influence on

¹³² Bélanger / Carter 2009: p. 133, referencing Mossenburg et al.: 2003.

¹³³ Cf. Eichmann 2000: p. 258.

¹³⁴ Cf. Wehner 1997: p. 134, referencing Boeckmann 1994: pp. 163ff.

¹³⁵ Wehner 1997: pp. 134f. Originally “*technisch reproduzierte Dialog*” and “*Veränderung von Schreib- und Lesevorgängen*”.

¹³⁶ Cf. Levinson 1999: p. 181.

¹³⁷ Wehner 1997: p. 135. Originally “*Das Internet wird als Raum für die Erprobung und Kultivierung einer bislang unbekannten Literalität verstanden*”.

¹³⁸ Cf. Litt 2013: p. 614.

whether passively or actively using media pre-dates the internet by several decades:¹³⁹ Robert Escarpit had concluded that *taste* was not the same as *judgement*: The former was the result of passive consumption, the latter earned and worked for. Thus, as far as literature was concerned, he assumed of a “*caste*”¹⁴⁰ of an educated audience that had influence on the “*literary fact*” - on what a book actually stood for.¹⁴¹ He also associated television with passivity,¹⁴² noting that televised literary works were “*imposed literature*”,¹⁴³ and seeing the educated audience as the one with the power to influence the meaning and reception of a work.¹⁴⁴ This two-fold logic, especially when put as bluntly as “*imposed literature*”, has a modern equivalent on the internet, as Castells argued with the quote above: Having access is not the same as being active online.¹⁴⁵ Said quote is also strikingly similar to what Bourdieu said about the habitus - that it makes the difference between being dominated and dominating.¹⁴⁶

Thus, it not only one aspect of the habitus – education and its consequences – that matters: “*Even in feminist bulletin boards, men dominate the discussion.*”¹⁴⁷ Hence, this illustrates the influence of gender-specific habitus, that men are simply more likely to be confident in their abilities. This can be applied directly to the usage of digital media, as research suggested that “*while men and women did not vary in their performance-based skills, women perceived their skills to be lower than men.*”¹⁴⁸ This is also the reason why self-assessed skills measures will not be used as an indicator of actual skill.

139 For a more recent example, cf. Eichmann 2000: p. 171.

140 Escarpit 1966: p. 120.

141 Ibid.: pp. 83f. Originally “*literarische Tatsache*”.

142 An assumption still shared decades later, cf. for example van Deursen / van Dijk 2014: p. 509, referencing Stern 1995.

143 Escarpit 1966: p. 96. Originally “*oktroyierte Literatur*”.

144 Cf. ibid.: pp. 105, 121.

145 Cf. Castells 2001: p. 424, via Zillien 2006: p. 96.

146 Cf. Bourdieu 2000: pp. 166f. Other authors that put huge emphasis on activity would be Levinson and Kapor, who will be elaborated on later. Bourdieu also noted that the ruled portion of the population was effectively living in passivity, disempowered and without self-determination (cf. Bourdieu 1982: pp. 596f, 602, 604).

147 Löw 2001: p. 100.

148 Litt 2013: p. 620. For general problems of self-assessment, see ibid.: p. 619f.

HYPOTHESIS 4C:

When both possessing the same skills, men are prone to estimate their skills to be of a higher level than women do.

Relevant variables: Technical Skills with Self-Estimation of skills.

This case also serves as an example how learned behaviour is typically and almost indistinguishably linked to gender, yet diminished, once accompanying variables are controlled for. However, the detailed effects of gender on internet use in particular have produced varying findings. Friemel notes that “(b)ivariate analyses suggest a strong correlation with sex, age, and education. However, logistic regression shows that sex becomes insignificant if controlled for other individual factors like age, education and income. (...) Hence, the large gap between males and females (...) (regarding internet use, author's note) is not directly confounded with sex but rather with other factors which are determined by the respondent's sex.”¹⁴⁹ However, as an empiric reality, greater age, Peacock and Künemund found that female gender and low education make it less likely for a person to be active online,¹⁵⁰ implying an interaction between age, education and gender. However, they also note that “non-significance of the gender effect (...) may hint (...) towards an increased importance of educational level”,¹⁵¹ which is in line with Bourdieu's findings that people of low capital resources are prone to resort to traditional gender roles.¹⁵²

¹⁴⁹ Friemel 2014: p. 13. On a similar note, Hilbert 2014 actually came to the conclusion, that in developing countries, being female actually has a positive effect on ICT usage. However, that is only if variables such as employment, income and education are controlled for, which correlate negatively with female gender (cf. Hilbert 2011: pp. 21, 1). From the perspective of Bourdieu, this is only too logical: To have accumulated the same amount of capital as men (which a ceteris paribus comparison implies), despite the odds being strictly against one, means that the implications of the attitude and habitus that led to the possession of this specific amount are likely to be very different. So women who, despite it being very atypical of their gender, have accumulated sufficient cultural capital, must possess an especially academic habitus for them to balance out the typical gender disadvantages. Or, considering the other factors of income and employment: They must have come from a privileged enough position to counter the negative effect of gender on the assumed habitus.

¹⁵⁰ Cf. Peacock / Künemund 2007: p. 198.

¹⁵¹ Ibid.: pp. 197f. They also note that “gender roles do not seem as pronounced at an advanced age as compared to younger age groups” (Ibid.: p. 198, referencing Korupp / Szydlik 2005)

¹⁵² Cf. Bourdieu 1982: p. 599.

HYPOTHESIS 5A:

The negative role of female gender regarding internet use is mediated by age, education and employment status. However, usage differences between genders increase as education decreases, and decrease at advanced age.

Relevant variables: Age, Gender, Formal education with Proactive use, Presence, Skills, Usage Type, Educational Use.

HYPOTHESIS 5B:

High age and low education have a negative effect on sophisticated internet use.

Relevant variables: Age, Gender, Formal education with Proactive use, presence, skills, Usage Type.

The distinction between active and passive use of media is both consequential and tied to education levels.¹⁵³ Thus, it is of little wonder that the online model of structuring texts via hyperlinks not only mirrors the academic ideal of hermeneutic reading,¹⁵⁴ but likewise assumes a critical readership giving feedback and correcting mistakes.¹⁵⁵ This academic approach is embodied in the Wiki-culture,¹⁵⁶ where everybody can edit articles, with the ideal of collectively achieving results. It is a modern equivalent of the educated readership Escarpit assumed, as such participation is heavily regulated by requirements of competence and education. However, in case of the internet, editing a Wiki changes the shape of the internet as well. Assuming that Wikis are not read only by a select few already of academic habitus, this means that the academic habitus makes it more likely for one to promote one's position in the world at large.¹⁵⁷

153 Cf. Schmutzer 1997: p. 232, referencing Kapor 1995, cf. Wehner 1997: p. 131, referencing Flusser 1995, cf. Eichmann 2000: p. 290.

154 Cf. Bühl 1997: pp. 69f.

155 Cf. *ibid.*: pp. 72f.

156 The most prominent example being Wikipedia.

157 One which by academic self-concept already possesses a status higher than opinion, much like profound engagement made the difference between taste and judgement.

HYPOTHESIS 5C:

Higher formal education implies an academic habitus and makes it more likely for users to apply the internet for educational purposes.

Relevant variables: Formal education with Educational use.

Yet, the question is whether an internet increasingly populated by passive 'television-population' will still adhere to these 'old' rule of literacy. Is the reach of Wikis truly universal, or are they actually comprised of rather closed circles, audience and editors having the same background?¹⁵⁸ If we are to assume the ideal of one connected internet, one without invisible borders, then the question raised by Litt is incredibly urgent: „*One area that researchers find internet skills have an impact on is who is producing and sharing content online, or framed another way, who is participating and whose voice is being represented*“.¹⁵⁹ If everybody uses the internet as their window to the world, but only a select few can shape its outlook, this undermines its universal ambition.¹⁶⁰

Also, heavily relying on a technology, the use of which is dependent on other factors, will serve to (further) bolster the importance of these factors. Bélanger and Carter argue that

*"it could be that e-government also contributes to the digital divide", as it "represents yet another technical innovation that certain members of society are excluded from. Benefits such as increased convenience and responsiveness could mobilize the technically savvy while disenfranchising those who are less efficacious regarding computer use."*¹⁶¹

¹⁵⁸As was the case for Escarpit's *literary fact*, cf. Escarpit 1966: pp. 83f.

¹⁵⁹Litt 2013: p. 623, referencing Correa, 2010; Hargittai and Walejko, 2008; Haythornthwaite, 2007.

¹⁶⁰The fear of such a development is not new – cf. Batinic et al.1997: pp. 229f.

¹⁶¹Bélanger / Carter 2009: p. 134.

2.4. Digital rooms and places

“It is the habitus that makes the habitat.”

~Pierre Bourdieu¹⁶²

Martina Löw and her sociological theory of rooms and places shares many common threads with Bourdieu, although she is not entirely uncritical of him (more on that later). In general, Löw distances herself from absolutist room theories, i.e. from those which perceive room to be a container filled with various bodies.¹⁶³ Löw advocates for a relativist theory: That the arrangement of bodies *itself* is what *constitutes* a room. Bourdieu's theory of fields meets that criteria,¹⁶⁴ and Löw also shares his assumption that conflicts rage concerning the authority to define the proper interpretation (a general topic of Bourdieu's theories) of rooms: The questions *“who arranges (with what right, with what power?)”* as well as *“how rooms form, volatilize, materialize or change and thus structure society”*¹⁶⁵ are central to Löw's observations.

Structure-wise, she distinguishes between places and rooms.¹⁶⁶ Places are singular and defined by geographical parameters,¹⁶⁷ and both the target and the result of placements. This act of placing social goods and people as well as primarily symbolic markings (e.g. a 'SMOKING PROHIBITED'-sign) is called spacing. However, this can yield symbolic artefacts that endure well beyond the actual event of such a placement (e.g. the space where the Berlin wall used to be).¹⁶⁸ Summarizing that placed arrangement of people (it is also possible to place oneself) and objects into a room is called synthesis.¹⁶⁹ Synthesis is an individual process and as such produces different interpretations of rooms depending on one's habitus and thus on class and gender.¹⁷⁰

¹⁶² Bourdieu 1991: p. 32, quoted via Löw 2001: p. 32. Originally *“Es ist der Habitus, der das Habitat macht.”*

¹⁶³ Cf. Löw 2001: p. 18.

¹⁶⁴ Fields are perceived as not constituted (strictly) locally but more what would be called environment or scene – there is no *“ruling class”* but the *“field of power”* with Bourdieu's theory. (Cf. Treibel 2000: p. 214, referencing Bourdieu 1989: p. 30)

¹⁶⁵ Löw 2001: p. 151. Originally *“Die Frage, was angeordnet wird (Dinge, Ereignisse, etc.), wer anordnet (mit welchem Recht, mit welcher Macht?) und wie Räume entstehen, sich verflüchtigen, materialisieren oder verändern und somit Gesellschaft strukturieren.”*

¹⁶⁶ German: *“Orte und Räume”*.

¹⁶⁷ Cf. *ibid.*: p. 199.

¹⁶⁸ Cf. *ibid.*: p. 198.

¹⁶⁹ Cf. *Ibid.*: p. 159.

¹⁷⁰ Cf. *Ibid.*: p. 202.

However, singular places can yield multiple rooms, even for one person: You can cook coffee in an office (synthesis #1) and also design a house there (synthesis #2).¹⁷¹ So even though the synthesis of different groups based on the same place can create more commonalities than those based on different places¹⁷², “*the possibility to create differing rooms based on the same place is always given*”.¹⁷³

Rooms also constitute themselves over a course of time. Because of this as well as due to the multitude of potential interpretations of space, what can be empirically measured and assessed is never ‘*the*’ room itself, but merely individual rooms.¹⁷⁴ An example for the constitution of a room over the course of time would be that the rhythmic dancing of people at a discotheque are part of what constitutes the room itself. Without it, it would be a different one. A room consists not only of who is in the room, but also what they are doing.¹⁷⁵ Transferring this logic to the internet, chat rooms would be a prime example of such a situation – if nobody writes anything, the room itself loses its main function and as such practically ceases to exist.

This is because online “*social goods (and on rare occasions people) are linked into rooms via abstraction facilities*”,¹⁷⁶ with the physical place being of no concern according to Löw. This is illustrated by the example of chatting with people from one's bedroom through the internet: Normally, one would not even welcome their neighbours from the bedroom, however, digital worlds continue to erode this seemingly clear distinction between public and private spaces.¹⁷⁷ Given the more recent developments, with social media sometimes featuring users posing for pictures in their bathrooms, this blending and bending of spheres has since left the realm of pure text communication.

¹⁷¹ Löw 2001: p. 160.

¹⁷² Cf. *ibid.*: p. 202.

¹⁷³ *Ibid.*: pp. 200f. Originally “*die Möglichkeit, am gleichen Ort unterschiedliche Räume zu schaffen, (ist) immer gegeben.*” Löw also notes that that women, as well as men of low social status, are more prone to engage in counter-cultural actions and shapings (cf. *ibid.*: p. 186).

¹⁷⁴ Cf. Löw 2001: p. 131. This is also one of the points of criticism Löw shares: To Bourdieu, rooms are structures, with it being systematically impossible for these to be assessed as being procedural. (cf. *Ibid.*: 167)

¹⁷⁵ Cf. *ibid.*: p. 133.

¹⁷⁶ *Ibid.*: p. 196. Originally “*im Computer (...) werden hauptsächlich über Abstrahierungsmöglichkeiten soziale Güter (in Ausnahmen auch Menschen) zu Räumen verknüpft.*”

¹⁷⁷ Cf. *ibid.*: pp. 168f.

As such, the internet is not mere means to transportation of data, but constitutes abstract rooms by itself.¹⁷⁸ More precisely: It is a place with multiple abstract rooms.¹⁷⁹ Löw has argued that connections beyond a place can also constitute a room, for example, cross-town networks can also constitute a room, if synthesized as such.¹⁸⁰ She speaks of “*islands*”¹⁸¹ that can be connected to a room of their own.¹⁸² When moving in public space, one connects multiple island they can 'jump' to. The same logic of connecting multiple locally disparate entities to one room of its own applies to surfing the internet.¹⁸³ Given the fact that Löw notes that moving in public spaces also means connecting them, for example via public transportation (making the 'jump'),¹⁸⁴ this makes the term 'information superhighway' seem strangely accurate.

Of course there is a fundamental difference to real highways: Since the material world is barely concerned in such interactions, the synthesis that takes place online (and as such creates rooms there) remain strictly abstract. However, Löw finds that women use the internet in a more pragmatic manner, looking for information, whereas men are more likely to 'surf' aimlessly from link to link.¹⁸⁵ This is akin to the general spatial strategy women are taught to adapt, which is reductionist (as opposed to the expanding one men learn) – in general, women *move* more goal- and purpose-oriented.¹⁸⁶ Among the other gender-related strategies are expertise in the inclusion of people in the construction of rooms (women) and expertise regarding rooms oriented at social goods (men).¹⁸⁷ This is reflected in gender-typical tests of courage – jumping off a cliff for boys, talking to a stranger for girls.¹⁸⁸ It is also connected to the typical tasks and expectations towards men and women – achievement-oriented and paid employment (men) as opposed to social activities, housekeeping and paid employment (women).¹⁸⁹ This is in line with van Deursen / van Dijk, who write that

178 Cf. *ibid.*: p. 95.

179 Cf. *ibid.*: p. 63.

180 *Ibid.*: p. 51.

181 *Ibid.*: p. 86.

182 Cf. *ibid.* and *ibid.*: p. 103.

183 *Ibid.*: p. 113.

184 Cf. *ibid.*: p. 114.

185 Cf. *ibid.*: pp. 98 and 92.

186 Cf. *ibid.*: pp. 92 and 246ff.

187 Cf. *ibid.*: p. 253.

188 Cf. *ibid.*

189 Cf. *ibid.*: p. 175.

there is “evidence that adult females are more likely to use the Internet’s communication tools, whereas adult males are more likely to use the Internet for information, entertainment, commerce (...) and online gaming”.¹⁹⁰ Furthermore, another study showed that “women, for instance, use the internet more for social reasons, while men use it more for instrumental and solo recreational reasons”.¹⁹¹

HYPOTHESIS 6A:

Women are more likely to use the internet for social means.

Relevant variables: Gender with Social usage.

HYPOTHESIS 6B:

Men are more likely to use the internet for instrumental reasons, hence, they are more prone to Proactive Use.

Relevant variables: Gender with Proactive use.

Löw also likens the abstract method that is required to use the Internet to scientific design or the use of a drawing board (for architects – itself also a rather sophisticated approach).¹⁹² Such proximity of online abstraction and the academic approach is in harmony with what was elaborated on in chapter 2.3..

Rooms, and as such, abstract rooms as well, have a certain atmosphere.¹⁹³ The habitus of those placing as well as of those synthesizing creates a room's atmosphere,¹⁹⁴ which can be perceived as either pleasant or not, depending on one's habitus.¹⁹⁵ As such, it depends on, among other things, gender, class and ethnicity,¹⁹⁶ which raises the ques-

¹⁹⁰ Van Deursen / van Dijk 2014: p. 511, referencing: Jackson et al. 2001, Subrahmanyam et al. 2001, Valkenburg / Peter 2007, Zillien / Hargittai 2009 as well as Schumacher / Morahan-Martin 2001.

¹⁹¹ Tondeur et al. 2010: p. 163, referencing Kennedy et al. 2003. It should be noted that Thornton's argumentation that certain fields of entertainment were originally tailored toward young men as they, unlike young women, earned money. This is exemplified with the example of music scenes in Thornton's analysis (Cf. Thornton 1996: p. 207), but remains a valid “historical” explanation for male predominance in certain fields of entertainment.

¹⁹² Cf. Löw 2001: p. 199.

¹⁹³ Cf. *ibid.*: 204.

¹⁹⁴ Cf. *ibid.*: pp. 217.

¹⁹⁵ Cf. *ibid.*: pp. 208f.

¹⁹⁶ Cf. *ibid.*

tion who will be the 'target audience' of the Internet: Those the content was designed with in mind are most likely to perceive the atmosphere as pleasant. With that in mind, there can be no truly 'neutral' depiction, and a certain atmosphere also implies inclusion as well as exclusion.¹⁹⁷ However, Löw noted that as far as body types go, white men are perceived as neutral as well as discarnate.¹⁹⁸ Mirroring the finding that white men are thus the frame of reference for online activities, Brock argued that ““(w)hiteness” often is the assumed “default identity” of Internet users”.¹⁹⁹ Which would mean that those assumed to be less likely to use the Internet are also less likely to find it to provide a pleasant atmosphere, logically making it less pleasant for them to use it at all:²⁰⁰ *“In many rooms, inclusion and exclusion does not need to be organized via permits or physical violence, but occurs via self-exclusion due to habitus preferences.”*²⁰¹ Which is why Löw summarized the atmospheres as *“(s)ubjectively lived, objectively effective.”*²⁰²

In fact, this is why Löw's theories are such a good fit for the questions asked with this thesis: They all ultimately concern the questions *“what is getting arranged (...), who arranges (with which right, with which power?) and how rooms form, dissipate, materialise or change, and thus structure society.”*²⁰³ The constitution of rooms is socially negotiated if multiple people are involved,²⁰⁴ which makes her theories useful to analyse the deceitful neutrality of technology.

It should be noted that using Löw's criteria of distinction between space and room, the physical address of a website (or any online content) does not dictate a deterministic interpretation.²⁰⁵ That means, how one and the same website is utilized and how

197 Cf. *ibid.*: p. 216.

198 Levinson 1999: p. 121.

199 Brock 2014: p. 1, referencing Taylor / Schejter 2013: vii and p. 311.

200 Löw also writes that computer games are usually not tailored towards the interests of female strategies, resulting in less interest in these games as well. (Cf. Löw 2001: pp. 98f)

201 Löw 2001: p. 215. German original: *„Einschluß und Ausschluß muß deshalb (...) nicht über Verbot oder physische Gewalt organisiert werden, sondern geschieht über Selbstausschluß durch Habituspräferenzen.“*

202 *Ibid.*: p. 217. Originally *“subjektiv gelebt, objektiv wirksam.”*

203 *Ibid.*: p. 151. Originally *“was angeordnet wird (...), wer anordnet (mit welchem Recht, mit welcher Macht?) und wie Räume entstehen, sich verflüchtigen, materialisieren oder verändern und somit Gesellschaft strukturieren.”*

204 *Ibid.*: p. 184.

205 The location of a website's server, which provides the requested data to any computer wanting to access it, is indicated by a distinct IP-address (internet protocol address) and often accessed via an URL (uniform resource locator – for example <http://www.univie.ac.at/>). These addresses allow other PCs to 'find' the requested data. As such, it can be compared to a distinct geographical position, indicated by geographic coordinates.

it is interpreted, in short, which room it constitutes, depends on individual synthesis. That “*the possibility to create differing rooms based on the same place is always given*” is most blatantly illustrated by the act of hacking websites, which essentially means using and manipulating them in ways that were not foreseen and intended by its creators. This means, making the surroundings one's own²⁰⁶ as well as differences in seemingly egalitarian surroundings is also possible online.

However, at least offline Löw also sees the possibility for rooms to induce standardized syntheses and spacings. Löw cites the example of a court room: Even those targeted by the prosecution will acknowledge the rules of the court and assume the 'correct' position. As such, the interpretation of such places becomes homogenized and the rooms are perceived to be objective items. That even those who are at the disadvantage of the rules accept them is, of course, clearly a link to Bourdieu.

But can such homogeneously synthesized rooms exist online? Paul Levinson argues that it is the distinct nature of the Internet to allow individuals to become more actively involved in the process of gathering information, and *not* be reduced to merely receiving,²⁰⁷ with it being conceptually contrary to central authority²⁰⁸ as well as to gatekeepers.²⁰⁹ And in fact, the “*characteristics of traditional media (e.g. low potential of selectivity and accuracy of information) create relative passivity in its use*”.²¹⁰ Furthermore, Levinson explicitly warns of an Internet that is too controlled.²¹¹ Now, if such plurality²¹² in the use and interpretation is constitutive of the Internet as a tool of individual freedom, what would that mean for websites intended for a very singular, linear usage style, such as ones where one fills out a tax form? Would it mean that its concept is diametrically opposed to that?

206Cf. *ibid.*: 200f.

207Cf. Levinson 1999: p. 91. The increased level of control in the online worlds actually lets the linear logic of the alphabet logically rise to its most “*purely or characteristically alphabetic expression*”, (*ibid.*: pp. 49f) but more on that later.

208Cf. *ibid.*: p. 83.

209Cf. *ibid.*: p. 12.

210van Deursen / van Dijk 2014: p. 509, referencing Stern 1995.

211 Cf. Levinson 1999: p. 202.

212 Cf. *ibid.*: p. 124.

2.5. An Internet beyond total freedom?

*“Forget an ambiguous goal like “Internet freedom” – it’s an illusion and it’s not worth pursuing. What we must focus on is creating environments where actual freedom can still be nurtured and preserved.”*²¹³

~Evgeny Morozov

The question whether a certain use of the Internet is true to its spirit or actually opposed to both its structure and functionality obviously has no clear answer. What the *raison d'être* of the Internet is depends on way more general positions. On the one hand, there are those arguing that Internet must be able to serve the free distribution of information. This is both argued to counter oppression and censorship as well as an *“act of enlightenment and democracy”*, installing an anti-point *“to the constantly increasing all-embracing surveillance by state and private economy.”*²¹⁴ This position²¹⁵ presents a *“hacker morality (...) based around a moral liberalism”*,²¹⁶ which led some to call such an Internet *“anarchic”*²¹⁷ as well as to various calls to regulation. On the one hand, these calls have sounded from representatives of the business side,²¹⁸ calling illegal downloading *“egoistic to the core”* and the arguments of the 'hacker-side' providing a mere *“pseudo-political superstructure”*²¹⁹ to justify such behaviour. On the other hand, there have been politicians, calling the Internet both an *“extralegal sphere”*²²⁰ as well as claiming that the *“digital Maoists”* jeopardizing intellectual property were going to *“lose the fight”*.²²¹

When it comes to control and surveillance of the Internet, one key figure as far as the public discussion goes would be former US-intelligence employee Edward Snowden.

²¹³ Morozov 2013.

²¹⁴ Engling et al. 2009: pp. 1f.

²¹⁵ It must be noted that there is no mandatory hacker codex, and there are other interpretations of the underlying values as well.

²¹⁶ Nafus 2012: p. 675, referring Coleman and Golub 2008.

²¹⁷ Eichmann 2000: p. 282. Originally *“das anarchische Internet”*.

²¹⁸ Cf. Sommer 2009.

²¹⁹ Sommer 2009. Originally: *“Der zutiefst egoistische Akt des illegalen Downloadens wird durch einen pseudo-politischen Überbau gesellschaftlich gerechtfertigt.”*

²²⁰ Lischka 2009. Originally: *“rechtsfreier Raum”*.

²²¹ Heveling 2012. Originally: *“Netzgemeinde, ihr werdet den Kampf verlieren!”* and *“digitalen Maoisten”*. Heveling is a member of the German conservative party CDU.

However, it must be noted that the starkly differing positions have been around long before. In 1995, Kapor wrote that there are basically

*„two extreme choices. Users may have indirect, or limited control over when, what, why and from whom they get information and to whom they send it. That's the broadcast model today, and it seems to breed consumerism, passivity, crassness, and mediocrity. Or, users may have decentralized, distributed, direct control over when, what, why, and with whom they exchange information. That's the internet model today, and it seems to breed critical thinking, activism, democracy, and equality.“*²²²

Since 1995, there have been various attempts to strive for a more regulated internet. One of resolutions, the SOPA (Stop Online Privacy Act) had led to the “*biggest internet protest of all time*”,²²³ but what was noteworthy of all these resolutions is that there was no clear line whether or not ‘*the economy*’ would profit. Since they were intended to protect intellectual property by giving means to shut down online-content as well as increased liability of internet-providers,²²⁴ these branches would be at a disadvantage, whereas other sectors might profit from it. This applies to ACTA (Anti-Counterfeiting Trade Agreement) and PIPA (Preventing Real Online Threats to Economic Creativity and Theft of Intellectual Property Act) as well, which had similar aims as well as it faced similar criticism.²²⁵ There were also political arguments, calling the wording of PIPA dangerously vague (actually increasing the uncertainty of the situation),²²⁶ as well as ACTA leading to a “*total surveillance*”²²⁷ and censorship.²²⁸

However, as with *habitus* and *illusio*, it should be reasoned why it could be in the interest of some parties to seek to limit the information flow. For one, passivity is no fertile breeding ground for instability, and it depends on one's personal world-view whether the (im)possibility of unforeseen changes holds more potential for bad or for good. Thus, it is not entirely unexpected for a member of a conservative party to

²²²Kapor 1995, quoted via Schmutzer 1997: p. 232.

²²³Schmitt 2012. Originally: “*sah die Welt den größten Internet-Protest aller Zeiten*“. Considering it being rooted in the idea of restriction-free information-sharing, it makes perfect sense that Wikipedia not only joined the protest, but did so by displaying the message “*Imagine a world without free knowledge.*” (quoted via BBC.com 2012)

²²⁴Cf. *ibid.*

²²⁵Cf. *ibid.*

²²⁶Cf. *ibid.*

²²⁷Feiler 2012.

²²⁸Cf. Zottler 2012.

request for more control over a seemingly free-roaming sphere.²²⁹ And while television, which thrives on passivity,²³⁰ served as a source of collective reality,²³¹ interactivity on the other hand means “*the next step in the fragmentation of the audience*”.²³² Such is the toll for advanced potential for individualism, as these new digital spheres, perceived to be ungoverned by them, leave the traditional milieus disoriented.²³³ On the same hand, more recent developments of the digital spheres led the “*computer freaks*” to shun the commercialization and simplification.²³⁴ Since these two positions contradict each other, unless one perceives it a viable option to simply leave out the traditional class and elderly people of an ever increasingly important aspect of modern life, a certain level of fragmentation has already taken place.

It must be noted, though, that these political agreements just discussed were aimed to be international. National resolutions have neither drawn as much international attention.²³⁵ Structure-wise, limiting access to the internet in certain regions certainly limits the freedom of that region, but does not directly affect the idea of the internet. How truly international the internet is if citizens of North Korea have limited access to it, is questionable, but this factor does not endanger the structural idea of the internet as much as a central authority would. And that is what international agreements and restrictions would do: One of the most central qualities of the internet – for it to be without centre and central authority – would be inverted. Because even though such an international network agreement would be devoid of a

229Whether the general assumption of being devoid of law as well as the choice of wording were appropriate, however, is subject to discussion – one article summarized the situation that a “*backbencher trolled the web-community*” and made “*a mockery of himself*”, as well as calling the article “*desperately yesterday*” and seeing the internet as a mere tool for business syndicates (all quotes Stöcker 2012 – originally: “*CDU-Hinterbänkler trollt die Netzgemeinde*”, “*sich zum Gespött gemacht*”, “*verzweifelt gestrig*”).

230Cf. Eichmann 2000: p. 290.

231Berger / Luckmann 1977: p. 163, quoted via Hepp 1998: p. 205. Also see Luhmann 1996: pp. 120ff.

232McLuhan / Powers 1995: p. 167. Originally: “*Interaktion ist die nächste Stufe der Fragmentierung des Publikums*“.

233Cf. Eichmann 2000: p. 286.

234Ibid.: p. 283.

235For example: The first draft of Australia's resolution regarding internet control was unfavourably compared to China, Iran (cf. Klopp 2010) and North Korea (cf. Stöcker 2010), but caused nowhere near as much media attention and 'web-wide' protest as SOPA did. The head of the ISPA association (Internet Service Providers Austria) openly cited England as a negative example for internet policy, claiming that “*almost every fifth website*” (Sawall 2014) was shut down there, yet again, to much less media coverage.

local centre, it would now install a central source of authority over content.

Whether its reach will affect all of the internet or just certain regions (which would mean that 'the internet' now excludes these regions), the measures of the recent years have already

*“busted (...) myths about the supposed benefits of decentralized and commercially-operated digital infrastructure, about the current state of technologically-mediated geopolitics, about the existence of a separate realm known as “cyberspace.” (...) Decentralization is liberating only if there’s no powerful actor that can rip off the benefits after the network has been put in place.”*²³⁶

Moreover, Evgeny Morozov, author of the previous quotes, also argues that the internet should actually be called *“the Internet”*, in quotation marks, as it is *“not all its promoters say it is or want it to be”*, which would be *“its own marvelous entity”*: *“connectivity does not equal democratization”*.²³⁷ To ensure that such bold ideas, as democratization, are effectively supported, an advocate is needed. As Levinson argues, two spheres – economy and politics – are traditional control entities and protectors of media. Whereas with traditional media, Europe perceived *“(b)roadcasting as a form of postal service, or a vehicle of communication so vital it could not be entrusted in any way to advertisers”*, the American interpretation was that it was so vital, it *“cannot be entrusted to government”*²³⁸ and was thus privately financed.

This two-sided system of support and control is picked up by Astra Taylor, who argues that *“the free market is not the only way to go”* and that government involvement is actually necessary to ensure certain freedoms:

“If we want a room for cultural products and activism, there is no sound reason to expect that Silicon Valley could give us this room. The mission of these companies is to serve investors and shareholders, not the interests of the civil society. Analogies between commercial services and libraries or town-squares do little to

²³⁶Morozov 2013.

²³⁷Leopold 2013.

²³⁸Levinson 1999: p. 75. However, it must be noted that the events of September 11th, 2001 have occurred since Levinson wrote the book, which shifted the balance in the US American system as well.

help – if we want virtual town-squares or digital libraries, they have to be financed directly by public funds.”²³⁹

As such, a championing actor systematically interested in egalitarian development is required. Morozov actually argues that the privatized model, which bolsters an “*information consumerism*”, only leads to monopolies as well as an anti-egalitarian and liberty-harming outcome: “*Information consumerism, like its older sibling energy consumerism, is a much more dangerous threat to democracy than the NSA.*”²⁴⁰

It must be noted that obvious regulations regarding the usage of the internet, such as locking down certain sites, or regulating services, are only the most apparent forms of governing the use, and deciding how we come to interpret the digital worlds. Changes that merely affect how we navigate and use the net can be just as powerful when it comes to shape our worldview, and thus, the digital doxa. In fact, the inventor of the pop-up ad - an online-advertisement that opens itself in a new browser window - claims that this invention is the “*Internet's original sin*”, as it established a system where personalized advertisements are used to gather financial revenue from web services. The consequences of this are grave:

“It’s unlikely that our willingness to accept online surveillance reflects our trust in the American government, which is at historic lows. More likely, we’ve been taught that this is simply how the Internet works: If we open ourselves to ever-increasing surveillance—whether from corporations or governments—the tools and content we want will remain free of cost.”²⁴¹

Which really goes to show that the practical reality of internet usage has a huge influence, and explains why that interpretative authority over the question 'what is the internet?' is so sought after.

²³⁹Lokshin 2014.

²⁴⁰Morozov 2013.

²⁴¹Zuckerman 2014.

2.6. Status quo vadis?

“I see the new approaching, it is the old.”

~Bertolt Brecht²⁴²

There is no homogeneous internet usage, as the strategies and goals pursued on the internet vary a lot. Both those in favour of regulating the internet more strictly as well as those arguing that this freedom is indispensable seem to agree that the internet used to be a place with less restrictions. Hence, it is noteworthy who used to be the demography of the internet. A study conducted in Germany in 1996 found that 74% of the users were male, at an average age of 37 years, 85% possessing an university degree, and 60% offering – mainly scientific – information online themselves.²⁴³ This is coherent with Sassi's statement that *“a white, middle-class and highly educated man as was usual in the early days of the internet”*.²⁴⁴

This in no shape or form reflects the average citizen.²⁴⁵ And as such, it emphasizes the origins of the usage style championed by the 'hacker culture': It is deeply rooted in academic habitus. As Luhmann argued, different types of text require a very different approach (e.g. a poem and a scientific article),²⁴⁶ and Krajewski argued that that the preferred method to navigate and work with links on the internet was hermeneutic reading and in general scientific reading.²⁴⁷ Now, with the user base having a scientific background, it is only logical for them to structure the web and their articles in such a way. It is just not a question of being able to do so, but as seeing it as the logical way to structure such texts. It is the habitus that makes the habitat,²⁴⁸ even if it is not a home but a homepage.

²⁴²Quoted via Mörtenhummer / Mörtenhummer 2009: p. 13. Originally *“Ich sehe das Neue nahen, es ist das Alte.”*

²⁴³Cf. Schmutzer 1997: pp. 218f.

²⁴⁴Sassi 2005: p. 687.

²⁴⁵Using weighted cases (see chapter 5 for more information), the database used for this thesis implied a general population that is 51% female and does not have a degree (81.4%). Since age was assumed in the form of classes, an exact average age cannot be given, however, the statistical mean of the age classes is 3.45, with 3 being 35 to 44, and 4 encompassing 45 to 54 years of age.

²⁴⁶Cf. Krajewski 1997: pp. 69f, referencing Luhmann.

²⁴⁷Krajewski 1997: 69f.

²⁴⁸Cf. Bourdieu 1991: p. 32, quoted via Löw 2001: p. 32.

Speaking of which, the subject of home-pages serves to illustrate the change of demography on the web, as during the earlier days of the internet, the only way to have a dedicated presence on the web was to have a homepage. Free services that provided the storage of this site enabled people to have such a representation. But although there some tools to make it easier to create a web site, the technical skills needed were considerably higher than those required to create a profile on a modern social network.²⁴⁹ However, as far as strictly private users are concerned, personal websites are in line with a profile on social media, not only in that they allow one to be seen on the web, but also in how they are financed. However, with social networks around, the appeal of a personal website as well as the presence of such free hosting services has dwindled.²⁵⁰ This indicates an obvious change of use, and democratization of the user demography.

These two facets – the use as well as the demography – are important, since at the heart of the 'hacker culture' argumentation is the free flow of information. However, a study from 2009 “*revealed that the lower educated are least likely to use the Internet for educational and economic purposes, even when they have similar levels of Internet access and skills*”,²⁵¹ and one from 2014 that

*“people with higher levels of education use the Internet for health information, financial transactions and research, while people with a lower level of education use the Internet for casual browsing, playing games or gambling online”.*²⁵²

In all cases, seeking and accessing information is only part of a specific internet usage style, typically associated with those of a higher education level. The implied original and central purpose of the internet, the free flow of information and, on a more general level, getting oneself engaged in the active hunt for information,²⁵³ are thus specific interests. It might only be fair to call those part of an academic habitus, given that students are also “*more likely to use the Internet for information, personal development, social interaction and leisure than the employed.*”²⁵⁴ Which ultimately would mean that even though the internet “*is a medium through which people can*

249Cf. van Deursen / van Dijk 2010: p. 908.

250Cf. Zuckerman 2014.

251 van Deursen / van Dijk 2014: p. 512, referring to Helsper / Galacz 2009

252Ibid.

253See Levinson 1999: p. 91.

254Van Deursen / van Dijk 2014: p. 520.

*learn and debate, it will be for rich white people rather than for the mass of the world's population.*²⁵⁵

Still, ever since that sentence was written in 2000, some things changed. For one, established 'offline' figures such as nation states and international corporations, are aiming to put online equivalents to established rules in place. However, this means that there is now another force of the status quo on its way: If an internet dominated by academics ensured the homogeneity of its leading class by informal rules, an internet ruled by governments and corporations ensures stability of hierarchy via institutional and structural design.²⁵⁶ None of these spheres are as accessible as they imagine themselves to be, but such is the way of *illusio*. And if existing offline-monopolies were to also extend their reach to the virtual world, this would entail a centralization that would only solidify existing order, diminishing prospects of social change.²⁵⁷ The individually empowering effects of the internet pales in comparison to its structurally involved powerlessness. This is because thanks to the internet, companies have more and more control over the conditions individuals can use their products. Thus, they can shape these conditions in a way that they themselves benefit the usage.²⁵⁸ So if Levinson wonders if after “*radio-presidents*” and “*television-presidents*” (President of the United States Of America – Nixon and Kennedy, respectively – there might be internet presidents which came to power in an era of emphasized literacy,²⁵⁹ this is not to be confused with a promise of emancipation: Change is what keeps hierarchies steady, as those in power set the goals so that currently no one else can compete with them – and by the time others might be able to compete, the goals have already changed.²⁶⁰ This means that there might be a slight change of parameters, but those competing about the title of the president will still be among a select few, of high capital in all areas. No matter whether the online world will be

²⁵⁵Sassi 2005: p. 689, referencing Sparks 2000. This also somewhat mirrors Morozov's reservations (cf. Leopold 2013), since “*it seems highly likely that the internet will fail to realise its undoubted potential as a medium of democratic life*”. (Sassi 2005: p. 689, referencing Sparks 2000)

²⁵⁶Cf. Hack 2014: p. 1.

²⁵⁷Also see Zuckerman 2014: “*Companies like Facebook want get as much of that money as possible, which means chasing users and reach. (...) This centralization has dangers for online speech—it means decisions these platforms take to ban speech are as powerful as decisions made by governments*”.

²⁵⁸Cf. Hack 2014: pp. 2f. For example, this can be done by assessing usage trends and developing profiles, lessening the users privacy and increasing the company's knowledge.

²⁵⁹Cf. Levinson 1999 154f.

²⁶⁰Cf. Bourdieu 1982: pp. 270f.

given predominance over the offline world, or vice versa;²⁶¹ the internet presidents or the television presidents: The result will be dictated by the respective elites. It is a battle among them.²⁶²

In fact, the focus propagated in the digital emphasises (digital) literacy²⁶³ and degrades bodily prowess.²⁶⁴ Since the habitus is incorporated, the body still plays a huge role, but in a much less immediately perceived way. Furthermore, modern technology allows people to create things previously restricted by “*physical adeptness*” by means of programming them; for example music, granting a sort of “*musical gateway from the mind*”.²⁶⁵ That the actual realization of ideas is part of the creative act of making art, is culturally determined,²⁶⁶ but for former means to an end to become obsolete and thus an art in itself is not unheard of. This kind of separation would make the manual prowess a sort of skill in itself, only previously inseparably connected to the act of creating music at all.²⁶⁷

While this development has liberating and empowering elements to it, those who benefit from it are most likely to already be in possession of considerable capital. In fact, as their independence from previously inevitable gatekeepers increases, so does the distance from those already at a disadvantage, as they do not have access to these new options.²⁶⁸ The path of an *internet-president* will be littered with less fortunate members of a digital society.²⁶⁹

261 Which also ignores their intertwined nature - cf. Beuth 2014.

262 Which, according to Bourdieu, is typical – cf. Bourdieu 1982: pp. 462f.

263 Commonly associated with education and a plethora of capital, cf. *ibid.*: p. 780 and van Deursen / van Dijk 2009, 2010, via Van Deursen / van Dijk 2010: p. 896.

264 Commonly associated with culturally remote spheres, cf. Bourdieu 1982: p. 600.

265 Levinson 1999: p. 168.

266 Cf. *ibid.*: pp. 171f.

267 Cf. *ibid.*: p. 148. Levinson uses the example of a Cabriolet, whose means to provide comfortable temperatures were made obsolete by air conditioning, yet became a sort of end of itself, as it became not only literally but figuratively *cool* to ride in a cabriolet.

268 For example, it is nowadays very well possible to do recording of music at one's own home for very little money (provided one has the knowledge to operate the respective tools and programmes – cf. Schwirzke 2008) and distribute it by oneself (provided one possesses the necessary knowledge and skill - cf. Davenport 2013). Strict dependency of gatekeepers such as recording studios and record labels is a thing of the past – for those with the cultural skills to self-sufficiently provide their services.

269 The assumption that the internet was “*anarchic*” (Eichmann 2000: p. 282) is off the mark as is the implication that it had no gatekeepers at all (see chapter 3.7). However, to change the process of selection and abolish old gatekeeping techniques of course presents a problem to those unable to adapt to the new circumstances. The theoretical wish to abolish (traditional) gatekeeping as much as possible is closely tied to the liberal ideology and the academic habitus. Because for many people, the pre-structuring mechanisms of the old gatekeepers provided an egalitarian (some might say: mediocre) restrictions (cf. Levinson: 12).

HYPOTHESIS 7:

Those already in power will remain in a very much favoured and powerful position in the digital sphere.

Relevant variables: Formal education, Employment state with Online presence, Proactive use.

Also, two additional factors must be considered.

First, allies struck are issue-bound. For example, Google and members of the 'hacker culture' can strive to allow for less restrictions of distributing and linking articles.²⁷⁰ This would imply a union between companies and the hackers. However, said hackers also have objections with the lack of privacy on the web, which is the economy model of companies such as Facebook.²⁷¹ Here, the two spheres clash, with some even going as far as pursuing legal actions against the companies.²⁷² And even the nation states and representatives of the economy ultimately do not pursue the same interests as far as online structure goes.²⁷³

And second, although this is a case of clashing world views – each party believes their position to be the one that can save central values from becoming extinct due to the other parties' activities. The nation states argue that their interventions, increased restrictions and confined privacy are needed²⁷⁴ to ensure safety and prevent crimes²⁷⁵ and preserve moral decency²⁷⁶ – apart from democracy, for which it ultimately holds the biggest democratically legitimized responsibility. Representatives of the economy argue that restrictions are needed to ensure economic stability as well as innovations, the latter of which have to figuratively and literally 'pay off'.²⁷⁷ And representatives of the hacker culture argue that more freedom and protection of privacy are needed for

²⁷⁰This in fact took place regarding the *Leistungsschutzrecht* in Germany, cf. CCC 2010 and Niggermeier 2013.

²⁷¹See Tangens 2011, CCC 2011 and Zuckerman 2014.

²⁷²Cf. Fennen 2013.

²⁷³Cf. Böcking 2014.

²⁷⁴However, the person assuming these positions has sometimes little regard to the idiosyncrasies on the internet – cf. Schmitz 2014.

²⁷⁵Cf. Brinkmann 2014.

²⁷⁶Cf. Profil Online 2014.

²⁷⁷Cf. Sommer 2009.

liberty, democracy and innovations.²⁷⁸ Innovations in this scenario are allowed thanks to free flow of novel ideas, and too much governmental influence is actually perceived as a threat to democracy.²⁷⁹

So, even though ubiquitous interests are at stake, there is no harmony about the way to reach them. However, the path ultimately chosen will influence in whose idea the internet will be structured, and thus shape its potential and usage – who will get to set the rules.

So when Levinson states that the gatekeepers, those who almost did not let the Beatles or Karl Popper pass into the public eye,²⁸⁰ are now a thing of the past, he is only technically right. The old gatekeepers have merely become replaced by new, differently operating ones,²⁸¹ and their influence is only increasing.²⁸² Graham et al. mention that as far as the internet is concerned, *“search engines are powerful because they are both gatekeepers and intermediaries”*.²⁸³ While they work differently, Levinson's basic assumption that there is a *“human penchant to lead”* and *“make our own decisions, rather than be spoon-fed by central authority”*²⁸⁴ also harkens back to liberal philosophy. Especially in the environment of the internet, it is highly objectionable whether this desire as well as the possibility to do so are equally distributed. And Levinson's scholar-centric perspective is especially clear when he alludes to the formerly cited Karl Popper: His reference to Thomas Jefferson, that *„the best remedy to misinformation is more information (...) because people have the rational capacity to separate truth from falsity”*²⁸⁵ shows the greater principle behind all of this. Which is Popper's Falsificationism.²⁸⁶ Which in turn is an academic practice. So limited access to certain tools and habits also limit access to such usage of the internet.

²⁷⁸Cf. Engling et al. 2009.

²⁷⁹Cf. Moglen 2014.

²⁸⁰Cf. Levinson 1999: p. 127.

²⁸¹Cf. Maier 2014.

²⁸²Cf. Wehner 1997: p. 140.

²⁸³Graham / Schroeder / Taylor 2014: p. 190. Also see Maier 2014 for an analysis of the role of Google in the modern world.

²⁸⁴Levinson 1999: p. 91.

²⁸⁵Quoted via Levinson: p. 163.

²⁸⁶See Popper 2002.

2.7. Universal fragmentation

“In a broadcast society, there were gatekeepers, the editors, and they controlled the flows of information. Along came the Internet and it swept them out of the way, and it allowed all of us to connect together, and it was awesome. But that’s not actually what’s happening right now.”

~Eli Pariser²⁸⁷

The idea of *“Let me Google that for you”* is the cumulation of both forms of new gatekeeping. For one, *“Let me Google that for you”* it is a website that can be used *“to mock your friends whenever they ask you a simple question they could easily answer themselves with any web browser”*.²⁸⁸ It merely searches the web via Google and displays *“let me google that for you”* above the search bar.

It is also the name of a bill that attempts to make sure that federal agencies rely less on the costly National Technical Information Service if the information they are looking for is readily available via internet search engines: *“When you can use Google to answer a question, use Google to answer a question.”*²⁸⁹

While it makes sense on an economic level, it also explicates two ideals are incorporated into the idea of the site itself.

First: If you want to know something, Google is the way to go.

Second: If you are not able to do so, you are at fault.

The first portion of this set of beliefs goes on to bolster the position of the gatekeeper that is not believed to be one, giving it even more power when shaping perception. Search results are customized to a degree (not only by Google) that is intended to display the results most favoured by the user first. This brings upon convenience, but also also results in the problematic *filter-bubble*²⁹⁰ effect. What weighs severe is the

²⁸⁷Pariser 2011, quoted via Lotan 2014.

²⁸⁸Wiener-Bronner 2014. Or, as the site itself (<http://www.lmgty.com>) puts it, *“For all those people who find it more convenient to bother you with their question rather than google it for themselves.”*

²⁸⁹Kolodny 2014.

²⁹⁰That term was coined by Eli Pariser, who also provided the quote at the beginning of this chapter. It has everybody merely operating in their own reclusive spheres, or bubbles.

sense of innateness this gives to viewpoints: Users can conduct research via Google, with the top results uniformly confirming their point of view – because the results displayed are filtered in a way that is supposed to be akin to their interests. As McLuhan predicted, computers thus brought upon “*the next level of the fragmentation of the audience*”,²⁹¹ and now we are “*not seeing different viewpoints, but rather more of the same*”,²⁹² yet believe that this is all there is to the world. This serves to give one particular position a more (perceived) universal feeling, and actually widens gaps.²⁹³ What is believed to be an all-encompassing and neutral tool to conduct research, a search engine, now gives particular *illusio* and *doxa* an empirical sheen.²⁹⁴

While the influence of algorithms and unconscious filtering has only increased over the years, the “*objective relation to the world*”²⁹⁵ of traditional mass media was never given for the internet; it was always more unlikely than likely for two recipients to see the same thing. Television's illusion of the universal,²⁹⁶ along with literacy's illusion of objectivity,²⁹⁷ are abolished on the internet. In fact, much like the introduction of printing and the mass-production of bibles had previously individualized the search for meaning,²⁹⁸ access to a network believed to be all-encompassing only propelled this development further ahead. Yet, the lack of binding truth, and the reality of plurality and contradictions, means that more knowledge also brings forth more known uncertainty.²⁹⁹ Hence, the search for definite, uncontested truth, the search for meaning, is simultaneously relocated to the supernatural.³⁰⁰ Hence, if clearness is found, it is to be assumed of deceiving origin, effectively further dividing contrary positions, and if plurality is found, it leads to disenchantment. Because for those not

291 McLuhan / Powers 1995: p. 167. Originally “*Interaktion ist die nächste Stufe der Fragmentierung des Publikums*“.

292 Lotan 2014.

293 Lotan 2014 provides a very detailed examination how such selective perception in closed circles goes to worsen the perceived gap in the Gaza conflict, also see Biermann 2014 for a summary and comment.

294 On a more frightening note, Han (via Boeing / Lebert 2014) notes that algorithms that are able to predict our preferences and position, in other words, are able to predict how we will react, can also serve to actively influence one's position – as they know how we will react. And the worst implication of all of it is that such influence will not be noticed.

295 Wehner 1997: p. 140.

296 Cf. *ibid.*: 139.

297 Cf. McLuhan / Powers 1995: p. 101.

298 Cf. Levinson 1999: pp. 121, 124.

299 Cf. Luhmann 1996: p. 126 and McLuhan / Powers 1995: p. 167. It should be noted that Luhmann famously defined mass-media in a way that cannot include the internet, as the communication must be strictly one-way (cf. Luhmann 1996: p. 11). However, some of his general analyses, such as the effects and functionality of irritation, are still applicable.

300 Cf. McLuhan / Powers 1995: p. 133.

in possession of the relevant cultural techniques and capital that are needed to deal with such situations of uncertainty and multiple truths, this new situation is not empowering, but rather overpowering. It does not only allow to, but also demands one to ponder individually which solution to chose. This strategy is not appealing to or available for everybody. Yet, the internet has become so important that participation and access must be sought after by all. But the way the internet had originally been purposed was not in a way that was accessible to all, as it demanded several specific cultural dispositions. Thus, those that use the internet by its 'old' logic, and actively demand for plurality and little regulation those prevail, also in a way promote an internet of the elite. Which leads to the second implication.

Said implication openly mocks those lacking the technical or cultural skills to commence an online search. As a bill, it is supposed to keep costs low. And as a website for private use, it is intended for online distribution, thus only be a minority of those it is aimed at are likely to actually lack these skills – as it claims itself, it is intended to mock people who could answer the question themselves, but chose not to. Yet, other than profound belief in Google, it also displays the belief that engaging in the academic ideal is strictly a matter of *choice*. Both that specific habitus as well as a private monopoly are assumed as the correct (meta)answer to the modern world.³⁰¹ Which is consequential and full of distinctions.

Thus academic ideal – which encompasses doing your own research, to filter information yourself – comes with certain requirements and barriers. As mentioned before, researchers van Deursen and van Dijk found out that the strategic use of the internet and its options was systematically biased in favour of already privileged people. This bias is consequential, as it determines one's position in the work and social life,³⁰²

³⁰¹Marc Prensky had assumed that this difference in attitude also reflected a generational conflict, between those born in the digital age (the Digital Natives) and those that were raised in a different medial climate (the Digital Immigrants): *"The importance of the distinction is this: As Digital Immigrants learn – like all immigrants, some better than others – to adapt to their environment, they always retain, to some degree, their "accent," that is, their foot in the past. The "digital immigrant accent" can be seen in such things as turning to the Internet for information second rather than first, or in reading the manual for a program rather than assuming that the program itself will teach us to use it. Today's older folk were "socialized" differently from their kids, and are now in the process of learning a new language. And a language learned later in life, scientists tell us, goes into a different part of the brain."* (Prensky 2001: p. 2)

³⁰²Cf. *ibid.*: p. 908.

especially since you cannot simply opt out of the modern digital world. As McLuhan / Powers had noted, when it comes to the written word, neither blind faith nor total disbelief will provide one with freedom, but the ability to understand, reflect and evaluate it.³⁰³

Although the choice of source of information on the internet emphasized this principle, being educated enough to be able to form a truly 'well judged' opinion has been a democratic principle ever since the French Revolution. Among other things, it resulted in compulsory schooling.³⁰⁴ There is no such thing as compulsory internet schooling, although, as said before, being adept at the strategic use of internet usually correlates with formal education.³⁰⁵ Ultimately, it seems that the free flow of information is only a priority for the higher educated percentage of the population. To possibly lose something that you never ever use is no threat. And this is not strictly a matter of awareness, as Bourdieu examined, people remote from cultural capital do not bother with cultural activities, because there is no room for them to engage in it.³⁰⁶ As such, not being accessible enough might have very well cost the ideal of free floating information much required backing.

Due to the specific appeal of a 'free' internet, the fears of further governmental restrictions are distributed with a bias. However, the two archetypical usage-styles mirror the two-fold distinction made by several authors, that certain activities enhance the status of one's "*career, work, education and societal position than others that are mainly consumptive or entertaining*".³⁰⁷ And if one were to argue that even if the free flow of information were to suffer, limiting these possibilities for all would in fact bring forth a certain more egalitarian status: Losing these possibilities would come at the price of losing something which social structure itself values highly. The general possibility for education and information would drop. So on a theoretical level, it is a quality that is valued by all, but not on a practical level.

The current unequal distribution also hints at deeper roots of the bias. For example, the self-determinism of the 'hacker culture' is closely linked to liberalism as well as to

303Cf. McLuhan / Powers 1995: pp. 90f, referencing Jaques Elluls: *Propaganda*.

304Cf. Bourdieu 2000: p. 68.

305Cf. van Deursen / van Dijk 2010: p. 909.

306Cf. Bourdieu 1982: pp. 596f. This also applies to politics, cf. Ibid.: pp. 605, 636, 638.

307van Deursen / van Dijk 2010: p. 509, referencing DiMaggio et al, 2004, Hargittai / Hinnant 2008, Kim / Kim 2001, Mossberger et al. 2003, van Dijk 2005, Wasserman / Richmond-Abbott 2005, Zillien / Hargittai 2009.

the open source software scene. Open source software is developed by people in their private time who also disclose the programme's code. This disclosure on the one hand allows for a community that develops and expands software together, and also for more transparency, aiming to provide alternatives to potentially shady corporate products.³⁰⁸ Its demography, again, shows that these alternatives are not appealing to and accessible for everyone: If anything, they depict a demography similar to the internet of 1996, as Bagozzi / Dholakia measured an average age of 31.1 years and 88.1% male users.³⁰⁹ It could thus be described as a bubble as well, as it is not at all representative for the world at large.

And it also means: While this specific demography could probably even manage to find technical workarounds for enforced restrictions, to a large percentage of the population these sought after activities are not even viable without these hindrances. This need not imply that such a secular situation is actively sought by members of the community. As mentioned before, the fundamental belief of such communities is that everybody is the same in front of technology, merely creates a false sense of egalitarianism.

HYPOTHESIS 8:

Usage varies wildly - homogeneous usage types cannot be assumed. Clusters can be identical regarding one or more attributes (for example, gender or education) but differ regarding others.

Relevant variables: Gender, Formal education, Employment status, Usage Type, Proactive use, Social appliance, Technical Skills, Presence.

On a related note, fragmentation is also conveyed as even given overlapping usage, the type of community that constitutes itself online differs a lot from traditional ones. For one, the traditionally assumed collective and shared stock of knowledge and interpretative patterns are not to be found at all.³¹⁰ In fact, body language, mimic,

³⁰⁸As some argue that “*Microsoft and its peers start building software that is insecure by design*”. (Leopold 2013)

³⁰⁹Cf. Bagozzi / Dholakia 2006: p. 1107. This study analysed a Linux user community. Linux is a popular open source operating system. Compare this to the data from Schmutzer 1997: pp. 218f, which found 74% of the users to be male, at an average age of 37 years, and with 85% possessing an university degree.

³¹⁰Cf. Wehner 1997: p. 142.

gesture and tone of voice are lost in a purely literal communication form.³¹¹ But even if vocal dialogue is present, bodily traits are not present, which changes the means of group creation and control.³¹² And “*actions speak louder than words*”,³¹³ as the actors stand for them. Such credibility is crucial for relationships,³¹⁴ but consequently, in an online setting, ties are likely to be very loose, with low threshold to quit once the intended use of the affiliation has run its course.³¹⁵ Peter Kruse also differed between two very different approaches to the digital, not strictly dictated by the medial climate one had grown up in, but the general approach to the new medium internet: He differed between two groups, the Digital Residents and the Digital Visitors. The Digital Residents “*live the digital*”,³¹⁶ whereas the Visitors might be aware of the importance of the internet,³¹⁷ yet only use it as means to an end, not an end in itself.³¹⁸ In fact, the Digital Visitors want “*authentic meetings with real people*”,³¹⁹ whereas Digital Residents want to profit from global creativity, almost devoid of any cost, and also influence societal processes.³²⁰ This parallels the differences between hacker culture, academic culture and the population at large. Being means to achieve individualized interests, the internet homes, for the most part, not solidarity groups, but specialized idea collectives without central authority. As such, it is much more prone to erratic consequences and less stable,³²¹ which can be too much for some, but is decidedly sought after by those championing the internet. As mentioned before, the requisites to align oneself with its particular culture are often understated, but nonetheless present. It is factually promoting selection as to who can participate. This is not to imply ill intention. If anything, this paints the picture of an unwilling elite democracy, which, be it is academic, technocratic or institutional, believes itself to be

311 Cf. *ibid.*: p. 143, referencing Boeckmann 1994: p. 160.

312 Cf. Lorenz 1997: p. 102.

313 Wehner 1997: p. 143.

314 Cf. *ibid.*

315 Cf. Lorenz 1997: p. 116. It should be noted that Wehner refers to three different types of communities present online: 1. Virtual communities, 2. Cultural communities with their own etiquette, providing specific identities, and 3. Functional communities, intended to provide technical solutions (Wehner 1997: p. 130, referencing Hoffmann 1996: p. 113, 115).

316 Bender 2010.

317 Cf. Columbus 2010.

318 Cf. Bender 2010.

319 Kruse 2010: p. 27.

320 Cf. *ibid.*: p. 31.

321 Cf. Levinson 1999: pp. 83f and McLuhan / Powers 1995: p. 169, who analyse the nature of new media versus old forms of media, respectively orality versus visuality.

accessible for anyone,³²² despite reality presenting a much different picture.³²³ But as such – is it that far remote from regular, 'offline' forms of democracy?

2.7. Coffee-houses and critical control

“The civil public stands and falls with the principle of universal access.”

~Jürgen Habermas³²⁴

In the tradition of McLuhan, Paul Levinson argued that *„the future can be rationally measured only in terms of the past“*.³²⁵ This is why the telephone was first called the *“talking telegraph”* - only later one would come to understand that this assertion would prove unable to describe its most crucial features.³²⁶ The internet, too, has seen many such comparisons, one of the most popular being the figure of the 'information superhighway'. However, from a sociological perspective, placing *“electrical communities, being public discussion forums”* in *“the tradition of salons and coffee-houses of the 18th century”*³²⁷ is a more impactful assertion.

The analysis of this tradition of critical discussion in salons is inseparably connected to the name Jürgen Habermas, whose habilitation treatise concerned the *“Structural Transformation of the Public Sphere”*.³²⁸ According to his findings, the roots of civil public lie in the coffee-houses and salons of the 17th century.³²⁹ Such public emerged in exclusion from the public,³³⁰ which might seem paradox. However, this exclusivity was needed to ensure that a *“parity of the educated”*³³¹ could criticise delicate matters, which was previously reserved for a *“privileged minority”*.³³² It must be

322And such a belief in a just 'market' in a more general sense of the term is in fact in line with the liberal philosophy associated with 'hacker culture'. (cf. Nafus 2012: p. 675, refering Coleman and Golub 2008)

323Such is the nature of doxa.

324Habermas 1990: p. 156.

325Levinson 1999: p. 181.

326Ibid.: 15f.

327Wehner 1997: p. 130, with reference to Rheingold, 1993. Originally *“Als öffentliche Kommunikationsforen reihen (elektrische Gemeinschaften) sich ein in die Tradition der Salons und Kaffeehäuser des 18. Jahrhunderts”*.

328Habermas 1990. Originally *“Strukturwandel der Öffentlichkeit”*.

329Cf. ibid.: pp. 90ff.

330Cf. ibid.: p. 95.

331Ibid.: p. 92, originally *“Parität der Gebildeten”*.

332Liesegang 2004: p. 26. Originally *“privilegierten Minderheit”*.

noted that although a *parity of the educated* also seems to imply a *privileged minority*, it was a central quality for this sphere and its public to be “*open on principle*”:³³³ “*Everybody must have a chance to join*”.³³⁴ The representativity of the civil public requires general accessibility, which means everybody must be able to achieve the education required for the debates sought after.³³⁵ This is close to Bourdieu's depiction of the principle of suffrage ever since the French Revolution.³³⁶ In case of the salons, however, such education was needed so that in this setting, social status could be ignored, and they could come together as equals, as “*humans per se*”.³³⁷ Only the “*authority of the argument*”³³⁸ was to prevail, via the “*forceless force*”³³⁹ of superior reasoning.

This idealistic assumption of debates without regards to factors not concerning the content reminds one of the illusion of the neutrality of program-code, and in its negation of the concept of class (in a society still very much dominated by this) also mirrors the principle of the gender-blind sexism.³⁴⁰ Furthermore, it propels the assumption of such discussions being an almost discarnate affair. Such emphasis on mind over body is very much present in the idea of the internet,³⁴¹ where one does not communicate with people, but rather with “*the net itself*”,³⁴² presenting a whole new quality of “*impersonal text*”³⁴³ mounted in a sphere orthogonal to society.³⁴⁴ Central to all this is that arguments and ideas are central, not the people presenting them. However, such idealism is closely related to another of Habermas' works, of the ideal speech situation, in which only understanding, not personal gain, is to be the goal, and only the quality of the argument itself is to be of importance.³⁴⁵ Again, the habitus this is closely related to is the academic one.³⁴⁶ In the case of the internet, not only are certain habits favoured, but illusions of equality biased in their blindness. That is to

333Habermas 1990: p. 98. Originally “*prinzipielle Unabgeschlossenheit des Publikums*”.

334Ibid. Originally: “*Alle müssen dazugehören können*”.

335Cf. *ibid.*: pp. 156f.

336Cf. Bourdieu 2000: p. 68.

337Habermas 1990: p. 121. Originally “*als Menschen schlechthin*”.

338Ibid.: p. 97.

339Brunkhorst et al. 2009: p. 149. Originally “*zwanglosen Zwangs*”.

340Cf. Nafus 2012: p. 672.

341 Cf. Bühl 1997: p. 56 and Levinson 1999: pp. 57 – 60.

342Cf. Harms / Voermanek 1995, via Wehner 1997: p. 136.

343Wehner 1997: p. 135, referencing Esposito 1995, Groys 1996.

344For a similar scenario, see Nafus 2012: p. 669.

345Cf. Treibel 2000: pp. 163, 166.

346Cf. Bourdieu 2000: p. 109.

say, skewed assumptions of neutrality are propelled. As mentioned before, on the internet, white men are considered the neutral ethnicity as well as discarnate.³⁴⁷ What is perceived as neutral thus has a cultural and ethnic quality to it. Certain predispositions – and *habiti* – are not only preferred, but demanded: Nafus' study also mentioned “*color-blind-racism*”, which found people stating that “*the problem (...) isn't that they are Chinese, it is that they “act Chinese”*”.³⁴⁸ This presents a warped version of the discussion ideal, where cultural requirements (such as education) were posed, yet must be obtainable by all. Such is not the case, yet neutrality is assumed. While it is questionable whether these ambitious conditions were ever fulfilled, the global architecture of the internet makes such biased and culturally centred requirements even more problematic.

As there was no such thing as a worldwide information network in the 17th century, the critical civil public required the emergence of a free press guaranteeing free speech.³⁴⁹ Through all the critique of rulers given way by these means,³⁵⁰ the members of the critical public remained private citizens. They did not strife to claim the rule themselves, they wanted to change the principle of rule itself.³⁵¹

HYPOTHESIS 9:

Whether people have access to the internet on their private premises or not influences the assumed usage. For one, to engage in lengthy discussions while accessing the internet in public or at work is unlikely. Second, the relation leisure time is in to professional activity shapes the assumed approach to online usage. Finally, for citizens to engage in discussions as equals is rooted in them doing so as private citizens, decidedly remote from external supervision.

Relevant variables: Usage Type with Proactive use and Presence.

³⁴⁷Cf. Löw 2001: p. 121 and Brock 2014: p. 1, referencing Taylor / Schejter 2013.

³⁴⁸Nafus 2012: p. 675, quoting Nakamura 2009: p. 139.

³⁴⁹Cf. Brunkhorst et al. 2009: p. 149.

³⁵⁰Cf. Greve 2009: p. 26.

³⁵¹ Cf. Habermas 1990: p. 87.

At first, the surge of capitalist production logic worked in favour of the critical public, since it was rooted in private law. This resulted in a sphere independent of the state, privately organized, but with a reach beyond mere private matters.³⁵² However, this would soon change, as the formerly clear distinction between stately and private matters eroded³⁵³ and resulted in an approximation of state and society. This allowed the state to intrude into formerly strictly private spheres, limiting individual freedom³⁵⁴ and enabling stately intervention.³⁵⁵ However, the reduction of culture to mere means to entertainment³⁵⁶ had the formerly “*culture-arguing*” public become a passive “*consuming*” one.³⁵⁷ This allowed for political parties, syndicates and organizations to now claim a monopoly on political character and issues.³⁵⁸ The public sphere was now reserved only for those affiliated with such groups,³⁵⁹ which meant private citizens and the actual public were only rudimentarily involved in this circle of power.³⁶⁰ Which is why public now had lost its political function - to allow for critique and control by a critical public.³⁶¹ It had shifted from being a “*principle of critique*” to being a “*principle of administrative integration*”.³⁶² And even the formerly advantageous capitalist logic had since led to privatization of the world, lending companies political power and function themselves,³⁶³ and promoting the marginalization of the private citizen.

These changes that the idealized salons underwent actually have modern equivalents in the idealized academic internet. It being more and more used as mere means to entertainment, due to a change in user demographics,³⁶⁴ is the counterpart of the reduction of culture to entertainment. The link between such passive use and democratic control has been explicitly made by Kapor, with the internet being seen as a

352Cf. Liesegang 2004: p. 26.

353Cf. Brunkhorst et al. 2009: p. 149.

354Cf. Greve 2009: p. 28.

355Cf. Liesegang 2004: p. 29.

356Cf. Greve 2009: p. 29.

357Habermas 1990: p. 248. Originally “*kulturräsonnierende*” and “*kultrkonsumierende*”.

358Cf. Greve 2009: p. 29.

359Cf. Habermas 1990: p. 337.

360Cf. *ibid.*: pp. 268f, 321; via Greve 2009: p. 29.

361Cf. *ibid.*: p. 223.

362 Liesegang 2004: p. 30. Originally „*vom Prinzip der Kritik zum Prinzip der administrativen Integration*.“

363Cf. Habermas 1990: p. 241.

364Cf. Schmutzer 1997: pp. 216f with modern studies, such as the one used for this thesis.

way towards less passivity and more democracy.³⁶⁵ Levinson, on the other hand, disagreed with the assessment of the political class, that democratic discussion required the affiliation with a political environment such as congress, which granted them, as Habermas stated, monopoly on political decision making: He cited the internet as both means as well as proof for citizens to engage in fruitful democratic discussions and decisions.³⁶⁶ And the increasing influence of corporations, themselves political actors more so than citizens nowadays, finds a modern exhibit when Astra Taylor demands less dependency on such corporations, and more stately granted civic means.³⁶⁷ In fact, Gibson et al. found the internet to host “*an important alternative critical space for party debate*”,³⁶⁸ with of utmost importance no longer being “*a membership base for a party*” but “*that a party knows who its supporters are.*”³⁶⁹ Stately interventionism, on the other hand, is reclaimed by such means as surveillance or shut-downs of websites, and the technical erosion of seemingly clear division lines between private and public spaces was already covered in chapter 2.4.³⁷⁰ Of course, all this took place in fast forward – the internet has been around for less than 50 years, whereas the critical public's rise and fall spanned multiple centuries.

Yet, it can be stated: Not only does the internet mirror the critical public of salons, but it does so with most of its problems, both internal and external. Hence, its limitations, while not new, mirror the critic that was applied to the idea of a critical public. So when Levy praises the internet presenting a “*new orality*”³⁷¹ he is in a line with McLuhan / Powers and Levinson, who saw the simultaneity on the internet far remote from the more controlled linearity of literacy.³⁷² It is also seen to be rooted in a “*culture of the universal*”, granting “*everybody the chance to talk to anybody at any time about any subject*”.³⁷³ Which it does not present, as argued before: Even

365Cf. Kapur 1995, via Schmutzer 1997: p. 232.

366Cf. Levinson 1999: pp. 72ff.

367Cf. Lokshin 2014.

368Gibson et al. 2012: p. 31.

369Ibid.: p. 48.

370Cf. Löw 2000: pp. 168f. Also see McLuhan / Powers 1995: p. 125.

371 Levy 1996: p. 65, quoted via Wehner 1997: p. 126.

372Cf. Levinson 1999: p. 33 and McLuhan / Powers 1995: pp. 169, 120. It should be noted, though, that Levinson notes that the digital allows to assess more control over the oral as well, though, as for example, radio stations can be recorded and listened back to later on as well reeled back. Thus, in the acoustic space of the internet, “*the alphabet (...) finds its most purely or characteristically alphabetic expression*”. (Levinson 1999: pp. 49f)

373Wehner 1997: p. 128, referencing Levy 1996.

ignoring the fact that not everybody has access, not everybody can communicate in a shared language, not everybody can actually read and write, not everybody has access to the cultural techniques and knowledge required for such a discussion: It would still leave the problem of implicit social codes, that regulate inclusion and exclusion of groups. Bodily stigmata might be overcome,³⁷⁴ but the language of expression and wording as well as the actual content still very much create distinction, which is still sought.³⁷⁵

The new thing about these means of discrimination (in the sense that it creates distinction and judgement) is that it takes place in a frame that is intended to imply equality and focus on arguments. But as Levinson put it, the idea that *the spirit is willing, but the flesh is weak* does not account “*when the spirit soars on air or online*”.³⁷⁶ And in fact, a *certain* quality of non-openness, a limited frame of reference regarding the community itself, is part of their constitutional quality.³⁷⁷ The illusion of objectivity that old mass media, which spoke the same to one and all, presented,³⁷⁸ is overcome, and what is rediscovered among such communities is, yes, “*truly reciprocal communicational relations*”.³⁷⁹ As such, the internet with its logic of the acoustic, that favour concurrency over linearity and impedes control, still truly manages to give the “*most purely or characteristically alphabetic expression*”:³⁸⁰ Like with Escarpit's literal ideal, not everybody is addressed by the messages,³⁸¹ but the sender and receiver are to share a certain background.³⁸² Now, no matter how it is constituted, a 'digital coffee-house' that follows this train of thought will in fact be centered about very particular interests, with little regard to universality. This is what gives the critical feedback of the user-base a certain credibility, but also limits access for others. It may be believed that only the messages and the written word counts,³⁸³ but cultural dispositions are embedded into these cultural products.³⁸⁴ Habermas' idea of such

374Cf. Lorenz 1997, referencing Goffmann 1967.

375Cf. Warren et al. 2011: p. 7, Nafus 2012: p. 677 (referencing Helmreich 1998), 675 (quoting Nakamura 2009: p. 139).

376Levinson 1999: p. 57.

377Cf. Wehner 1997: p. 141.

378Cf. McLuhan / Powers 1995: p. 101, Wehner 1997: p. 139.

379Wehner 1997: p. 128.

380Levinson 1999: pp. 49f.

381Cf. Escarpit 1966: pp. 78ff.

382Cf. *ibid.*: p. 103.

383Cf. Wehner 1997: p. 136 (referencing Harms and Voermanek 1995), p. 135 (referencing Esposito 1995, Groys 1996).

384All cultural creations are a product of their environment, and as such, have certain values inscribed

egalitarian societies is very much alive in such beliefs, but also shows that is not least also a philosophical idea, not a pure sociological description. But nonetheless, understanding these embedded codes is connected to limits of one's own habitus.

Hence, it is of little wonder that Bourdieu was heavily critical of Habermas, especially the idea of reason being at the centre of a critical public:

*“How indeed can it ignored, that, even within the scholastic worlds, cognitive interests are rooted strategic or instrumental social interests, that the force of arguments counts for little against the arguments of force (or even against desires, needs, passions and, above all, dispositions), and that domination is never absent from social relations of communication?”*³⁸⁵

Thus, he called the scholastic idea of a universal and ahistoric reason devoid of very stratified access an “*epistemocentric illusion which leads Habermas to make the universality of reason*“.³⁸⁶ However, two things must be stated regarding this. One, the universality of reason is not a major theme of the idea of the critical public, but to Habermas later work. If only due to feminist critic, it should be obvious that the critical public of the 18th century was still very much limited in its universal representation (in that case, the salon society was very much male dominated). However, it changes little of the general principle of such a culture acting as a critical counter to stately governance. It is not even remotely sought by Habermas definition that such a public, that is to be open on principle,³⁸⁷ should exclude women. For his historical assessment to be of a too optimistic nature is a valid critique, but does not touch the nature of his political analyses of the nature of the developments.

Second, it must be noted that Habermas' ideas of an ideal speech situation and communicative ideal are explicitly stated as a way out of current predicaments,³⁸⁸ something to be aspired, or to anticipate for it to occur, not something necessarily present.³⁸⁹ Bourdieu called such an aspiration to be “*obviously marked by the naiv-*

to them. For example, cf. Introna / Wood 2004: pp. 190, 195.

³⁸⁵Bourdieu 2000: p. 65.

³⁸⁶Ibid.: p. 66.

³⁸⁷Cf. Habermas 1990: pp. 98, 156.

³⁸⁸Cf. Treibel 2000: p. 173, referencing Habermas 1981a: p. 28.

³⁸⁹Cf. Ibid.: pp. 176f.

eties of Christian humanism”,³⁹⁰ but it is assumed to be a way, not a *ita est*-state.³⁹¹ However, as such, it has little to do with the empiric reality of the internet, where distinction is sought as “*Men are routinely aggressive towards women, experienced users harass newcomers*”.³⁹² Whatever the ideal situation is implied to be, it is not yet achieved.

HYPOTHESIS 1B:

Despite shared places, the internet still very much sees different strategies applied and goals pursued depending on the individual's habitus. Supra-individuell tendencies, governed by gender, age, education and employment status shape the usage of the internet. While there is literally 'space for everyone' on the internet, the pursued strategies are modern emergences of old differences and mirror previous hierarchical differences. As such, they are embedded in traditional strives for dominance.

Relevant variables: Age, Gender, Formal education, Employment Status with Proactive use, Presence.

3. Description of the used database

The database used to conduct the analysis originally consisted of two databases, one assessing variables at individual level, and one assessing attributes on a household-level.³⁹³ For example, the technical equipment at home and the urbanity was recorded on household level, whereas the level of education as well as the actual use of the internet was measured on an individual level. Both the database with the responses concerning individual attributes as well as the one with the information on a household-level contain household-id³⁹⁴ respectively a household reference-id.³⁹⁵ The reference-id acts as a pointer, referencing to the corresponding household. If one member of a household with multiple members provided incomplete information regarding

³⁹⁰Bourdieu 2000: p. 66.

³⁹¹Cf. Treibel 2000: pp. 172, 177.

³⁹²Warren et al. 2011: p. 7.

³⁹³Cf. Statistik Austria 2013a: p. 2.

³⁹⁴Variable *hh_id*

³⁹⁵Variable *hh_ref_id*. Cf. Statistik Austria 2013b.

the household, the information given by other members of the household was used to assemble a complete household-profile (statistical imputation).³⁹⁶ Missing information on both household and personal level, that could not be logically deducted was added on the basis of a nearest neighbour estimation.³⁹⁷

Since the cluster-analysis is to be conducted with one singular database, the two databases were merged using the reference ids. In the end, the database with the individual information was complemented with the information from the household-database regarding the respective individuals. The original study had individual weighting attributed to the households and to the individuals,³⁹⁸ which differed from the household, as many households featured multiple individuals also present in the database with the individual information. This thesis scrutinizes tendencies on an individual level. While cluster analysis is used to group similar cases together, not extrapolate (numeral) predictions (for example, income),³⁹⁹ the size of the resulting clusters will be shaped by the weighting of the cases. As the population for the assessment were all Austrian households with at least one member aged 16 – 74, using weighted cases, a total N of 6419651 is implied (i.e. the amount of people aged 16 – 74 in Austria).⁴⁰⁰ The study was conducted as part of the Austrian *Mikrozensus*, which used a single-level stratified random sample. ICT usage was assessed for roughly 5000 households and the interviews were conducted via telephone.⁴⁰¹ The study was conducted from April to June of 2013.⁴⁰²

Since this is a secondary evaluation, not all of the items and variables covered are relevant for this thesis. The description of the variables is part of the appendix. Since the combined database comprises of 136 variables, only the variables actually applied in this thesis will be detailed (see chapter 7).

396Cf. Statistik Austria 2012a: p. 15.

397Cf. Statistik Austria 2013a: p. 14. The variables used to assess the nearest neighbour on a personal level were gender, age, highest degree, employment status and settlement type. On a household level, the used variables used for the weighted distance function were size of household, settlement type and federal state.

398Cf. *ibid.*: p. 16 and Statistik Austria 2013: p. 4.

399Cf. Statistik Austria 2012: p. 16.

400This is also why the weighting will be applied, not the cases multiplied by the respective weighting: A cluster analysis for 6.4 million cases would

401Cf. *ibid.*: pp. 8ff.

402Cf. Statistik Austria 2013b.

Among the strengths of the database, there is the considerable amount of cases for a rather specific subject in a particular country of small size. In other words, it was by far the best database that could be found on the subject for Austria. Some of the questions and items assessed are very concise, and the documentation and statistical quality are of striking quality.

However, the aware weaknesses of the database must also be disclosed, if only to be able to correctly interpret their potential consequences. First of all, foreigners are generally under-assessed, and the questionnaire is only available in German. The extrapolation is supposed to balance this issue out,⁴⁰³ yet this remains a weak point. Also, the very central aspects of ethnicity⁴⁰⁴ and migration background are not assessed at all. The same goes for the factor of income.⁴⁰⁵

Also, some questions were troublesomely particular,⁴⁰⁶ some were very vague,⁴⁰⁷ and some worded confusingly.⁴⁰⁸ It also must be mentioned that the way education was assessed makes it somewhat hard to determine whether an academic habitus can actually be implied. The 6 levels of ISCED (International Standard Classification of Education) were condensed into 3, with the lowest now ranging from 0 – 2, the medium one from 3 – 4, and the highest from 5 – 6.⁴⁰⁹ The way they were re-encoded made it hard to discern the educational level of an individual, as the highest possible level was now 5. A mean of 6, even among the most educated group, was thus impossible. This must be kept in mind when analysing the results. Also, a *Meistertitel*, while connected with a considerable amount of sophistication in the respective field as well as responsibility, is thus part of the highest possible education class.⁴¹⁰ In Bourdieu's theories, the assumed habitus of a postgraduate doctorate and a master technician differs greatly, if only due to the assumed respective field. However, this

403Cf. Statistik Austria 2012: p. 19.

404Cf. Löw 2001: 208f.

405Only employment state is assessed, and this is done in a very vague manner – students and pupils are in one category, every kind of employment is treated the same, and there is a category “other”, which, due to the age-distribution most likely means pensioner, but is never labelled as such.

406For example, “posting on political topics” was assessed individually, but everything else was subordinated under a general “posting” category, which included chat-rooms, message boards and social networks all in one, which is a very broad category.

407Other than the already mentioned example of “posting”, there is also education, which will be elaborated on further below.

408For example, as far as internet connection goes, “broadband” is a different category than “DSL”, although DSL is a type of broadband access.

409Cf. Statistik Austria 2013a: p. 2.

410Cf. Statistik Austria 2010.

imprecision is part of the assessment itself, and as such, can only be considered, but not changed. If anything, it might actually prove to be enlightening knowledge, should the analysis result in one or more clusters with a certain level of education, but otherwise very 'uncharacteristic' (in a Bourdieuan sense) traits.

Also, as the study was conducted due to an enactment of the European Union,⁴¹¹ its potential to prove to be social or political dynamite is decidedly low – it is obviously not the interest of the EU to bring upon social instability or cries of discrimination. For some potentially skewed factors to not register in a way that spells disparities thus even serves the interests of the study to a certain degree. But no matter what the implications of certain decisions, this will mean that for this study, hypotheses will be categorized as strong and weak ones.

The strong hypotheses are ones that can be (dis)proven in a concluding with the help of the database. For example, gender is assessed on a level that suffices even the most demanding of theories.⁴¹² The weak ones are those that might prove difficult to determine due to the assessment used for the database. For example, the role of economic capital cannot be scrutinized with the database at all, as income was not measured. Education, as mentioned above, was assessed in a way that differs from the one implied by the theory at hand. This does not mean that the respective hypotheses can only 'win', as, if they are disproved, the database was at fault, and if they are proven to be right, the theory was correct all along. If the result displays the complete opposite of the prognosticated clusters, of course the respective theory can be considered confuted. However, if the results do not exactly display the suspected relations, it might mean that the results demand further scrutiny and differentiated analysis. The example of education given above is a good example, as it shows that the database itself might yield limits regarding immediate evaluation.

⁴¹¹ Cf. Statistik Austria 2012: p. 18.

⁴¹² Of course, the sheer dichotomy of this category would also be contested by some theories. However, the main theories at hand for this thesis are not among them.

4. Overview of the hypotheses

The hypotheses were deduced from the theoretical foundation and previous research findings. For a detailed explanation of their backgrounds, see chapter 2. This chapter only serves as a convenient overview. Also, while several of these hypotheses (for example, 1A) can only be tested with the use of cluster analysis, some of these can also elegantly be tested using correlations. The apt method will be used, as all these hypotheses concern important points and should be treated with methodological adjustment.

HYPOTHESIS 1A (strong):⁴¹³

The habitus governs seemingly individual decisions. The style of internet usage depends on socio-demographic factors. Clusters will differ by gender, age, cultural capital and the social position.

Relevant variables: Gender, Age, Formal education, Employment status.

HYPOTHESIS 1B (strong):⁴¹⁴

Despite shared places, the internet still very much sees different strategies applied and goals pursued depending on the individual's habitus. Supra-individual tendencies, governed by gender, age, education and employment status shape the usage of the internet. While there is literally 'space for everyone' on the internet, the pursued strategies are modern emergences of old differences and mirror previous hierarchical differences. As such, they are embedded in traditional strives for dominance.

Relevant variables: Age, Gender, Formal education, Employment status with Proactive Use,⁴¹⁵ Presence.

⁴¹³ See page 15.

⁴¹⁴ See page 59.

⁴¹⁵ Proactive Use, Presence, Usage Type, Technical Skills and Social Appliance are indices; as they do not describe what would commonly associated with these terms. Consequently, they will be capitalized.

HYPOTHESIS 2 (strong):⁴¹⁶

The more urban an area, the better the assumed connection to the internet and the world wide web will be.

Relevant variables: Usage Type with Urbanity.

HYPOTHESIS 3A (weak):⁴¹⁷

Strategic and Proactive Use of media strongly correlates with academic habitus.

Relevant variables: Formal education with Proactive use.

HYPOTHESIS 3B (weak):⁴¹⁸

Formal education has a positive effect on technical skills.

Relevant variables: Formal education with Technical Skills.

HYPOTHESIS 4A (strong):⁴¹⁹

Technical skills do not determine the actual usage.

Relevant variables: Technical Skills with Proactive use, Presence, Social Appli-
ance, Educational use.

HYPOTHESIS 4B (strong):⁴²⁰

Technical Skills are higher among younger people.

Relevant variables: Age with Technical Skills.

HYPOTHESIS 4C (strong):⁴²¹

⁴¹⁶ See page 21.

⁴¹⁷ See page 23.

⁴¹⁸ See page 23.

⁴¹⁹ See page 24.

⁴²⁰ See page 24.

⁴²¹ See page 26.

When both possess the same skills, men are prone to estimate their skills to be of a higher level than women do.

Relevant variables: Technical Skills with self-estimation of skills.

HYPOTHESIS 5A (weak):⁴²²

The negative role of female gender regarding internet use is mediated by age, education and employment status. However, usage differences between genders increase as education decreases, and decrease at advanced age.

Relevant variables: Age, Gender, Formal education with Proactive use, presence, skills, Usage Type, Educational Use.

HYPOTHESIS 5B (weak):⁴²³

High age and low education have a negative effect on sophisticated internet use.

Relevant variables: Age, Gender, Formal education with Proactive use, presence, skills, Usage Type.

HYPOTHESIS 5C (weak):⁴²⁴

Higher formal education implies an academic habitus and makes it more likely for users to apply the internet for educational purposes.

Relevant variables: Formal education with Educational use.

HYPOTHESIS 6A (strong):⁴²⁵

Women are more likely to use the internet for social means.

Relevant variables: Gender with Social usage.

⁴²²See page 27.

⁴²³See page 27.

⁴²⁴See page 28.

⁴²⁵See page 32.

HYPOTHESIS 6B (strong):⁴²⁶

Men are more likely to use the internet for instrumental reasons, hence, they are more prone to proactive use.

Relevant variables: Gender with Proactive use.

HYPOTHESIS 7 (weak):⁴²⁷

Those already in power will remain in a very much favoured and powerful position in the digital sphere.

Relevant variables: Formal education, Employment state with Online presence, Proactive Use.

HYPOTHESIS 8 (strong):⁴²⁸

Usage varies wildly – homogeneous usage types cannot be assumed. Clusters can be identical regarding one or more attributes (for example, gender or education) but differ regarding others.

Relevant variables: Gender, Formal education, Employment status, Usage Type, Proactive use, Social appliance, Technical Skills, Presence.

HYPOTHESIS 9 (strong):⁴²⁹

Whether people have access to the internet on their private premises or not influences the assumed usage. For one, to engage in lengthy discussions while accessing the internet in public or at work is unlikely. Second, the relation leisure time is in to professional activity shapes the assumed approach to online usage.⁴³⁰ Finally, for citizens to engage in discussions as equals is rooted in them doing so as private citizens, decidedly remote from external supervision.

Relevant variables: Usage Type with Proactive use and Presence.

⁴²⁶See page 32.

⁴²⁷See page 44.

⁴²⁸See page 50.

⁴²⁹See page 54.

⁴³⁰Cf. Sassi 2005: p. 689.

5. Methodical contemplations and approach

In this chapter, the choice of method as well as the exact approach to the deduced analysis will be explained. The operationalization, and the weighting of specific variables for the creation of indices will be mapped out in the following chapter. In general, individuals and their actions will be analysed, but the circumstances of these decisions and the context of their social embedment will be considered and used to deduct conclusions.

5.1. k-means cluster analysis

Analysing such a complex construct as the one in question for this thesis, various methodical options are available. Ultimately, a choice was made for a cluster analysis. This was due to the following reasons:

1. It is a rather sophisticated method, which allows me to deepen my understanding of a complex method in the context of my master's thesis.
2. Cluster analysis is also a very robust method, that *“behave(s) reasonably well”*, even when assumptions regarding the variables and their distribution are not met: *“it's perfectly acceptable to cluster data that may not meet the assumptions for best performance.”*⁴³¹
3. It allows for the use of indices, which allow to put different weight on different activities conducted, depending on their theoretical interpretation. For example, one can create an index for “Technical Skills”, and the variable “I have created a website” will yield more points than the variable “I have sent an Email”.⁴³² Thus, theoretical implications can already be applied in the process of operationalization.
4. Cluster analysis lends itself very well to the structure of Bourdieu's theories, which are a central part of this thesis' theoretical foundation. The existence of distinct milieus, marked by structural as well as quantitative differences in

⁴³¹Norušis 2011: p. 394.

⁴³²Cf. van Deursen / van Dijk 2010: p. 908.

available resources, can be assessed clearly defined in the form of clusters.⁴³³ Also, Bourdieu himself argued that even seemingly independent variables are embedded in a complex social structure,⁴³⁴ thus implying interplay between it and other factors.⁴³⁵ Cluster analysis yields complex, multi-dimension results that are able to display the complexity of the situation at hand:

5. The ultimate findings yield more differentiated and poignant results than merely '*yes, higher education positively influences the use of the internet*': Concrete user types and styles would be represented, in the very demonstrative form of distinct clusters. The social structure itself can be represented.
6. Then, theories can be used to explain these specific constellations, allowing one to interpret and explain the structural reasons. It also allows to combine multiple theories, if clusters, for example, have a distinct gender as well as education bias. It allows, given 'correct' operationalization, to easily interpret the findings, but also making the most of the theories' cumulative explanatory potential. All of this lends itself to lean and poignant results: The operationalization is undergone in a manner that produces very few, clearly defined indicators, that are easy to review and interpret. As such, the resulting clusters should prove very demonstrative.

There are many options when conducting a cluster analysis.⁴³⁶ However, it must be kept in mind that, in general, cluster analyses compare the (dis)similarity of (in this instance) cases and group the most similar ones together. To achieve this, the values for the various variables from the individual cases are compared and the distance is measured. For example, cases A and B are compared regarding the internet skills. A has a score of 2, B has a score of 5, which equals a difference of 3. This is done for all relevant variables across all cases. Then, the cases with least cumulated distance are grouped together.⁴³⁷

⁴³³For example, see Dudenhöffer / Meyen 2012.

⁴³⁴Cf. Bourdieu 1982: p. 178.

⁴³⁵For example: access to education depends on gender, yet when conducting an analysis for the correlation between gender and pay, it is assumed that gender is an independent variable.

⁴³⁶Cf. Bacher 1996.

⁴³⁷Cf. Backhaus et al. 2000: pp. 331f.

However, this means that how similarity is both assessed as well as encoded will have a huge influence whether this analysis is sensible on the content level. For this thesis, indices will be generated using dichotomous information. For example, if somebody answered that, yes, they have created a website, they will be rewarded points on the Technical Skills-index. If somebody answered that yes, they do post and discuss online, they will be rewarded points for the Presence-index. To ensure that these various indices do not bear differing weight, they must be standardised before conducting the cluster analysis itself.⁴³⁸ If one index had a maximum score of 900, while another one had a maximum score of only 3, this would mean that the influence of the index that can result in a possible distance of 900 will be much bigger than the one with a maximal distance of 3. In the case of this thesis, with regards to the theory, the various indices should not have different influence, as they all assess different points of the bigger picture that is internet use. For this thesis, only continuous variables assessing internet use will be used. This is sensible on multiple levels:

1. The aim is for the resulting clusters to be interpreted regarding how the socio-demographic parameters have shaped the internet usage. For example, assume that one cluster was predominantly made up by females and shows a very high level of technical equipment. To imply any (general) structural connection between gender and technical equipment would not be statistically sound if gender was one of the variables used to comprise clusters. Socio-demographic variables must be excluded from the variables used to build clusters if their influence on the composition of the clusters is to be analysed. Otherwise their influence on the clusters would be on a direct, statistical level, not on a latent, theory-based one. If cases were grouped by their similarity of eye colour and technical equipment, eye colour would also be found to be very different among the clusters, exactly because it was part of how the clusters were formed.
2. Using various scale levels (which nominal variables such as gender would require) for a cluster analysis in SPSS⁴³⁹ is only possible with a two-step cluster

⁴³⁸Cf. Field 2000: p. 3.

⁴³⁹Author's note: Due to my personal familiarity with SPSS and its convenient user interface, the analysis was conducted with SPSS. There are many more programs, with very different options for cluster analysis, however, time constraints as well as the focus of this thesis being the analysis, not the program used to conduct it, led to the choice of SPSS.

analysis, which is a very unreliable method.⁴⁴⁰ It would also require to re-encode polytomous variables into categorical dummies (such as employment status). This would enhance their influence and produce auto-correlation.⁴⁴¹

Since the database contains weighted cases, this should be reflected when conducting a cluster analysis. However, a hierarchical cluster analysis in SPSS will ignore the weighting. It is possible to simply clone the cases with regards to their weighting and put additional weight on them this way. However, this would result in a database with 6.4 million cases – too much for a hierarchical cluster analysis.⁴⁴² It would still be possible to commence an analysis using randomly select sub-samples.⁴⁴³ However, this would result in additional extrapolation. Hence, a k-means cluster analysis will be used, as it allows for weighted cases. Hierarchical clustering, applying the aforementioned sampling-technique, will only be used to “*estimate starting values for the k-mean algorithm.*”⁴⁴⁴

K-means clusters are formed by arranging cases into clusters while aiming for the lowest possible sum of squares within the clusters. As such, it is closely related to Ward's method.⁴⁴⁵ To do so, k-means requires a set number of clusters to be defined⁴⁴⁶ which then function as cluster centres. Hence, various solutions will be calculated, and the best one – both based on its theoretical explanatory potential and on parameters – will be picked. Although the k-means clustering algorithm is “*very sensitive to outliers*”,⁴⁴⁷ this is not an issue for this thesis, as the resulting indices are of controlled values, which are even standardized afterwards. Thus, extreme values are not theoretically possible.

440Cf. Steiner / Hudec 2006: p. 5416, Bacher et al. 2004: p. 18.

441Cf. Backhaus et al. 2000: pp. 347f and p. 332.

442Also, the cases have uneven weighting numbers attributed to them.

443I want to thank the members of statistics discussion forum CrossValidated for their invaluable help and insight on this topic – see the discussion at

<http://stats.stackexchange.com/questions/120044/weighted-cases-in-a-cluster-analysis-for-cases-in-spss>. The approach for propagating cases as well as for injecting distortion variables was suggested there.

444Norušis 2011: p. 389.

445Cf. Bacher 1996: pp. 308f.

446Cf. *ibid.*

447Norušis 2011: p. 390.

5.2. On indices

As mentioned before, the cluster analysis will be conducted using both continuous as well as binary variables. In order to put specific theoretically based importance on distinct activities as well as conduct the analysis with a concise number of variables, indices will be generated. This also allows to combine multiple indicators into one variable, as well as determine the depth of assessment on a level that can be interpreted sensibly.

For example, whether a person has fibre cable access to internet or merely normal broadband cannot be interpreted based on the theory at hand. What will be done is taking all the various questions regarding access to the internet and transform them into one variable determining the type of access at home: none, slow, and fast. Otherwise, 7 variables with no interpretable additional information would have been part of the analysis.

Educational Use is a prime example for how multiple questions originally spread all over the questionnaire can be combined into one concise index. The database contains information regarding the formal education level, however, there are also questions such as whether the individual uses online wikis to educate themselves. Indices allow one to use all the available information on informal education and combine it into one variable, which will be increased if certain variables are presented. For example, using said wikis will give more points on the Educational Use index than reading newspapers online. (A detailed explanation of this and the distribution of points will be given in the following chapter.)

Also, indices will allow to discern seemingly one-dimensional information. Based on the theoretical foundation, the usage of the internet will be divided in Technical Skills, online-Presence, Educational Use and Social Appliance. Reading online news will grant no points for Proactive Use, as it does little to imply particularly goal-oriented use of the internet. However, it displays a strong interest in staying in touch with the latest developments, and thus, grants points for Educational Use. These theoretical distinctions are applied on the level of building indices, making them tools to quickly overview the results.

6. Operationalisation and composition of indices

In the following, the approach to assess theoretical assumptions in the form of data will be explained. It will also be argued how the indices are created, and how the weighing of different aspects will be accounted for. All the variables that will ultimately be analysed, both those used to compose the clusters as well as those thought to influence these variables, will be detailed in the following chapters.

It must be noted that there will be two types of variables used: Those used to generate the clusters, which are assumed to be independent of each other,⁴⁴⁸ and those used to analyse the composition of the resulting clusters. The clusters will be formed based on the internet usage, which is implied to be very much connected to demographic and social circumstances, which themselves are not directly applied to compose those clusters. In fact, these socio-demographics must not be part of the variables used to compose the clusters out of statistical logic. For example, if clusters are constructed by media usage and gender, and the clusters differ by gender, this says little about the connection between media-usage and gender, since gender itself was used to discriminate between clusters. On the other hand, if clusters that were created via different types of media usage vary by gender, then this shows that media usage is very much determined by gender. The underlying assumption of this expectation is that the activities conducted online and the abilities possessed regarding the digital are not orthogonal to social factors: The activities that are performed online reflect a socio-demographic slant.

In general, agreeing to certain statements yields points on the respective index.⁴⁴⁹ The amount of points distributed for this varies, and is based on the theoretical background – creating a website oneself requires more technical skill than sending an email with an attachment.⁴⁵⁰ Also, different questions concerned different time-frames – some assessed whether a specific activity was conducted recently, others, if the activity had ever been performed. This also was reflected in the points attributed. The specific reasoning for the distribution of points will be given in the respective chapters.⁴⁵¹

448Cf. Norušis 2011: p. 394.

449See chapter 6.1.

450Cf. van Deursen / van Dijk 2010: p. 908.

451 The distribution of these points to the indices, as well as the indices, were created for this thesis

One variable will only be applied to the generation of multiple indices if theory and the circumstance of the database⁴⁵² demand it. Thus, for applied indices, this only happened once (for the subscription of online news).⁴⁵³ This was avoided as much as possible to not prompt (auto)correlation of indices. While correlation among indices is not a problem on a statistical level,⁴⁵⁴ the variables generating the clusters should be independent from each other,⁴⁵⁵ otherwise some concepts are measured multiple times, or worded differently, some latent variables (used to determine the indices) have bigger influence than others:⁴⁵⁶ *“When variables are highly correlated, it becomes virtually impossible to form clusters where one variable can have a high value and the other can have a low value.”*⁴⁵⁷ Before commencing with the final clustering, the correlations between the indices were also calculated.⁴⁵⁸

Nominal variables can not be sensibly interpreted in a continuous scale, which is why Usage Type actually consists of various nominal variables that do not ultimately yield one scale.⁴⁵⁹ Usage Type is one of the variables that will be used to analyse the resulting clusters, but will not be applied to actually constitute them. All variables used to conduct these follow-up analyses will still be prepared and edited for maximum clarity, for the results to be as incisive as possible.

All indices will be equalized after they have been composed (i.e. each index then holds the same weight as the others), and afterwards they will be z-standardized. This means that what is important for the composition of indices is the internal ranking. The score awarded for the most influential activity or information from one index is not meant to be compared to the internal rankings of the other indices. Yet, 10 points was set to be the theoretical top-score, and served as an orientation point for all the other attributed scores.

and were not previously defined in the database.

452i.e. if the variable is one of the few that assesses exactly what this index demands.

453For a more detailed explanation, see the respective chapters. In fact, Social Appliance was not included in the cluster generation due to its very interconnected nature with Presence.

454Cf. Sambandam 2003.

455Cf. Mooi / Sarstedt 2011: p. 241.

456Cf. Sambandam 2003.

457Ibid.

458A certain level of correlation is to be expected, as for example, both Proactive Use and educational use are believed to correlate with formal education, thus both depend on the same (external) variable.

459This is detailed in the chapter on Usage Type.

6.1. Proactive use of the internet (applied index): “*proact*”

Theoretical background: Active media usage is assumed to correlate with cultural capital and serves one's “*penchant to lead*”.⁴⁶⁰ To apply the means presented by the internet and use them to achieve an autonomously set goal,⁴⁶¹ to not merely passively react and linearly comply is what will be understood as Proactive Use: Teleological and self-determined use of the internet.⁴⁶²

Overview of the variables:⁴⁶³ **isrch** (using a search engine - ever) (8.5 points)

iunw1sub (subscribing to online-news – last 3 months) (3 points)

iuif (researching information on goods and services online – last 3 months) (4.5 points)

iujob (searching and applying for jobs online – last 3 months) (3 points)

ihols (looking up information for holidays – last 3 months) (3 points)

ihif (looking up health-related information – last 3 months) (3 points)

iusell (selling goods or services online – last 3 months) (3.5 points)

igov12if (looking up information on governmental websites – last 12 months) (2 points)

⁴⁶⁰Levinson 1999: p. 91.

⁴⁶¹Cf. van Deursen / van Dijk 2010: p. 893.

⁴⁶²While technically a sub-category of this, pursuing educational goals will not be assessed with this index but in Educational application, as to prevent auto-correlation.

⁴⁶³For an even more detailed description of the variables, see the variable sheet of Statistik Austria provided in the appendix.

iuem (sending and reading emails – last 3 months) (5 points)

iupnet (using business networks – last 3 months) (7 points)

iuvote (voting on politics online – last 3 months) (5.5 points)⁴⁶⁴

Weighting of the variables: isrch (using a search engine - ever):8.5 points

Conducting online searches of whatever kind is the very core of what it means to “seek out rather than merely receive news stories”.⁴⁶⁵ 96% of the sample have picked a yes to this question, still, by sheer theoretical approach, this is the one technique somebody needs to be familiar with for the concept of Proactive Use to be put to fruition. If somebody has never used a search engine, it is very questionable how proactive any of their other appliances of the internet (especially ambiguous ones, such as reading online-news) can be. While it grants the most points, the fact that it is only applied if somebody has ever done so costs it some points, as theoretically, it could have been a one-time event.

iunw1sub (subscribing to online news – last 3 months)

3 points

Reading online news, on the other hand, may show a certain interest in gathering an understanding; however, the active and critical use cannot necessarily be implied. Of course, the internet presents many possibilities to pick specific sources of news, but this process is not necessarily of deliberate or tactical nature, and almost everything stated online theoretically qualifies as online news. Subscribing to online news, however, implies a much more purposely coordinated action. However, it registers rather low as subscribing to news is not something that is a daily habit for many, which is why the 3 month time-frame potentially has potential long-time subscribers respond negatively. There is a possibility of chance being at work, as somebody who

⁴⁶⁴Maximum score: 48. Points shared with Social Appliance: 4/48=8.3%. Points shared with Educational Use: 3/47=6.3%.

⁴⁶⁵Cf. Levinson 1999: p. 7.

has subscribed to many news sources, but last done so 4 months ago, will not get any points, yet somebody who has only subscribed to one, but done so 3 months ago, will get points. The points rewarded must not be too high, as not to imply too much distance between those two. However, if somebody truly subscribes on a regular basis, that is indeed a statement of Proactive Use. The 3 points granted are intended to balance both the possibility of timely coincidence and regular subscribing.

iuif (researching information of goods and services – last 3 months) **4.5 pts.**

This activity is rather particular. However, it can be argued that the acquisition of goods and services is part of every-day life in modern western societies, one that is very likely to occur frequently. Hence, to use the internet to give this process a more self-determined and active component makes it obvious that it is part of a Proactive Use.

iujob (searching and applying for jobs online – last 3 months) **3 points**

ihols (looking up information for holidays – last 3 months) **3 points**

ihif (looking up health-related information – last 3 months) **3 points**

iusell (selling goods or services on the internet – last 3 months) **3.5 pts.**

All these activities very much show a Proactive Use of the internet, however, they are very particular in their demographic: You only look or apply for a job online if you are unemployed⁴⁶⁶ or unhappy with your current job.⁴⁶⁷ All these activities obviously appeal to very specific demographics or situations. Also, the fact that only the last 3 months are assessed put additional weight on circumstantial coincidence, although it can also be argued that in such situations, such as when they are looking for a job, people in fact apply a more active use of the internet. This is why it was concluded that, while less so than the more general and every-day application of researching information on goods and services, these activities still grant points. Selling was, in line of reasoning for researching information on goods and services, granted a slightly higher score, as it can be assumed to be more of a frequent and common activity.

⁴⁶⁶82.6% of the unemployed demographic answered positively.

⁴⁶⁷Only 20% of the employed ones picked this category.

igov12if (looking up information on governmental websites – last 12 months) **2 pts.**

Looking up governmental information may be rarely ever required, but not at all is applying for a job when you are not unemployed – the particularity of the question continues. However, the period of time in question is longer, since these categories span a whole year. Thus, it is more likely to have been in a situation that makes one answer one of these questions positively. However, what remains from this question is the ability and application to actually use the options provided by the internet for one's own needs.

iupnet (using business networks – last 3 months)

7 points

Business networks are included, as they obviously are intended to achieve an autonomously set goal and get in touch with viable information before others do. Because they are very particular in their usage, they also do not get a top score, but due to the fact that goal-oriented usage can almost universally be assumed, they still score 7 points. However, social networks are not included: While they can be used to be very much in touch with the information flow of certain sources, and also to spread certain information yourself very quickly, they in fact usually result in the opposite of Proactive Use: In wasted time, akin to passive consumption.⁴⁶⁸ This is made more difficult to discern since the various typed of social networks were all assessed in one general variable.⁴⁶⁹ Hence, depending on the usage type of social networks, the effects could be positive as well as negative regarding Proactive Use, they are not assessed as not to distort validity.

iuem (sending and reading emails – last 3 months)

5 points

Email provides an option also granted by social networks, to get in touch with the information flow of certain sources, but also to spread certain information yourself

⁴⁶⁸Cf. Hiscott 2014 and Knezevic 2012.

⁴⁶⁹The dataset includes all of them in one question, although it is very arguable that Twitter is designed around the aspect of getting news quickly and to the point, whereas Facebook has a much broader approach, also including pastime and socialising.

very quickly.⁴⁷⁰ While it still can be assumed that the usage is not always as teleological, unlike social networks, email is not prone to incite contra-active use and time-wasting. Hence, a proactive usage can be assumed, even if not primarily. Not sending or reading any emails, however, definitely degrades one's tactical options in the pursuit of their ambitions, which is why these 4 points can also be seen as a penalty-score for those who do not commence such a very basic task.⁴⁷¹

iuvote (online consultation and voting on politics – last 3 months) **5.5 pts.**

This variable obviously assessed a very goal-oriented use of the internet. However, since it is a single particular field, it does not receive the highest amounts of points. Yet, it applies technical means to exert personal influence towards a personally determined outcome. However, for a relevant online-voting or deliberation opportunity to arise in the set time-frame of the last 3 months, some chance will also come into play. But, since mandatory voting (such as on the government) is not yet possible via internet, voting online does not hint at convenience. Consequently, it is actually implied that the efforts to vote online are made by choice, denoting more emphasis on a personal intention. Thus, despite all its particularity, it yields 5.5 points.

6.2. Presence on the internet (applied index): “*pres*”

Theoretical background: Shaping one's surroundings and asserting an influence by promoting personal agenda and opinion exerts personal impact. It depicts somebody who is interacting, not merely interacted,⁴⁷² or in other terms, influential, not merely influenced. What can be seen online is more likely to be created by people with a higher presence index. However,

470A bit of technical info: According to Schmutzer 1997: p. 225, Email is more of a “*one to one asynchronous*” form of communication, whereas social networks are one to one, one to many, many to one and many to many means of asynchronous communication – if their chat function is also used, even synchronous. (However, Email can be very well used to communicate one to many, as multiple recipients for one mail are also possible.) It is very much akin to McLuhans / Powers assumption that synchrony usually implies a much less controlled participation than a-synchrony (cf. McLuhan / Powers 1995: pp. 48f, 66, 169.

471 As it generates an additional distance of 4 to those who do in fact use email.

472 Cf. Castells 2001: p. 424, via: Zillien 2006: p. 96.

such presence is not necessarily asserted teleologically, which discerns it from strictly Pro-active use.

Variables used:

ichat (posting in chatrooms, newsgroups or online discussions - ever) (6 points)

iusnet (using social networks – last 3 months) (8 points)

iupol1 (posting on political topics – last 3 months) (5 points)⁴⁷³

Weighting of the variables: **ichat** (posting in chatrooms, newsgroups or online discussions – ever) **6 points**

This variable represents one of the most basic tools to exert Presence online. However, while being the most general one, it is held severely by its vagueness and the fact that it only asks if said activity was ever performed. If somebody has at one time, ever, posted a message, maybe even only on a chatroom, this does not imply a footprint left by them on the web of today. Yet, if somebody has never performed this very basic action, it can be assumed that their usage of social media will also differ from those who have.⁴⁷⁴ As a result, there must be a difference in points between these two groups. The points rewarded thus function as discrimination.

iusnet (using social networks – last 3 months)

8 points

⁴⁷³Maximum score: 19. Points shared with Social Appliance: 8/19=42.1%. It should also be noted that, given Kruikemeier et al.'s concerns that it “*may well be that these citizens are more cynical about politics, especially because these comments are often negative and sarcastic in nature*” (Kruikemeier et al 2014: pp. 12f) were not verified for the population of this study: “posting on political topics – last 3 months” and “voting on politics online – last 3 months” correlated to 0.363.

⁴⁷⁴What also holds back the score of this category is the fact that posting messages is usually implied by using social media. However, 27% of those using social media answered that they had never posted a message. While it should not be rated too highly, as it would otherwise double some of social media's functions, this shows that some difference can be assumed.

While the use of social networks rewards 8 points, business networks do not grant any points due to their nature: They are a very specific appliance that, while important to connect to certain circles, do not serve to make one's opinion's and persona noticed by people in general. The only agenda they serve is to connect on a professional level, which is why they are part of Proactive Use, not presence. Social networks, however, allow public postings that everyone can read. Still, they do not grant the maximum amount of points, as they are often used for more private purposes than comments in online discussions are. This implies a possible a less expansive impression, but still absolutely plays a role when it comes to perceive people and their opinions online. Also, the fact that these networks have been used recently⁴⁷⁵ can be interpreted as it being part of a routine in this case, implying a constant presence.

iupol1 (posting on political topics – last 3 months)

5 points

While definitely able to produce a considerable presence (for example, having the top comment below a news article), what holds this back is its particularity: Posting on the topic of health, on the topic of entertainment, on the topic of culture also would yield such results, but is not assessed by the questionnaire. While politics is a subject that provides considerable influence if one's voice can be heard, it still is rather specific. Hence, it only grants 5 points.

6.3. Technical internet skills (applied index): “*skills*”

Theoretical background:

While they affect the actions one can perform online to a certain degree, Technical Skills alone do not deterministically result in a more

⁴⁷⁵The usage in the last 3 months is more likely to have occurred by habit than by chance: Using differing measuring methods, Brustein 2014 reports that on average, Americans spend 40 minutes per day on Facebook, whereas Labinski 2014 cites a general average of 17 minutes per day. However, both figures support the claim of the recent usage not likely having occurred due to temporal coincide.

sophisticated (in terms of legitimization)⁴⁷⁶ use of the internet.⁴⁷⁷

Variables used:

cweb (creating a website - ever) (8.5 points)

ibconf (configuring a browser's settings – ever) (6.5 points)

iupload (uploading files – ever) (1.5 points)

cem (sending mails with attachments – ever) (1.5 points)

isexch (file-sharing - ever) (3.5 points)

iusoft (downloading software – last 3 months) (3 points)⁴⁷⁸

Weighting of the variables: **cweb** (created a website - ever) **8.5 pts.**

Creating a website requires one to provide original content, which by itself requires considerable technical understanding,⁴⁷⁹ but also, depending on how one approaches the creation, understanding of web-hosting, programming the web-pages themselves, linking documents, folder structure, as well as many other things. Not only is it by far the most technical action listed, but also shows a certain engagement with seemingly complex tasks. Thus, it grants the most points.⁴⁸⁰ However, it is somewhat held back by the fact that it concerns tasks that were ever performed – the creation of a website might have been part of a course, and the relevant Technical Skills long forgotten,

476In Bourdieu's terms, "legitimate" means "canonically accepted as proper" - for example, "legitimate art" is art that is considered to be "high art", even if one does not like it on a level of taste. (Cf. Bourdieu 1982: pp. 501ff, 504f) In case of the internet, this means, to use it for purposes that are considered more purposeful (cf. van Deursen / van Dijk 2014: p. 509).

477In a way, this transfers the idea of Max Weber, that we live in a world where it is not needed to know how a tram works to efficiently ride one (cf. Weber 1919: p. 593), into the digital realm.

478Maximum score: 24.5. No points shared with other indices.

479Cf. van Deursen / van Dijk 2010: p. 908.

480Creating a website via creation tools might make it easier to do so, however, it still shows a certain devotion to such creation and willingness to engage in technical activity. Also, for those who merely want a private representation online and do not possess the technical skills usually associated with the creation of a website, this is less likely than ever: Also, the presence of private websites has gone back since the advent of social networks (cf. Zuckermann 2014)

and not at all proof of a general technical understanding still present. This unlikely scenario still drags the score down a bit.

ibconf (configure the browser's security settings - ever)

6.5 pts.

On a technical level, configuring the browser's security settings can be very easy, however, to even concern oneself with such activities hints at a certain level of interest and knowledge. It is a statement, so to speak, as to which details of the computer's working one changes from the default settings, and also dares to do so. Since it can still be guided by a step-by-step instructions (for example, after encountering a problem), it is somewhat devalued, though.

iupload (uploaded files – ever)

1.5 pts.

cem (sent mails with attachments - ever)

1.5 pts.

Technically, uploading content can imply absolutely private use, for example by uploading backup copies of a thesis.⁴⁸¹ Depending on the scenario, uploading files can be more difficult (using an ftp-client), but in case of this questionnaire, uploading content is implied to be done so on a social network.⁴⁸² As far as the content itself is concerned, it includes “*texts, games, pictures, films or music*”.⁴⁸³ Attaching files to an email is a very similar scenario, hence it grants the same amount of points.

isexh (file-sharing - ever)

3.5 pts.

Files sharing demands a certain understanding of what computer files are, how they can be accessed, how they can be copied, and how folder structures work, as well as what uploading and downloading is. However, it is very much possible to use such

⁴⁸¹Modern mobile phones often backup files automatically by saving a copy of them online (in a so-called *Cloud*). This implies zero technical knowledge, but considering the wording of the question, is not what was assessed. For a more detailed explanation of *Cloud*, see Horchert 2014.

⁴⁸²The question explicitly suggests social networks as a potential platform of where the content might be uploaded.

⁴⁸³Statistik Austria 2013. The wording is confusing, as the most common social networks do not allow to upload games. Hence, the content to be uploaded most likely implies no additional technical skill in the generation. (Also, “uploading texts” is technically a synonym for “posting messages”, and sending an email also uploads a copy of that mail to one's own sent-folder.)

sharing programs without this knowledge (which can lead to certain problems, especially legal ones).⁴⁸⁴ What is the main distinction between this and attaching files to emails is a certain interest in a more efficient way of acquiring files, as well as the aspect of also sharing files oneself, which, although not necessarily conscious, still presents a possibility for more sophisticated use. Yet, this variable also suffers from the “ever”-assessment, which is why it is closer to regular downloading than it would have been otherwise: A current usage might not be given, and neither the ongoing technical ability to do so.

iusoft (downloading software excluding games – last 3 months)

3 points

Like attaching files to an email, downloading software requires almost no technical skill. However, the desire to change the default programmes provided at least shows an interest in designing the surroundings and the willingness and ability to shape the personal digital environment (games were explicitly excluded). Since a recent download is implied by the question, it hints further at technical understanding.

6.4. Educational use (applied index): “edu”

Theoretical background:

On a theoretical level, academic habitus and access to certain cultural techniques make it much more likely to engage in activities related to education if the cultural capital is higher.⁴⁸⁵ On an empirical level, the use of the internet in fact differs depending on formal education.⁴⁸⁶ In case of this thesis, the index displays an applied digital academic habitus, which, considering the problematic assessment of education,⁴⁸⁷ is closer to the

⁴⁸⁴It is quite interesting that the sharing of movies or music is explicitly mentioned in the questionnaire, and a certain social, if not legal, desirability can be implied. However, to still answer that question positively hardly implies an especially profound technical knowledge. Hence, if anything, it implies to slightly downgrade the points rewarded, as not to warrant too many points for a question whose answer also depends on non-technical factors.

⁴⁸⁵Cf. Bourdieu 1982: pp. 596f.

⁴⁸⁶Cf. Van Deursen / van Dijk 2010: p. 511, referencing Hargittai and Hinnant 2008.

⁴⁸⁷See chapter 3.

implications of Bourdieu's cultural capital than pure formal degrees are.

Variables used:

iunw1 (reading online-news – last 3 months)
(6 points)

iunw1sub (subscribing to online news – last 3 months) (1.5 points)

iuwiki (using wikis – last 3 months) (8.5 points)

iuolc (taking online courses – last 3 months)
(8.5 points)

iueduif (researching courses – last 3 months)
(8 points)

igovlib (using public libraries' online catalogues – last 12 months) (6 points)⁴⁸⁸

Weighting of the variables:

iunw1 (reading online-news)

6 points

iunw1sub (subscribing to online news)

1.5 pts.⁴⁸⁹

If one reads online news, they get 6 points; if they subscribe to them (which implies reading them), they get an additional 1.5 points. As far as the points themselves are concerned, reading and especially subscribing to news online shows great interest in furthering one's education as well as it being part of the every-day routine to catch up with the latest developments in the case of subscription. Thus, the willingness to learn of new things is considered to be linked to education. However, since pretty much every report posted online technically qualifies as online-news, not all of what is encompassed by this category fulfils the criteria for (traditional) education.⁴⁹⁰ To

⁴⁸⁸Maximum score: 38.5. Points shared with Proactive Use: $1.5/38.5=3.8\%$.

⁴⁸⁹“Subscribing to online news” already granted points for Proactive Use. As mentioned before, this was done out of theoretical and data-based necessity. As far as the top scores go, this shared indicator represents 1.5 out of the maximum score of 38.5 for Educational Use (=3.8%) and 2 out of a maximum of 45.5 of Proactive Use (4.4%).

⁴⁹⁰Popular Email-hosts GMX and web.de feature gossip and political news on their homepage.

subscribe news, on the other hand, implies a more profound willingness not to miss out, as well as a more professional attitude towards one's personal interests⁴⁹¹ and the automatized inclusion of a source of cultural capital. Yet, as only the last three months of subscribing were assessed, people with many potential previous subscriptions would not be incorporated, which is why the distance possible due to bad timing should not be too great.⁴⁹²

iuwiki (using wikis – last 3 months)

8.5 pts.

Wikis offer very in-depth knowledge on very specific subjects. The question was specifically worded whether one resorted to the use of wikis to “*acquire knowledge, regardless of the topic (e.g. Wikipedia, online encyclopedia)*”.⁴⁹³ To engage with them and to conduct research specially on such such resources shows a certain devotion to knowledge; not to mention the possibility to actually constitute the *critical public* of intellectual circles.⁴⁹⁴ Also, many wikis specialize in information on certain subjects. Even if one were to use a wiki on a popular film, this would still demonstrate a particular interest in details that cannot be found in more general wikis.⁴⁹⁵

iuolc (taking online courses - last 3 months)

8.5 pts.

While the subject matter might vary, the willingness to extend one's knowledge as well as the belief that it can be done via a strictly virtual course shows alignment to ideas and knowledge not being restricted to material bounds,⁴⁹⁶ which is typical of academic habitus. Also, it is less likely for online courses to be a mandatory part of one's profession, unlike with the following variable. However, it was limited to the

Hence, people who access their mails via these sites will automatically see the respective headlines.

491 This interconnection between professional application and private life is typical for those with more capital - cf. Sassi 2005: p. 689.

492 This is less so the case for Proactive Use, which implies staying up to date and using new possibilities as they come.

493 Cf. Statistik Austria 2013c.

494 Cf. Krajewski 1997: pp. 72f. However, as it is implied by the questionnaire, what was monitored here only concerned the usage of wikis to educate oneself, implying only reading activities.

495 Whereas Wikipedia, with its encyclopediac approach and nature, emanates and implies typical legitimate cultural techniques. Also, a certain amount of hyperlinks to 'legitimate' topics, if one were to only research pop-cultural information, can still be assumed, as well as an approach to pop-cultural themes that also implies an academic methodical approach.

496 Cf. Bühl 1997: p. 56.

last 3 months, and hence, might omit previous coursework searched. Thus, it should not yield too many points, as not to potentially distort the results due to pure timing of the assessment.

iueduif (researching courses – last 3 months)

8 points

Although it can be assumed to be somewhat tied to professional obligations, the understanding that learning is never finished as well as the willingness to learn more and more hints at high regard for education. The particularity, the possible goal-oriented background and the window of time, which might require some chance for this to be accounted for, hold it back slightly.

igovlib (using public libraries' online catalogues – last 12 months)

6 points

Reading has been identified to be typical of academic habitus.⁴⁹⁷ Libraries allow to overcome potential financial shortcomings when having that desire to read and are also a legitimate and institutionalized source of culture. Hence, it implies an even greater proximity to academic habitus. Also, performing research and looking for particular books also implies the possession of certain cultural techniques. Applying them allows access to desired knowledge, but also implies a certain level to be already present. Thus, they pretty much encapsulate the hypothesis related to this index: That what allows one to educate themselves is tied to certain educational requirements. Yet, despite its traditionally legitimate aura, the actual books contained within libraries are not necessarily in-depth or intended to provide a factual look-up, and it includes having looked up a book over the course of the last 12 months, which is not very much possible reading made possible for this time-frame. Also, not all libraries might offer this feature.

6.5. Social Appliance (analysed index): “soc”

Theoretical background:

Social Appliance concerns social activities that are not goal-oriented, unlike the ones concerned by

⁴⁹⁷Cf. Bourdieu 1982: p. 780.

proactive use. It concerns social interaction as an end to itself, that is conducted via internet usage. Women are more likely to use the internet in such a way.⁴⁹⁸ However, since most variables that would qualify for social usage can also be applied in a more goal-oriented manner, this index will be constructed somewhat differently: Only the most immediate and most likely socially applied variables will be used.⁴⁹⁹ Since social use also implies a daily appliance, having ever posted a message was also not included here. This is done to avoid overt auto-correlation.⁵⁰⁰ As the resulting index is rather specific and still uses some variables also used by presence, it will not be applied to the generating of clusters, but only analysed afterwards.

Variables used:

iuph1 ((video) calls over the internet – last 3 months) (8 points)

iuem (sending and receiving emails – last 3 months) (5 points)

iusnet (using social networks – last 3 months) (8.5 points)⁵⁰¹

⁴⁹⁸Cf. Tondeur et al. 2010: p. 163, referencing Kennedy et al. 2003.

⁴⁹⁹However, as mentioned before, it was simply inevitable to re-use previously applied variables, such as using email.

⁵⁰⁰During an earlier stage of this thesis, Social appliance and Presence were calculated differently, and both were used to compose the clusters. However, this resulted in a correlation between these two indices of over 90%, which would have given the applied variables a twofold weight in the composition of the clusters. Hence, the operationalization was changed (to allow for better interpretation), and the index of Social appliance was only used for analysis, not for composition: Even on a theoretical level, it is obvious that there will be overlappings between those two categories.

The points amounted by shared variables among both indices account for 8.5 out of a maximum of 21.5 (39.5%) for Social appliance, and for 8 out of a maximum of 17 points (47%) for Presence. Furthermore, Social appliance also shares the variable “Sending email” with Proactive use, which accounts for 7.7% of Proactive's points, and 18.2% of Social's top score.

⁵⁰¹Maximum score: 21.5. Points shared with Presence: 8.5/21.5=39.5%. Points shared with Proactive

Weighting of the variables: **iuph1** ((video) calls over the internet – last 3 months) **8 points**

If one performs phone-calls via the internet on a regular basis (and the last three months imply that), then this points at a very social use of the internet. A natively included internet-calls option for mobile phones will make this category much more likely, however, it changes nothing about the fact that it bolsters Social Appliance.⁵⁰²

iuem (sending and receiving emails – last 3 months) **5 points**

While a very basic function of the internet, sending emails serves to interact with other people. It lacks certain levels of more sophisticated interaction – voice, live picture – and is asynchronous,⁵⁰³ but it still can provide a conversation.⁵⁰⁴

iusnet (using social networks – last 3 months) **8.5 pts.**

Social networks are specifically designed for social interaction, often as an end in itself. While chatting and posting messages is what ultimately provides the social interaction, just reading other people's messages, looking at their pictures and being 'in touch' with them also provides a considerable amount of social connection. Thus, it rewards many points.⁵⁰⁵

6.6. Usage Type (analysed nominal variables): “*inhome*”, “*iacc*”, “*ihm_rec*”, “*ifu*”, “*iump_rec*”

Theoretical background: While the pure means of access as well as the quantity of use are relatively independent of the quality of use, they still can hint at priorities. Some user-types are more prone to invest heavily in new

Use: $5/21.5=23.3\%$.

⁵⁰²This category does not assess technical proficiency, after all. If the internet is technically used to commence phone calls, which serves a social intention, this is a respective use of the internet, after all. It still requires access to the internet and generates data.

⁵⁰³Cf. Schmutzer 1997: p. 225.

⁵⁰⁴This very variable was previously assessed focusing on the potential pro-active implications, whereas this one covers the social use of it.

⁵⁰⁵The same thing as discussed in the previous annotation applies to this variable.

technology, which shapes the view how their usage is framed, but does not determine it. However, since this results in very differentiated profiles, this must be analysed as nominal variables: For instance, somebody who has no smart-phone can very much so be in possession of considerable technological interest and knowledge, yet decidedly chosen not to buy such a phone due to political reasons.⁵⁰⁶ Also, unless the maximum or minimal amount of points is achieved, two users with identical scores can still have very different usage profiles.

Variables used: **iacc** (internet access at home – yes or no)
inhome (type of connection at home – none, slow, fast)
ihm_rec (recent internet usage at home – yes or no)⁵⁰⁷
iu (frequency of internet use – last time of use)
ifu (frequency of internet use over the last 3 months)
iump_rec (internet usage via mobile phone – yes or no)⁵⁰⁸

⁵⁰⁶Cf. Doerner 2014. This line of reasoning harkens back to the liberal ideals and claims to individual freedom, especially of possible external control and surveillance, of the hackers.

⁵⁰⁷Since that activity originally only assessed this value for those who had recently used the internet, it was recoded using the following code:

```
/* Recoding internet at home without missings:
USE ALL.
COMPUTE ihm_rec = 0.
IF ihm = 1 ihm_rec = 1.
EXE.
```

⁵⁰⁸This value also needed to be recoded, for the same reason as the one for internet use at home.

```
SPSS Syntax:
/* Recoding mobile internet without missings:
USE ALL.
COMPUTE iump_rec = 0.
IF iump = 1 iump_rec = 1.
EXE.
```

6.7. Urbanity (analysed continuous variable): “*geo_dens*”

Variable used: geo_dens (degree of urbanisation)⁵⁰⁹

Theoretical background: Access to the internet is much less developed in the periphery.⁵¹⁰

6.8. Age (analysed continuous variable): “*agecls*”

Variable used: agecls (age classes)

Theoretical background: Age has a negative effect on technical skills,⁵¹¹ however, gender differences in internet use become less pronounced at advanced age.⁵¹²

6.9. Employment status (analysed nominal variable): “*empst*”

Variable used: empst

Theoretical background: Employment state will be used to at least partially assess the socio-economic status of the individual as well as to allow better interpretation and attribution of the social context of the clusters.⁵¹³

6.10. Gender (analysed nominal variable): “*sex*”

Variable used: sex

⁵⁰⁹The cities that yielded the highest urbanity-score for Austria were Klagenfurt am Wörthersee, Linz, Salzburg, Graz, Innsbruck and Wien (cf. Eurostat 2011).

⁵¹⁰Cf. Sassi 2005: p. 691.

⁵¹¹Cf. van Deursen / van Dijk 2010: p. 905, Peacock / Künemund 2007: p. 198.

⁵¹²Cf. ibid., referencing Korupp / Szydlik 2005

⁵¹³To allow better analysis and correlational analysis, the variables was recoded into dummy-variables for the respective values (one dummy for employment state “student”, one for “unemployed”, one for “employed” and one for “other”).

Theoretical background: Gender is a central variable when it comes to the use of the internet,⁵¹⁴ to self-estimation of skills⁵¹⁵ as well as to the habitus in general.⁵¹⁶

6.11. Other nominal variables

Variables used: Structure of household (hh_pop)
 Various variables assessing buying behaviour over the last 12 months
 Self assessment of skills (isk_sfcom, isk_sfpri, isk_sfvir)

Theoretical background: The last 3 variables will be used to analyse the relation of the Technical Skills actually possessed to the self-assessment of skills. The structure of the household will be used if people have internet access at home, yet do not use it themselves: In this case, it is very likely for the access to be used by other members of the household. Online buying behaviour will be analysed to estimate the integration of internet-services into multiple aspects of life. It will also allow insight into which goods money is spent on, and which interests are pursued by doing so.

7. Commencing the analysis

After computing all the indices,⁵¹⁷ their ranges were equalized, as each of them was intended to have the same influence. To do so, a common denominator was calculated, and each score re-coded into a new variable.⁵¹⁸ Afterwards, weighting was

⁵¹⁴ Cf. Löw 2001: pp. 98, 92.

⁵¹⁵ Cf. Litt 2013: p. 620.

⁵¹⁶ Cf. Löw 2001: pp. 227f.

⁵¹⁷ It should be noted that all theoretically possible maximum scores were achieved.

⁵¹⁸ The maximum scores were 48, 19, 24.5, 38.5 and 21.5. Hence, the syntax was as follows:

turned on and the correlation between the indices was calculated for those who had used the internet in the last 3 months.⁵¹⁹

Chart 1: Weighted correlation of the indices for regular internet users.

		Correlations			
		Proactive use Recoded	Presence Recoded	Technical skills Recoded	Educational use Recoded
Proactive use Recoded	Pearson Correlation	1	,336**	,456**	,556**
	Sig. (2-tailed)		,000	,000	,000
	N	5175447	5175447	5175447	5175447
Presence Recoded	Pearson Correlation	,336**	1	,460**	,310**
	Sig. (2-tailed)	,000		,000	,000
	N	5175447	5175447	5175447	5175447
Technical skills Recoded	Pearson Correlation	,456**	,460**	1	,463**
	Sig. (2-tailed)	,000	,000		,000
	N	5175447	5175447	5175447	5175447
Educational use Recoded	Pearson Correlation	,556**	,310**	,463**	1
	Sig. (2-tailed)	,000	,000	,000	
	N	5175447	5175447	5175447	5175447

** . Correlation is significant at the 0.01 level (2-tailed).

As expected, there was a certain correlation between Proactive Use and Educational Use, as well as between Educational Use and Technical Skills, as they all are more

```

/*Recoding the indices so the top score is identical for all.
/*Common denominator: 48*19*24.5*38.5*21.5=18495246.
COMPUTE re_proact = (proact*385317.625).
COMPUTE re_pres = (pres*973434).
COMPUTE re_skills = (skills*754908).
COMPUTE re_edu = (edu*480396).
COMPUTE re_soc = (soc*860244).
EXE.

```

```

/*Since this results in a huge number, the variable was then divided by 1000000:
COMPUTE re_proact = (re_proact/1000000).
COMPUTE re_pres = (re_pres/1000000).
COMPUTE re_soc = (re_soc/1000000).
COMPUTE re_skills = (re_skills/1000000).
COMPUTE re_edu = (re_edu/1000000).
EXE.

```

```

DESCRIPTIVES VARIABLES=re_proact re_pres re_soc re_skills re_edu
/STATISTICS=MEAN STDDEV MIN MAX.

```

⁵¹⁹ Including those who had never or not recently used the internet produced greater correlation, as if one index was zero, the likelihood of all others also being zero was rather high.

likely to be high if the formal education level is greater. Yet, as mentioned before, the assessment of this was only partially able to imply a general academic habitus, and the educational activities conducted online might actually be able to serve as a better indication.

Chart 2: Weighted correlation among regular internet users.

Correlations		Technical skills Recoded	Highest formal education level	Educational use Recoded
Technical skills Recoded	Pearson Correlation	1	,076**	,463**
	Sig. (2-tailed)		,000	,000
	N	5175447	5175447	5175447
Highest formal education level	Pearson Correlation	,076**	1	,207**
	Sig. (2-tailed)	,000		,000
	N	5175447	5175447	5175447
Educational use Recoded	Pearson Correlation	,463**	,207**	1
	Sig. (2-tailed)	,000	,000	
	N	5175447	5175447	5175447

** . Correlation is significant at the 0.01 level (2-tailed).

And, in fact, although they share no variables, Educational Use serves as a much better predictor for Technical Skills (among regular internet users) than formal education does. (This will be scrutinized further in the chapter on the resulting clusters.) However, it remains to state that while the two indices Educational Use and Proactive Use correlate highly in the context of cluster analysis,⁵²⁰ this hints at latent variables shared by both, not an operationalizational issue.⁵²¹ Hence, the indices were used. They were then z-standardized, giving them a mean of 0 and a standard deviation of 1.⁵²² While this meant that their range was now no longer identical, it

⁵²⁰Sambandam 2003: “in the context of cluster analysis, high correlation would be above .50 and low correlation would be below .20”.

⁵²¹As mentioned before, Technical Skills and Educational Use shared no variables, yet they still correlated at 0.463.

⁵²²Cf. Field 2005: p. 750. This means, distances are now expressed in relational scores - if the average score was very low, thus, the mean and thus zero-point will be very low – and not the scores originally computed.

meant that differences would now be calculated with regards to the mean of an index.⁵²³ Afterwards, since the method of k-clustering is not independent of the order the cases are in, they were ordered randomly.⁵²⁴ Afterwards, the datafile was saved. To find indication on how many cases to use, a hierarchical cluster analysis using cloned cases was performed to substitute weighting. To do this, the weighting variable was first rounded so it was always an integer, which allowed for cloning complete cases.⁵²⁵ Afterwards, weighting of cases was turned off and the respective cases were copied according to the new weighting variable, then saved into a new file.⁵²⁶

523 Cf. Field 2000: p. 3 for an explanation on why to standardize values before commencing a cluster analysis.

Syntax:

```
/*Creates random number variable
```

525 Syntax:

526 Syntax:

(The resulting file was 357 MB in size, since it contained 6.4 million cases)

```

DO repeat x = Zre_proact Zre_pres Zre_skills Zre_edu Zre_soc.
COMPUTE x = x+rv.uniform(0,0.0001).
end repeat.
EXE.

```

529Cf. Reinard s.a.. The low sample was needed, since 0.1% of 6.4 million cases was still over 6000 cases.

531 Although k-means uses non-squared Euclidian distance (cf. IBM SPSS 22 Information Center
2011a), Ward's method itself bases the fusion of groups on the squared Euclidian distance (cf.
Backhaus et al. 2000: p. 360), which is why it was used for this step.

exclusion of cases was irrelevant. The suggested amount of clusters was noted⁵³² and varied between 3 and 6.⁵³³

Afterwards, the non-cloned database was used again, and a hierarchical cluster analysis was commenced again, this time without cloned cases. This suggested a solution strongly suggested either 5 or 6 cases, implying a stable structural composition of the cases.⁵³⁴ A 7 case solution also seemed possible, although less obvious. Afterwards, a hierarchical cluster analysis for 5 and 6 clusters was commenced to save the resulting cluster membership. Afterwards, a non-weighted cluster solution with k-means for 5 and 6 clusters was also computed⁵³⁵ and the resulting cluster memberships saved into a new variable. The two membership variables between the two methods were then compared. Since hierarchical cluster analysis is not dependent on the order of the cases than the k-means method is,⁵³⁶ a high congruence is desirable. Various case orders, always using the aforementioned randomized arranging, were thus used, and the one with the highest concordance was eventually used. The randomized numbers offering lesser solutions were then deleted, and the result was then saved into a new file.⁵³⁷ Weighting was then turned on. One of the results of comparing the various cluster solutions was that one cluster always encompassed the people not using the internet at all or very very little.⁵³⁸ Thus, a 3 cluster solution was not desirable, as it would only yield two clusters depicting differing online-usage.

Since a cluster analysis is only as good as the interpretation it allows,⁵³⁹ a k-means cluster analysis for 3, 4, 5, 6 and 7 clusters was then conducted, as suggested by the analyses in the cloned database. Doing so, the resulting clusters were compared regarding their values of the indices, and the solution that depicted the greatest interpretational potential and coherence was picked.

532Cf. Norušis 2011: p. 389.

533Number of the suggested amount of clusters for each run: 4 or 5, 3 or 4, 4 or 5, 5 or 6, 4, 3 or 4 or 5, 5, 3 or 4 or 5, 3 or 4, 4 or 5, 4 or 5, 4 or 5, 5 or 6, 5 or 6, 6 .

534This is because even without weighting or cloning, similar results were obtained.

535With the option "Running means" turned off – cf. IBM SPSS 22 Information Center 2011a. The maximum number of iterations was set to 900, and the convergence criterion was set to 0 . (cf. IBM SPSS 22 Information Center 2011b)

536Cf. Bortz 2005: p. 580.

537The 6 k-means cluster solution was more stable when varying randomized order, with a congruence with the hierarchical 6 cluster-solution of 84.55%. The 5 cluster solution varied, with the best congruence being 81.74%.

538This was done so across all methods, with the congruence of the cluster of thee effective non-users even attaining a score of 100% for both the 5 cluster solution and the 6 cluster solution.

539Cf. Norušis 2011: p. 377 and Schendera 2010: p. 131.

Overview of the resulting clusters, with similar usage profiles coloured accordingly:

Chart 3: 3 Cluster solution:

Cluster	Proactive	Presence	Skills	Education	Female	Formal Edu.	Age	N
1	0.34 +	-0.39 -	-0.23 -	0.06 0	50% 0	3.13 +	3.5 0	2630925
2	0.73 ++	1.16 +++	1.03 +++	0.84 ++	44.4% -	3.08 +	2.3 --	2059459
3	-1.38 ---	-0.79 --	-0.88 --	-1.09 ---	0.59 ++	2.08 --	4.7 +++	1729266

Chart 4: 4 Cluster solution:

Cluster	Proactive	Presence	Skills	Education	Female	Formal Edu.	Age	N
1	0.88 +++	1.09 +++	1.39 ++++	1.09 +++	38.4% --	3.23 +++	2.4 --	1426816
2	0.39 +	-0.78 --	-0.16 -	0.25 +	44.9% --	3.28 +++	3.7 0	1833413
3	-1.35 ----	-0.80 ---	-0.88 ---	-1.08 ----	58.8% ++	2.11 -	4.7 +++	1774212
4	0.31 +	0.93 +++	-0.11 -	-0.07 0	59.9% ++	2.75 0	2.6 --	1385209

Chart 5: 5 Cluster solution:

Cluster	Proactive	Presence	Skills	Education	Female	Formal Edu.	Age	N
1	0.52 ++	-0.66 --	0.09 0	0.76 +++	42.5% --	3.46 ++	3.6 0	1288507
2	0.017 0	-0.64 --	-0.55 --	-0.71 --	53% +	2.90 0	3.9 +	1261151
3	-1.61 ----	-0.82 ---	-0.92 ---	-1.10 ---	60.8% +++	1.95 ---	4.9 +++	1397382
4	0.91 +++	1.19 +++	1.47 +++	1.133 +++	38.9% --	3.20 ++	2.3 --	1249523
5	0.35 +	1.08 +++	0.017 0	0.033 0	56.9% ++	2.73 0	2.4 --	1223085

Chart 6: 6 Cluster solution:

Cluster	Proactive	Presence	Skills	Education	Female	Formal Edu.	Age	N
1	0.54 ++	-0.67 --	0.15 +	0.81 +++	41.8% -	3.46 ++	3.6 0	1148187
2	0.05 0	-0.81 ---	-0.56 --	-0.59 --	50.7% 0	2.95 0	3.9 +	1171893
3	0.17 0	0.87 +++	-0.16 -	-0.36 --	56.5% ++	2.61 -	2.6 --	1012752
4	0.86 +++	1.08 +++	2.06 +++++	0.95 +++	31.3% --	3.20 ++	3.2 -	708998
5	0.82 +++	1.26 ++++	0.49 ++	1.04 +++	53.7% +	3.18 ++	2.3 --	975912
6	-1.6 ----	-0.82 ---	-0.91 ---	-1.10 ---	60.6% +++	1.95 ---	4.9 +++	1401906

Chart 7: 7 Cluster Solution:

Cluster	Proactive	Presence	Skills	Education	Female	Formal Edu.	Age	N
1	0.54 ++	-0.55 --	0.72 +++	0.65 ++	29.4% ---	3.46 ++	3.50 0	868198
2	0.035 0	-0.68 --	-0.59 --	-0.75 ---	53.6% +	2.88 0	3.94 +	1151362
3	-1.61 ----	-0.82 --	-0.92 ---	-1.10 ---	60.7% ++	1.95 ---	4.91 +++	1398437
4	0.91 +++	1.21 +++	2.11 ++++	1.02 +++	31.0% ---	3.13 ++	2.32 --	625357
5	0.87 +++	1.35 +++	0.51 +	1.12 +++	52.9% +	3.18 ++	2.27 --	810255
6	0.20 +	1.05 +++	0.02 0	-0.29 -	56.5% ++	2.56 -	2.46 --	876114
7	0.44 +	-0.51 --	-0.60 --	0.79 +++	58.5% ++	3.43 ++	3.39 -	689925

Chart 8: Global means:

Proactive	Presence	Skills	Education	Female	Formal Edu.	Age
0	0	0	0	50.5%	2.83	3.5 (44.25)

Considering the results from the cloned hierarchical cluster analysis, a 7 cluster solution should only be used if the other solutions prove unfruitful for interpretation. However, while the 7 cluster solution allows further differentiation, the 6 cluster solution offers the best balance between a lean cluster amount and in-depth information about the varying usage profiles. The solutions with less clusters were not as theoretically fertile, as will be shown in the following chapters.

8. Results and interpretation

In this chapter, the resulting clusters will be presented, analysed and compared to the assumptions of theory and previous research. Also the hypotheses will be tested when feasible and possible with demonstrative examples.

Chart 9: Simplified overview of the 6 resulting clusters:

Cluster	Proactive	Presence	Skills	Education	Female	Formal Edu.	Age	N
1	0.54 + +	-0.67 - -	0.15 +	0.81 + + +	41.8% -	3.46 + +	45.2 0	1148187
2	0.05 0	-0.81 - - -	-0.56 - -	-0.59 - -	50.7% 0	2.95 0	48.1 +	1171893
3	0.17 0	0.87 + + +	-0.16 -	-0.36 - -	56.5% + +	2.61 -	35.2 - -	1012752
4	0.86 + + +	1.08 + + +	2.06 + + + + +	0.95 + + +	31.3% - -	3.20 + +	43.3 -	708998
5	0.82 + + +	1.26 + + + +	0.49 + +	1.04 + + +	53.7% +	3.18 + +	32.4 - -	975912
6	-1.6 - - - -	-0.82 - - -	-0.91 - - -	-1.10 - - -	60.6% + + +	1.95 - - -	58.1 + + +	1401906

Considering the original intention of the questionnaire and database used, which required some less immediate operationalizing, the socio-demographic differences between the clusters are very satisfactory. As mentioned before, the clusters were composed strictly based on the indices scores on internet usage. The socio-demographic slant present thus makes a certain usage type much more likely to be applied

when possessing said parameters. While asserting Presence will factually mean very different things for people with very high cultural capital than for those with a very low one, both with regards to the implied actions as well as to the possibilities and chances connected with them, to differentiate such intricate matters would have required a much more detailed database. Given the limits of the database, the coherence of the groups' socio-demography is very high. Hypotheses 1A and 1B can thus be considered verified.

Of course, this quick overlook chart omits some of the more in-depth variables (such as employment status). These will be analysed in the following chapters, which will each detail one cluster. These chapters are not ordered by the cluster numbers, but in a way that allows a clear narrative flow of the analyses. Chapter 6 is an obvious starting point, due to its distanced nature. For the following chapters, a specifically designed overview chart will always be given at the beginning. In the following, this chart will be explained.

Chart 10: Explanation of the overview chart

Cluster Name, number and size					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
Applied indices					
Proactive Use	The indices have been standardised, thus a mean greater than 0 implies an above-average score. A standard-deviation of less than 1 implies a bigger homogeneity of the variable within the cluster than among general population. The “Simple”-column represents the value in comparison to the general population, ranging from a lot lower (- - -) over equal (0) to a lot higher (+ + +). A standard deviation of >1 will be boldfaced. Overall ranking lists the position the value of the variable ranks in an inter-cluster comparison. First and last ranking positions will also be boldfaced.				
Presence					
Technical Skills					
Educational Use					
Socio-demographic Items (not standardised)					
Age	Socio-demographic items as well as the nominal variables were not standardised, as to allow interpretation of the number. The standard-deviation, however, has been standardised, to allow easier overview whether it is above average (>1) or below. The group associated with the respective number will be listed in the “Notes” column (for				
Female					
Formal Education					
Urbanity					

Cluster Name, number and size					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
Students	example, an age of 3.5 value is roughly equivalent to 45.2 years of age. The “Simple”-column is in relation to the variable-name. For example, a higher urbanity score means a more rural area (this is how the data was encoded). For easier reading, however, a “+” in the urbanity column labels a more urban area, not a higher score. The same goes for the ranking. Formal education ranges from 0 to 6. ⁵⁴⁰ “Other” encompasses retirees, those exclusively engaged in housekeeping, and other social positions. ⁵⁴¹				
Working					
Other					
Unemployed					
Analysed indices					
Social Appliance	“Social Appliance” was not applied to the cluster composition, hence it is listed separately.				
Relation skills / self-assessment	This line compares the score achieved for Technical Skills to the cumulated self-assessment of one's technical skills, after standardising both.				
Nominal non-standardised variables					
Internet type at home	This variable ranges from 0 (no internet) to 2 (fast internet) at home. Again, the standard-deviation was standardised, the score of the variable itself was not.				
Frequency of internet use	This concerns the general regularity of internet use, ranging from 4 (never) to 1 (in the last 3 months). The “Simple”- and “Ranking”-column was adapted for a + to mean more frequent use, not a higher score.				
Frequency of recent use	Those that responded that they used the internet within the last three months could specify whether that usage was almost daily (1), at least once per week (2) or less than once a week (3). Again, the “Simple”- and “Ranking”-columns were adapted.				
Recent Internet use at home	This variable indicates whether the internet was used at home during the last three months.				
Recent Mobile use	This variable represents the amount of people with mobile internet usage during the last 3 months.				

⁵⁴⁰For a detailed overview of the various levels, including national classifications, see Statistik Austria 2010.

⁵⁴¹Cf. Statistik Austria 2012b: pp. 51 – 75.

8.1. Cluster 6/6: The Non-Digitals

Cluster #6 in one sentence: Lacking access as well as the required cultural skills to utilize the internet, the elderly Non-Digitals home a socio-demographic group already marginalized and at disadvantage in an increasingly digital world.

Chart 11: Cluster #6: The Non-Digitals

Cluster #6: The Non-Digitals: 1.401.906 cases (1.4 million)					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
Applied indices					
Proactive Use	-1.6	0.27	----	6	
Presence	-0.82	0.12	---	6	
Technical Skills	-0.91	0.19	---	6	
Educational Use	-1.10	0.12	---	6	
Socio-demographic Items (not standardised)					
Age	4.9	0.75	+++	1	~58 years.
Female	60.6%	0.98	+++	1	
Formal Education	1.95	1.05	---	6	
Urbanity	2.2	0.98	-	5	
Students	0%	0.14	--	6	
Working	31%	0.95	-----	6	
Other	67%	1.05	+++++	1	
Unemployed	1.86%	0.81	-	6	
Analysed indices					
Social Appliance	-1.19	0.16	---	6	Lower score than presence
Relation skills / self-assessment	-0.914 (skills) -1.36 (s.a.)	0.19 (skills) 0.49 (s.a.)	--- ----	n/a	More skilled than self-assured
Nominal non-standardised variables					
Internet type at home	0.82	1.39	--	6	59% without
Frequency	3.45	0.92	----	6	73% never

Cluster #6: The Non-Digitals: 1.401.906 cases (1.4 million)					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
of internet use					
Frequency of recent use	2.05	1.58	- - -	6	Only concerns 12%
Recent Internet use at home	0.09	0.66	- - - -	6	9% yes
Recent Mobile use	0.02	0.29	- - - -	6	2% yes

This cluster includes all the people that answered that they had never ever been on the internet in their lives (72.9% of the cluster, and 15.9% of the general population). However, 12.1% of the cluster actually replied that they had been on the internet in the past 3 months. Out of these 12.1%, 34% replied that they were on the internet (almost) daily. 4% of the cluster are thus online daily. Yet, as is made obvious by the indices, these people who are online daily still gather almost no advantages from this activity. For all the indices, this cluster ranked last.

As such, not only is it validated that there is not an access-gap, but also considerable usage and skills gaps. This cluster exhibits that there are more people that cannot seize the chances of the digital world despite having access, even if that number is little. But with or without access, the people of this cluster do not participate in the digital world at all, nor do they use its options for more traditional means. They are non-digitals in an increasingly digital world.⁵⁴² The fact that this cluster is the biggest of all thus presents a problem that should not be taken lightly, especially given the continuing emphasis on the digital.

Hence, the structure of this cluster is of great importance, as a structural inequality concerning its composition hints at further disadvantages for the concerned socio-demographic groups. From this perspective, it is almost comforting to know that the standard-deviation is often greater than in the population at large, meaning the present slants still do not imply a too narrowly confined group. Yet, the present tend-

⁵⁴²McLuhan / Powers assume that people who do not apply the modern world's means for identity-construction will become “non-persons” (McLuhan / Powers 1995: p. 151).

encies persist: The cluster is by far the one with the greatest average age, the least educated population, and also with the most women (60.6%). This is in line with the findings of van Deursen / van Dijk 2010 and Dudenhöffer / Meyen 2012: “*there are still gaps in internet usage (gender, generation, and education gap)*”.⁵⁴³

Again, the clusters were composed strictly based on internet-usage, all the other variables were only analysed afterwards. The rather high amount of internet access being present at home (41%) as contrasted by the actual use of it (only 9% have been online at home in the last 3 months) is easily explained when keeping in mind that out of those 41%, only 5% lived alone.⁵⁴⁴ So if there is an access at home, it is most likely not actually used by the people from this cluster.

Considering the potential implications of the “other” category of employment status (strictly engaged in housekeeping, retired and “*other social situations*”⁵⁴⁵), the cluster most likely features pensioners, or, given the gender-bias as well as the educational slant, also some ‘traditional housewives’,⁵⁴⁶ who as such show little interest for technical things.⁵⁴⁷

Fittingly, among the men in the cluster, 40.7% were employed and 57.5% classified “other”, whereas for the women of the cluster, only 25.4% were working and 72.4% classified as “other”. This is in line with the theory provided by Bourdieu,⁵⁴⁸ and validates hypothesis 5A⁵⁴⁹ and 5B⁵⁵⁰ for the time being (and thus, also the role of gender).

As far as a profile of the online usage goes, there is nothing to say about the online-use for this cluster, as there is basically none, or at least that registers with the indices. This means that most of the other hypotheses cannot be tested with the

⁵⁴³Dudenhöffer / Meyen 2012: p. 8.

⁵⁴⁴Given that 4% of this cluster are online daily, an akin figure seems logical.

⁵⁴⁵Statistik Austria 2012b: p. 51.

⁵⁴⁶In general, the “other” state was more likely to be occupied by women, further hinting at a still present slant when it comes to the gender distribution of housekeeping: Between the ages 16 – 54, 2.48% of all men belong to the “other” category (which is very unlikely to imply retirement in this age group), but 14.6% of all women.

⁵⁴⁷Cf. Bourdieu 1982: p. 599.

⁵⁴⁸Cf. *ibid.*

⁵⁴⁹“The negative role of female gender regarding internet use is mediated by age, education and employment status. However, usage differences between genders increase as education decreases, and decrease at advanced age.”

⁵⁵⁰“High age and low education have a negative effect on sophisticated internet use.”

results presented by this cluster. As of now, hypotheses 3A,⁵⁵¹ 3B⁵⁵² and 4B⁵⁵³ can only be validated in that the cluster is of high age and low education and lacks these skills and use. However, it should be noted that hypothesis 4C⁵⁵⁴ is validated insofar as this cluster is predominantly female, and the self-assessment shows a lower score than the actual skills possessed.⁵⁵⁵ In fact, another hypothesis the composition of this cluster supports is hypothesis 7: *“Those already in power will remain in a very much favoured and powerful position in the digital sphere.”* In this case, this means that the people who were already in a disadvantaged situation before now continue to be so when it comes to claiming the digital world. With regards to online-purchases and tendencies, only 1.26% of the cluster's members have ever bought something online, so an analysis of this would not yield meaningful results. As far as education is concerned, this is especially true for this cluster, as 38.5% have the lowest educational rating – much more than all the other clusters, and only 5.2% have the highest possible score. A correlational analysis was also performed to validate these findings,⁵⁵⁶ and found that an employment state of “other” in fact correlated negatively with all the other indices – Proactive Use, Presence, Technical Skills, Educational Use, but also with formal education.

8.2. Cluster 2/6: The Rural Visitors

Cluster #2 in one sentence: Despite having access on a technical level, the Rural Visitors have little regard for the more sophisticated and capital-enhancing facilities provided online, as such application is not part of their habitus.

Chart 12: Cluster #2: The Rural Visitors

Cluster #2: The Rural Visitors: 1.171.894 cases (1.2 million)					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
Applied indices					

⁵⁵¹ “Strategic and Proactive Use of media strongly correlates with academic habitus.”

⁵⁵² “Formal education has a positive effect on technical skills.”

⁵⁵³ “Technical Skills are higher among younger people.”

⁵⁵⁴ “When both possess the same skills, men are prone to estimate their skills to be of a higher level than women do.”

⁵⁵⁵ Validating the assessments presented by Löw (cf. Löw 2001: p. 100) and Litt (Litt 2013: p. 620).

⁵⁵⁶ Unless noted, all the correlations analysed in this thesis are significant on a level of 0.01.

Cluster #2: The Rural Visitors: 1.171.894 cases (1.2 million)					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
Proactive Use	0.05	0.40	0	5	
Presence	-0.81	0.15	- - -	5	
Technical Skills	-0.56	0.45	- -	5	
Educational Use	-0.59	0.49	- -	5	
Socio-demographic Items (non-standardised)					
Age	3.9	0.80	+	2	~48 years
Female	50.7%	0.99	0	4	
Formal education	2.95	0.82	0	4	
Urbanity	2.27	0.96	-	6	Most rural
Student	0%	0.32	- -	5	
Working	66%	0.98	+	3	
Other	32%	1.04	+	2	
Unemployed	2.00%	0.84	-	4	
Analysed indices					
Social Appliance	-0.48	0.45	- -	5	Higher score than presence
Relation skills / self-assessment	-0.562 (skills) -0.034 (self-assessment)	0.45 (skills) 0.89 (s.a.)	- - 0	n/a	More self-assured than skilled
Nominal non-standardised variables					
Internet type at home	1.89	0.68	+	5	
Frequency of internet use	1.01	0.08	+ +	3	Usually within last 3 months
Frequency of recent use	1.61	1.26	-	5	Concerns 99%. Less than daily.
Recent Internet use at home	0.91	0.69	+	5	91% yes
Recent Mobile use	0.25	0.87	- -	5	25% yes

Cluster 2 carries on the theme of mere access not being enough for people to actually engaging and 'legitimately' benefiting from the usage of the internet. Being the second biggest cluster, it again includes people who do not use the internet in ways that enhances their capital.⁵⁵⁷ This cluster is fairly balanced in regards to socio-demography, with an almost perfect gender-balance, the age only being slightly higher than the mean, and the formal educational also being very close to the general mean.⁵⁵⁸ In fact, while the cluster actually features 14.4% people with the highest possible education score, the mean is still lower due to the 74.3% that get the medium score of 3 out of 6 points. The cluster is almost perfectly average as far as this is concerned. Also, the amount of workers and retirees is only slightly higher than on average (5% and 4% higher, respectively). The one indicator that is out of the ordinary is the urbanity, which is the lowest of all clusters, while the Pro-active Use-index is very close to the general mean too.

However, members of the cluster hardly ever use the internet to educate themselves or to assert presence in the digital. The level of technical skills is also below average. While 91% of the cluster's population have used the internet at home within the last three months, and 50% of the cluster use the internet daily, this does not transfer into societal advantage. The way "*the internet, the medium of media*"⁵⁵⁹ is used, obviously differs from the more engaged clusters. With regards to Löw, this shows that the digital spaces are used to construct (and seek) very different rooms.⁵⁶⁰ The also almost perfectly average score of the index for Proactive Use hints at the underlying principle of this cluster: In a way, it uses it in a goal-oriented away, but these goals are not what is generally associated with (scholastic) legitimacy. Due to their age, the members of the cluster lack the technical skills,⁵⁶¹ and are, in the terms of Prensky, Digital Immigrants.⁵⁶² Due to their attitude, they are Digital Visitors, meaning, they only use the internet as means to an end and do not actually seek the engagement in digital worlds as an end in itself.⁵⁶³ This also explains the lack of regard for actually asserting presence online, whereas the social use scores slightly higher. The ends they

⁵⁵⁷Also cf. Van Deursen / van Dijk 2010: p. 511, referencing Hargittai and Hinnant 2008.

⁵⁵⁸However, the cluster has almost exactly 0% students. Given its average age, it is not likely for the educational degree still being in the process of completion.

⁵⁵⁹Levinson 1999: p. 42.

⁵⁶⁰Cf. Löw 2001: p. 200f.

⁵⁶¹Cf. Hypothesis 4B.

⁵⁶²Cf. Prensky 2001: p. 2.

⁵⁶³Cf. Bender 2010.

actually apply the possibilities of the internet to are not assessed by the indices: Due to their average formal education, no academic habitus is present, which, even without regard for digital worlds, would have allowed to still show interest in educating oneself online. If strategic use is applied, it concerns areas not assessed by the questionnaire. While 43.6% of the cluster answered that they had bought goods or services over the internet in the last 12 months, there was no clear slant that could have hinted at actual activities on the internet or PC itself: Clothes and sportswear were the most popular among the people who had ordered over the internet in the last 12 months (54%), next were holiday bookings (35%), then books and magazines (30%), and then electric devices (23%) and furniture and toys (23%). In fact, all these concern activities performed remote from a stationary PC, implying a focus away from it, but mainly, the scores almost all below 50%. What this also means, though, is that given the technical skills and the lack of presence, if the people from these cluster decide to visit the digital, they will most likely be among the interacted, and not among the interacting, as the architects of the digital worlds are not among their peers.

Given the discrepancy between the technical access possessed by the members of this cluster and the actual usage, the constellation exhibited here confirms that there exists a considerable second level divide,⁵⁶⁴ one not in mere access, but in use, in Austria. Despite cluster #1 being also often technically isolated, this proves the necessity to possess not only the technical means, but also the cultural techniques to utilize the internet. This hints at different habitus, as does the rather skewed relation between self-perceived skills and those actually possessed: As the habitus dictates "*the thinkable and the unthinkable*",⁵⁶⁵ this might very well imply unfamiliarity with more sophisticated use, making one overestimate the personal ranking of one's own knowledge.

In a way, however, for the members of this cluster, the digital fragmentation illustrated here is not that much of a problem: As they do not actually "*live the digital*",⁵⁶⁶ their immediate reality is not affected by the fact that, while they are on the same internet as everybody else, they conduct very different activities in very different

⁵⁶⁴Cf. Zillien 2006: p. 97.

⁵⁶⁵Bourdieu 2000: p. 97.

⁵⁶⁶Ibid.

places. To them, this sphere is negligible, and is used in a more passive and less involved way, akin to the tradition of the television.⁵⁶⁷ Of course, only time will tell how long this choice can be made without serious disadvantages even in the 'offline-world', as, for example, E-governmental aspects become more important, placing additional weight on the digital(ised) life.⁵⁶⁸ If that time should come, this cluster, as well as cluster #6, would be at a huge disadvantage, and with them, 2.6 million Austrians. And given their disconnected stance toward the internet, they would not have the modern networking technology to organise and prepare themselves in such a scenario. For an almost perfectly average cluster to be among the clear losers of recent and future developments is slightly disconcerting from a democratic point of view.

8.3. Cluster 1/6: The Established Users

Cluster #1 in one sentence: The Established Users continue to be successful in the digital age, despite not being Digital Natives or particularly tech-minded, but rather applying the technology to achieve goals.

Chart 13: Cluster #1: The Established Users

Cluster #1: The Established Users: 1.148.187 cases (1.1 million)					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
Applied indices					
Proactive Use	0.54	0.44	++	3	
Presence	-0.67	0.37	--	4	
Technical Skills	0.15	0.68	+	3	
Educational Use	0.81	0.54	+++	3	
Socio-demographic Items (non-standardised)					
Age	3.57	0.79	0	3	~45 years

⁵⁶⁷Considering the assumptions of technology this use implies, it makes sense that the members of the cluster were more self-assured about their technical skills than their actual skills would warrant.

⁵⁶⁸Cf. Bélanger / Carter 2009: p. 134.

Cluster #1: The Established Users: 1.148.187 cases (1.1 million)					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
Female	42%	0.99	-	5	
Formal education	3.46	0.81	+ +	1	
Urbanity	2.11	0.99	0	4	
Student	3.4%	0.67	-	4	
Working	75%	0.88	+ +	1	
Other	19%	0.88	- -	3	
Unemployed	1.89%	0.82	-	5	
Analysed indices					
Social Appliance	-0.18	0.58	-	4	Higher score than presence
Relation skills / Self-assessment	0.15 (skills) 0.39 (s.a.)	0.68 (skills) 0.69 (s.a.)	+ + +	n/a	More self-assured than skilled
Nominal non-standardised variables					
Internet type at home	1.97	0.33	+ +	3	
Frequency of internet use	1.00	0.00	+ +	1	100% within last 3 months
Frequency of recent use	1.18	0.79	+	3	Daily use more typical than mean.
Recent Internet use at home	0.97	0.41	+ +	3	97% yes
Recent Mobile use	0.52	1.00	+	4	52% yes

This cluster is the third largest one, and the first of the presented ones with considerably high index scores. What is apparent is that only Presence shows a below average score, whereas Educational Use is very high, as is Proactive Use. However, the score for Technical Skills is only slightly above average. The emphasis presented by this cluster thus hints at a rather purposeful use of the internet, with the skills that are present most likely being used as means to a certain end. Given the very high (the highest of all clusters) formal education level, it comes as no surprise that Educa-

tional Appliance is among these goals. As far as socio-demographic indicators go, the mean age is almost perfectly aligned to the general mean, however, there is an emphasis on men over women within the cluster.

Considering the varying scores for the indices, the composition of this cluster confirms the findings of, among others,⁵⁶⁹ van Deursen and van Dijk,⁵⁷⁰ that there are many distinct types of skills applied when using the internet. It also confirms that varying activities require various forms of skills.⁵⁷¹ These principles, along with their consequences, were thus also confirmed for Austria.

Given their average ages, it makes sense to compare this cluster to cluster 2, which, by contrast, showed very little regard to the digital. What is noticeable is that the amount of women working in cluster 1 is 70.4%, whereas it was only 57.3% for cluster 2. For men, 74% of those in cluster 2 work, whereas 79% of cluster 1's men work. The "other" category, which, as argued before, usually implies retirement or house-keeping, encompasses 23.2% of the women of cluster 1, but 39.0% of those from cluster 2. In short, women are much more likely to work when in cluster 1. This might be due to the generally much higher level of formal education, or hint at underlying differences in attitude. In fact, using Bourdieu's theories, this can be explained by the assumption of differing *habiti*. The distinction between active and passive media use, with the former being typical for more educated and powerful circles, is neither tied to the concept of *habitus* nor new.⁵⁷² However, using Bourdieu's theory allows one to interpret the differences in media use as framed by generally different approaches and differences in available capital.⁵⁷³ Altogether, this shows the continuity of hierarchy, and how the principle at work here is an old one.

Hypothesis 5A,⁵⁷⁴ which assumed that gender-differences were mediated by age and education, comes to mind, as this cluster has a much higher level of education, and also a much more evenly distributed relation of employment across the genders. When conducting a partial correlation analysis between gender and Proactive Use

⁵⁶⁹For an overview, see Litt 2013.

⁵⁷⁰Cf. Van Deursen / van Dijk 2009, 2010, via Van Deursen / van Dijk 2010: p. 896.

⁵⁷¹Cf. Krajewski 1997: pp. 69f, referencing Luhmann.

⁵⁷²For example, cf. Schmutzer 1997: p. 232, referencing Kapor 1995. Also cf. Escarpit 1966: p. 96.

⁵⁷³For example, cf. Bourdieu 1982: p. 695, Dudenhöffer / Meyen 2012: p. 10, Löw 2001: pp. 217, 208f, 100.

⁵⁷⁴"The negative role of female gender regarding internet use is mediated by age, education and employment status. However, usage differences between genders increase as education decreases, and decrease at advanced age."

while controlling for formal education, being female had a negative correlation of -6.3%. However, when not controlling for formal education, the correlation was almost twice as high, at -11.4%. While gender has a slight negative effect on Proactive Use, its influence is significantly lowered when formal education is accounted for. However, the assumed diminishing effects of age on the difference between genders could not be universally verified: Looking at Technical Skills, the difference between genders increased from age classes 1 to 3,⁵⁷⁵ and then lowered again afterwards.⁵⁷⁶ There was, however, a huge marginalization of difference with the shift of age class 5 to 6:⁵⁷⁷ At the age of retirement (65+ years), the difference in attitude in fact decreases considerably. Controlling for the employment state of “other”, the positive effect of male gender on Proactive Use changes from 11.4% to 4.4%, and the effect on Technical Skills from 24.2% to 20%. Hypothesis 5A can thus be confirmed.

It should also be noted that this cluster is much more urban than cluster 2 (and than cluster 6 as well), which might hint at further differences of lifestyle. Also, despite its age, there were some students present in the cluster, bolstering this interpretation. It should also be noted that hypothesis 2⁵⁷⁸ can be considered validated, verifying the influence of urbanity,⁵⁷⁹ as clusters 2 and 6 are very close as far as urbanity is concerned, ranking in last and second to last, and all the other clusters are considerably better connected to the internet. It must be mentioned, though, that while higher urbanity correlates slightly positively with the internet access at home,⁵⁸⁰ the frequency of recent use correlates slightly negatively⁵⁸¹ with higher urbanity, as does recent use in general.⁵⁸² However, urbanity correlates positively with formal education,⁵⁸³ with Proactive Use,⁵⁸⁴ with Presence⁵⁸⁵ and with Technical Skills.⁵⁸⁶ This again proves that the activities performed online as well as the way they can be and are

575 Meaning from 16 to 44 years of age.

576 Distance between the standardised score for Technical Skills from age classes 1 to 6:

0.319525286659, 0.521671415873, 0.5550703719388, 0.5355576629868, 0.5285048615062, 0.2325928938612.

577 Age class 5 ranges from 55 to 64 years.

578 “The more urban an area, the better the assumed connection to the internet and the world wide web will be.”

579 Cf. Sassi 2005: p. 690.

580 +2.5%.

581 -0.4%.

582 -7.4%.

583 +11.7%.

584 +13.6%.

585 +12.9%.

586 +15.4%.

conducted cannot be measured only in temporal quantity. As far as the connection that can be assumed is concerned, urbanity only has a slight effect, but nonetheless, hypothesis 2 can thus be considered verified.

The low presence score of the cluster might seem out of place at first, however, it makes perfect sense considering the distinction made by Prensky and Kruse. The academic habitus, that can be very much assumed for this cluster,⁵⁸⁷ prompts Educational Appliance, and also leads to Pro-Active Use in general. However, a regard for digital Presence is tied to both Digital Nativeness and Digital Residency. Such Digital Nativeness is questionable due to the average age present in this cluster. And to adapt online discussions as 'natural', to give weight to what is going on in the strictly digital, is not necessarily tied to the regard for the educational possibilities presented online. The people from this cluster use the internet, 84.2% of them daily, and 14% at least once a week. 52% of them even use a mobile phone with access to the internet. However, this does not necessarily imply involvement with the internet as an end to itself. The members of this cluster use the internet as a tool to achieve previously set goals – 73.1% of the cluster's members have bought goods or services online within the last 12 months. In general, the more sophisticated use of the internet is a reflection of their cultural capital, and most likely the amount of capital possessed in general.⁵⁸⁸ It is part of the cluster's members' habitus to use Wikis (92.4% yes), perform research on goods and services before buying (91.9% yes). However, the digital is not legitimate in itself, but only yields such use – online news are read by comparably few people (74.3%), most likely as there are other, more traditionally legitimate forms of gathering the information presented by them.

Hence, the people of this cluster are “users” in the truest sense – they use the internet to achieve certain goals, but remain both Digital Immigrants and Digital Visitors, with little regard for the strictly digital. Given the emphasis on men in the cluster as well as a generally high education, the self-assessment of the skills ranks higher than the actual skill level, although both are above average. What they have in common with the traditional internet users of 1996 is their regard for educational use. Still, the interest in the internet for itself, as well as the technical skills, make it likely for them

⁵⁸⁷ 31.5% of the cluster have the highest possible educational score, and only 5.5% have the lowest possible – the second highest and very lowest score in the respective category.

⁵⁸⁸ Cf. Sassi 2005: p. 689. As mentioned before, the economic and social capital cannot be operationalized with the used dataset.

to be rather new to the internet, thanks to the developments in usability and importance ever since.

8.4. Cluster 4/6: The Old Internet

Cluster #4 in one sentence: The Old Internet may have been marginalized as far as their percentage of online demography is concerned, yet the members of this very urban and male-dominated cluster still apply the internet in long-serving, sophisticated and capital enhancing ways.

Chart 14: Cluster #4: The Old Internet

Cluster #4: The old internet: 708.999 cases (0.7 million)					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
Applied indices					
Proactive Use	0.86	0.59	+ + +	1	
Presence	1.08	0.69	+ + +	2	
Technical Skills	2.06	0.43	+ + + + +	1	
Educational Use	0.95	0.73	+ + +	2	
Socio-demographic Items (non-standardised)					
Age	2.34	0.74	-	4	~43 years
Female	31.3%	0.93	- -	6	
Formal education	3.2	1.05	+ +	2	
Urbanity	1.84	0.99	+ + +	1	Most urban
Student	18.4%	1.44	+ +	2	
Working	71.8%	0.94	+ +	2	
Other	6.2%	0.54	- - -	6	
Unemployed	3.6%	1.12	+	3	
Analysed indices					
Social Appliance	0.94	0.75	+ + +	2	Higher score than presence
Relation	2.06	0.43 (skills)	+ + + + +	n/a	Less self-assured

Cluster #4: The old internet: 708.999 cases (0.7 million)					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
skills / Self-assessment	(skills) 0.75 (s.a.)	0.39 (s.a.)	+ +		than skilled
Nominal non-standardised variables					
Internet type at home	1.992	0.18	+ + +	1	Almost 100% fast
Frequency of internet use	1.00	0.00	+ +	1	No non-recent users
Frequency of recent use	1.02	0.29	+ +	1	Almost 100% daily
Recent Internet use at home	0.99	0.29	+ +	1	99% yes
Recent Mobile use	0.86	0.69	+ + +	1	86% yes

This cluster possesses by far the highest mean for Technical Skills, and as far as applied indices go, very high scores in general. For 97.6% people of this cluster, being on the internet is part of every day, and 86% of them have recently used an internet-ready mobile phone. Given the male domination of this cluster (68.7%), this is very much in line what used to be connoted with the people online before the change of demography in the past decades: When comparing the internet of 1996 in Germany with this cluster (from Austria in 2013), the scores line up almost perfectly.⁵⁸⁹ In 1996, 74% of the 'heavy users' were male, for this cluster, it is 78.7%. The average age was 37 years, now it is 43.⁵⁹⁰ In 1996, 85% possessed a university degree, and today's score sees 85.4% with an ISCED score of 3 or higher,⁵⁹¹ which is somewhat lower, but still, as seen by the high score for formal education, well above average. In fact, 32.1% possessed an ISCED level of 5 or higher – the highest amount of all the clusters. However, the lowest score for education was also present for 14.6% of the cluster –

⁵⁸⁹All figures from 1996 Schmutzer 1997: pp. 218f.

⁵⁹⁰It should be noted that the average age is rather high in general, as not exact ages were assessed, but classes. The lowest category ranged 16 to 24, and its mean already was 20. Hence, the actual mean age might be lower, or higher, if it were assessed more precisely.

⁵⁹¹As mentioned before, the assessment of the educational levels, especially as multiple levels were combined into one, makes it hard for such comparisons. 3 describes “*upper secondary education*” (United Nations Educational, Scientific and Cultural Organization 1997: p. 22), ISCED 4 describes “*post-secondary non-tertiary education*” (ibid.: p. 25).

possibly hinting at some heterogeneous *habitus* in the cluster, also confirmed by the above average standard deviation.

In general, hypothesis 5C,⁵⁹² which assumed a linear correlation between formal education and educational appliance, can be confirmed, though. The assumed correlation was present both among all the people in the database as well as only for recent users. The amount of people without academic degree in this cluster show that while originally shaped by academic *habitus*, the logic of “hacker culture” is, at least nowadays, not necessarily tied to it. This very constellation shows people display academic behaviour without actually possessing academic degrees themselves. The implications of this are manifold – it could on the one hand hint at an erosion of the academic foundation of the hacker culture, rendered merely convention, not an over-reaching structural principle to deliberately adhere to⁵⁹³ – weakening the claim of discussions among equals. It could also contribute to distribution of the academic approach, bolstering its claim for universal validity. It could also prove empowering for individuals who thus gather access to techniques they would normally not adapt in their immediate surrounding. The constellation could also be a result of being in possession of degrees not acknowledged in Austria. All these scenarios and questions require further scrutiny with different means (possibly qualitative) and cannot be fully answered here.

This cluster assembles various factors typically associated with computer experts. When it comes to the consumption of media, 29.4% of the members of the cluster have ordered computer or video games over the last 12 months. While this number is still lower than that for music and films (35.91%), it is higher than that of all the other clusters. Also, 37.7% of the cluster had bought computer hardware in the past 12 months – again, the highest number across clusters. In general, 87.9% of the cluster had bought goods or services online in the past 12 months, with the most popular items being clothes (61% of all buyers), holiday bookings (57% of all buyers), electric devices (54% of all buyers) and tickets for events (51% of all buyers). The high mean for all these items shows that this cluster 'lives the digital' and uses it to complete many tasks.

592“Higher formal education implies an academic *habitus* and makes it more likely for users to apply the internet for educational purposes.”

593Of course, how deliberate academic *habitus* was, can be contested.

Altogether, this cluster mirrors the typical internet user from 17 years before, along with the image and technical requirements typically associated with internet users back then. In a way, the cluster presents a bubble in itself, having kept that peer group alive even through the changing general demographic on the internet. (Although it is now the smallest cluster of the six.) The question now is whether the aspired universality of the online discussions comes to life and these various clusters actually overlap when they meet to discuss as equals on the 'modern day coffee-houses' on the internet. But especially then the composition of this cluster demonstrates the theoretical limits of the reach of such universality: How equality is perceived and asserted depends on very normative axioms. Whether one is able to join a discussion or not will dictate the range of possible opinions present in it.⁵⁹⁴ People might very well, possibly unwittingly, end up in 'bubbles'⁵⁹⁵ of their own peers, which makes perfect sense: For like-minded individuals to come together and discuss builds on the very supposition that they share certain basic assumptions and grounds. Both in terms of language used and as far as topics concerned go, even if they should both gather online, cluster #4 and cluster #2 would probably have very little to discuss as far as the exchange of information goes. This is because to engage in a more qualitative experience, to get to see other people's impeti and sets of belief, is usually not included in the – in that way very literal⁵⁹⁶ – tradition of discussion present on the internet, that centres around the explication and exchange of arguments, not sentiments.⁵⁹⁷ The internet, as mentioned before, does not present, solidarity groups, but specialized idea collectives.⁵⁹⁸

And in fact, from the perspective of Bourdieu, to engage in a circles that are open for anybody is actually detrimental for one's personal distinction: What is shared by many, what is accessible by all, is of less value.⁵⁹⁹ Similarly, to re-arrange the online worlds in ways that make them more accessible for others would serve little purpose

⁵⁹⁴Cf. Nafus 2012: pp. 677f.

⁵⁹⁵Cf. Pariser 2011 via Lotan 2014.

⁵⁹⁶Cf. Levinson 1999: p. 53, McLuhan / Powers 1995: p. 68.

⁵⁹⁷Which of course also is connected to the academic ideal of arguments being intersubjectively understandable.

⁵⁹⁸Bourdieu also notes that a sense of solidarity, as a moral principle to cite and refer to, is more of a trait of the lower classes (cf. Bourdieu 1982: p. 339).

⁵⁹⁹Cf. *ibid.*: p. 224.

for those already at home in that environment.⁶⁰⁰ Actually, if such 'specialist bubbles' persisted, it would only enhance their value, now still serving as means of distinction.

A claim for universal knowledge might mediate such capital enhancing strategies, however, as illustrated before, *illusio* and especially *doxa* obscure one's ability to perceive the particularity of the personal approach and attribute a more general innateness to it.⁶⁰¹ While one might be able to get involved with other people's points of view, it is unlikely to have any regard for it, especially given the little meaning it will bear in one's own value system.

What is also noteworthy is that, as far as the clusters composed are concerned, there is no clear correlation between Technical Skills and activities performed online. While cluster #1 had only slightly above average skills, it still showed a huge emphasis on Educational Appliance, but none on Presence. Cluster #4 has a lot more Technical Skills, but only slightly more points for Educational Appliance – yet a lot more for Presence. Thus, hypothesis 8⁶⁰² is confirmed. It should also be noted that while this cluster by far had the greatest score for technical skills, its self-assessment showed humbleness. This goes to show that *“the more you know about IT, the less you trust it”*.⁶⁰³ It also implies that *“online experience influenced how well one’s self-rating aligned with the actual knowledge score”*,⁶⁰⁴ bolstering that finding, too.

In this specific case, the assumption to be actually able to protect one's privacy might seem a lot more likely if one is not actually aware of all the possibilities that exist to intrude it. As this cluster is the most male dominated of them all, hypothesis 4C⁶⁰⁵ cannot be discarded (as there is no other cluster with a comparably high Skills score), but it still sees a traditional gender-assumption inverted in an environment that is otherwise not assumed to be very regardful for non-male approach.⁶⁰⁶

600Cf. *ibid.*: pp. 358, 361.

601Cf. Nafus 2012: p. 674.

602“Clusters can be identical regarding one or more attributes (for example, gender or education) but differ regarding others.”

603Wolfensberger 2014.

604Litt 2013: p. 620. The full sentence read: *“The researchers found that factors such as income and online experience influenced how well one’s self-rating aligned with the actual knowledge score”* – sadly, income was not available in the database.

605“When both possess the same skills, men are prone to estimate their skills to be of a higher level than women do.”

606Cf. Nafus 2012: p. 670.

However, a partial correlation controlling for technical skills revealed among heavy users (those that use the internet daily) revealed that women usually rated themselves lower than men (correlation: -3.5%). While this might not come as a surprise,⁶⁰⁷ for recent users (within the last 3 months), all users, the correlation was only -1.9%, and for all the people in the database, -1%. While more experience with computers might very well lead to a more humble self-assessment, in general, this still to be the case more so for women than for men. Interesting enough, just among the members of cluster 4, this effect was almost non-existent: In fact, controlling for Technical Skills and only for daily users, a correlation between being male and self-assessment of skills of +1.1% resulted. So although hypothesis 4C can be verified, the gender stereotype of male self-assuredness is peculiarly less present in the most male-dominated cluster.⁶⁰⁸

Hypothesis 9⁶⁰⁹ can also be assumed to be validated, as all the clusters with an above average score for Proactive Use or Presence also had an above average score for the internet connection present at home. A correlation for those who had used the internet in the last 3 months, but have no access at home resulted in a below average mean values for Proactive Use and Presence.⁶¹⁰ For those that were online within the last 3 months, but had access to internet from home, the means for these two indices were both above average.⁶¹¹

607Cf. Löw 2001: p. 100, Litt 2013: p. 620.

608Taking into consideration the results of Nafus 2012, it might be likely that women that are among this cluster would need a certain amount of self-esteem to even engage in such circles, possibly explaining the results.

609“Whether people have access to the internet on their private premises or not influences the assumed usage.”

610-0.20139 and -0.3712, respectively.

611 They were 0.4109 and 0.2094, respectively.

8.5. Cluster 3/6: The New Internet

Cluster #3 in one sentence: Being both a part as well as a product of the change of online demography and options, the young members of the New Internet synthesize digital rooms and options with limited capital enhancing possibilities.

Chart 15: Cluster #3: The New Internet

Cluster #3: The New Internet: 1.012.752 cases (1 million)					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
Applied indices					
Proactive Use	0.17	0.44	+	4	
Presence	0.87	0.55	+++	3	
Technical Skills	-0.16	0.61	-	4	
Educational Use	-0.36	0.58	--	4	
Socio-demographic Items (non-standardised)					
Age	2.62	0.87	--	2	~35 years
Female	56.5%	0.99	+	2	
Formal education	2.61	0.95	-	5	
Urbanity	2.09	0.97	0	3	
Student	9.5%	1.08	+	3	
Working	70.6%	0.93	++	3	
Other	15.1%	0.79	--	4	
Unemployed	4.7%	1.27	++	1	
Analysed indices					
Social Appliance	0.75	0.64	++	3	Lower score than presence
Relation skills / self-assessment	-0.16 (skills) 0.45 (s.a.)	0.61 (skills) 0.68 (s.a.)	- ++	n/a	Much more confident than skilled
Nominal non-standardised variables					
Internet type at home	1.95	0.42	++	4	
Frequency	1.01	0.11	++	3	Typically within last 3

Cluster #3: The New Internet: 1.012.752 cases (1 million)					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
of internet use					months
Frequency of recent use	1.20	0.87	+	4	Concerns 99%
Recent Internet use at home	0.96	0.46	+	4	96% yes
Recent Mobile use	0.62	0.98	+ +	3	62% yes

On the one hand, the shift in demography that took place since 1996 was caused by the people who now also wanted to use the possibilities provided by the internet. On the other hand, that shift also made it easier for people remote from the habiti of the typical users of the “old” internet to engage online and find like-minded people. This cluster possesses below average technical skills, yet it still yields a considerable Presence score, indicating no shortage of like-minded people to interact with – and in fact, the cluster is considerably bigger in size than the one home to those mirroring the old internet in terms of demography and skills.

The level of formal education in this cluster is below average. In fact, only 11% of the cluster's population have the highest educational score, and 20.4% have the lowest. This is considerably remote from the typical internet user of 1996, and again shows that there is no clear connection between Technical Skills and the Presence actually asserted.⁶¹² Hypothesis 4A⁶¹³ is thus validated in regards to these two variables, and hypothesis 3A⁶¹⁴ and 3B⁶¹⁵ are also still valid. Conducting a general correlation analysis between these variables also confirms hypotheses 3A and 3B, yielding a correlation of 19.8% between formal education and Technical Skills, and one of 36.7% between Proactive Use and formal education.

However, looking at the general population, there exist considerable correlations between the various indices. Yet, this should not be misleading: It is much more sens-

⁶¹² Cf. van Deursen / van Dijk 2014: pp. 511f.

⁶¹³ “Technical skills do not determine the actual usage.”

⁶¹⁴ “Strategic and Proactive Use of media strongly correlates with academic habitus.”

⁶¹⁵ “Formal education has a positive effect on technical skills.”

ible to only analyse potential correlations between the indices for people who have recently been online, as those who have a minimal score for one index are likely to be among those who do not use the internet at all, and thus will also have the very low scores for all the other indices. When only assessing the group of recent users, Technical Skills correlative with Proactive Use to 45.6%, to 46.0% with Presence, to 46.3% with Educational Use, and to 44.1% with Social Appliance. Technical Skills might not determine the actual usage on a qualitative level, but they very much make a generally more sophisticated use of the internet more likely. Hypothesis 4A can thus not be verified, although a qualitative analysis might yield more differentiated results.

Despite all differences cluster 3 has when compared to the old internet, the members of it are very much a part of the internet, and in a way, are the modern internet: 82% are online daily, and 96% regularly access the internet from their homes. As far as the assumed universal encounters and discussions on the internet go, this cluster has relatively little in common with all the other clusters as far as the interests pursued online go. Educational appliance is below average, and Proactive Use is only average, only besting clusters #2 and #6. In fact, given its considerably lower age, this cluster has more in common with a younger version of cluster #2 than it has with cluster #4, or even with cluster #1. In fact, cluster #1 is practically the opposite of this cluster: Where cluster #3 shows below average Educational Use, cluster #1 excels in this category. The opposite is true for Presence, and whereas cluster #1 has slightly above average Technical Skills, cluster #3 has slightly below average ones (the numbers are almost perfectly lined up). The new internet is, quite literally, not born of the old elite. However, as the average score for Proactive Use demonstrates, it does not use the internet in ways that make it likely for the tables to turn.⁶¹⁶ As such, it seems that Digital Nateness alone does not ensure gainful application of the internet alone.

The fact that cluster #1 has a higher mean for Technical Skills should not imply that hypothesis 4B⁶¹⁷ is disproved: A correlation of -42.9% between age and Technical Skills is present among all clusters, implying a negative effect of higher age on Technical Skills.

⁶¹⁶ Again, the habitus causes you to “*become what you are (and what you have to be)*”. (Bourdieu 2000: p. 218)

⁶¹⁷ “Technical Skills are higher among younger people.”

Despite a female dominance, the members of cluster #3 are much more self-assured about their Technical Skills than the empiric reality warrants. Just looking at this cluster, a positive correlation (when controlling for Technical Skills) between gender and self-assessment for men is to be noted.⁶¹⁸ Also, atypically for female dominance, the score for Social Appliance is lower than that for Presence. However, hypothesis 6A⁶¹⁹ is not to be discarded, as among recent users in general, women display a higher average score for Social Appliance.⁶²⁰ In fact, the mean score for Presence among recent users is also higher for women,⁶²¹ which not only confirms hypothesis 6A, but actually adds to it. Hypothesis 6B,⁶²² which assumes a generally higher score for Proactive Use for men, can also be confirmed.⁶²³

Another factor typically associated with members of the old internet, an interest in video and computer games, is considerably less pronounced in cluster #3: Only 6.85% of this cluster had spent money on games in the past 12 months, as opposed to the 29.4% of cluster #4, or even the 18.25% of cluster #5. In general, 62% of the cluster had bought goods or services over the internet in the last 12 months. The most popular items bought were clothes (64% of all buyers), books and magazines (33% of all buyers) and furniture and toys (32% of all buyers). Again, not many technical items are present among the most popular items in this category. All in all, this cluster consists of people who would have found very little of interest on the internet of 1996 (having neither interest in Educational Use nor much technical knowledge), yet nowadays make up a considerable part of its present day version.

⁶¹⁸ +3.8%.

⁶¹⁹ "Women are more likely to use the internet for social means."

⁶²⁰ 0.32 for women, 0.27 for men.

⁶²¹ 0.22 versus 0.18.

⁶²² "Men are more likely to use the internet for instrumental reasons, hence, they are more prone to proactive use."

⁶²³ For non-recent, recent and daily users, men always displayed higher average scores for Proactive Use (0.115 vs. -0.113, 0.441 vs. 0.353, 0.551 vs. 0.487).

8.6. Cluster 5: The Digital Academics

Cluster #5 in one sentence: Young and possessing considerable capital, the Digital Academics apply the internet to legitimate means and in sophisticated ways, ensuring or even improving their already advantageous position.

Chart 16: Cluster #5: The Digital Academics

Cluster #5: The digital academics: 975.913 cases (0.9 million)					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
Applied indices					
Proactive Use	0.82	0.53	+	2	
Presence	1.26	0.46	+	1	
Technical Skills	0.49	0.52	+	2	Big distance to #1.
Educational Use	1.04	0.60	+	1	
Socio-demographic Items (non-standardised)					
Age	2.32	0.78	-	6	~32 years. 'Youngest' cluster.
Female	53.9%	0.99	+	3	
Formal education	3.18	0.93	+	3	
Urbanity	1.98	1.03	+	2	
Student	23.57%	1.57	+	1	
Working	65.55%	0.98	+	5	
Other	6.94%	0.57	-	5	
Unemployed	3.93%	1.17	+	2	
Analysed indices					
Social Appliance	1.06	0.59	+	1	Lower score than presence
Relation skills / self-assessment	0.49 (skills) 0.53 (s.a.)	0.52 (skills) 0.59 (s.a.)	+	n/a	Balanced
Nominal non-standardised variables					
Internet type at home	1.991	0.18	+	2	

Cluster #5: The digital academics: 975.913 cases (0.9 million)					
Item	Mean	Std.-Dev.	Simple	Overall rank.	Notes
Frequency of internet use	1.0	0.00	+ +	1	No non-recent users.
Frequency of recent use	1.07	0.49	+ +	2	
Recent Internet use at home	0.98	0.36	+ +	2	98% yes
Recent Mobile use	0.78	0.84	+ +	2	78% yes

The final cluster to be analysed shows above average scores for all indices, with Presence and Educational Use especially pronounced and the highest ranking across all clusters. Their formal education is also above average. However, this cluster should not be confused for a slightly younger cluster #4: The amount of female cluster members is actually above average, and the amount of students is the highest of all clusters. It is also the second-smallest cluster.

In fact, it is to be assumed that the cluster does not 'live the digital' as much as cluster #4 does: Being rather young, the members of this cluster are Digital Natives, and being rather academic in their education, they have a certain interest to use the internet in sophisticated ways. However, the involvement is more likely to be connected to non-digital relations: 94% of this cluster use social networks, whereas only 77% of cluster #4 do. In cluster #4, the score for chatting was even higher than that for using social networks (90% vs. 77%), but lower in cluster #5 (94% vs. 85%). Posting on political topics was almost identical (15% in cluster #4, 16% in cluster #5), showing both interest as well as engagement in such discussions. Also, the score for Social Appliance was higher in cluster #4 than in cluster #5. Similarly, while their Technical Skill ranked second overall, the distance between cluster #4 and cluster #5 in this category was huge. (Their self-assessment of skills was in balance with the actual empirical Technical Skills.)

While this means that members of cluster #5 are less tied to their Digital Residency than cluster #5 is, in general, the members of this cluster are still Digital Residents.

Furthermore, they also are Digital Natives (due to their age) and have a certain academic habitus, explaining their sophisticated use of the internet. The members of this cluster are almost all online daily (93.4%) and have access from their home (98%), and 86.9% of this cluster have bought goods or services online within the last 12 months. The most popular items were clothes (67% of all buyers), then books or magazines (56% of all buyers), holiday bookings (53% of all buyers) and electric devices (35% of all buyers). It should also be noted that its above average figure for unemployment is in line with the fact that unemployment is generally higher among younger people. This cluster being the youngest, its unemployment rate is almost perfectly average for that age demographic.⁶²⁴ And in terms of demographic, this cluster confirms hypothesis 5B,⁶²⁵ as it is both above average in terms of formal education as well as with regards to Proactive Use, Presence, Skills and Usage Type. In fact, when controlling for age, formal education has a positive effect on all indices (when not controlling for age, it has a slight negative effect on Presence and Social Appliance). Also, cluster #5 is the youngest cluster. In general, a correlation of -45.3% is noted for higher age to Proactive Use, -55.9% for Presence, -42.9% for Technical Skills possessed, and -43.6% for the type of connection at home. A similar picture is depicted when correlation formal education with these variables.⁶²⁶

In closing, this cluster is both the youngest as well as one with the highest cumulated indices points. Being in possession of both traditional forms of capital (cultural) as well as of knowledge (Technical Skills) and habitus (Proactive Use, Presence, Educational Use) to further assert an advantageous position, this cluster is to cluster #1 what cluster #4 is to cluster #2: Its modern day equivalent, paying respect to the societal changes that have since occurred. It is much more likely for members of clusters #3 and #5 to meet online and engage in a discussion of equals than it is for members of cluster #4 and #5. However, given the respective score for Pro-active Use, this only confirms the assumption that *“it seems highly likely that the internet will fail to realise its undoubted potential as a medium of democratic life”*,⁶²⁷ as that would require conversation and participation among all involved groups.

⁶²⁴3.7% of the people aged under 45 are unemployed.

⁶²⁵“High age and low education have a negative effect on sophisticated internet use.”

⁶²⁶With Proactive Use: 36.7%, with Technical Skills: 19.8%, with Presence: 5.7%, with access type at home: 22%.

⁶²⁷Sassi 2005: p. 689, referencing Sparks 2000.

As Löw had concluded, the synthesis of places into rooms is individual,⁶²⁸ depending on one's habitus.⁶²⁹ It is only logical that the appeal of certain usage, for example those that see the 'free flow of information' at the core of the internet,⁶³⁰ has limited and biased reach. This is all obvious when comparing the use of the internet of clusters #1 and #5 when compared to that of clusters #2 and #3. Whether to apply the internet to such ends is part of one's habitus seems determines heavily on formal education. This again confirms the theory of academic habitus as well as the findings of van Deursen / van Dijk.⁶³¹

However, it should be noted that, when controlling for age, the partial correlation between various types of employment and the indices scores yields interesting results: Students still have the highest score for Educational Use, however, both working people and unemployed people display higher scores for Proactive Use, and the score for students is actually slightly negative.⁶³² While in general the score for students is higher,⁶³³ this might imply that this is only so due to age.

While this might at first hint at empowering chances for those of low capital, this is misleading: When controlling for both age and formal education, the partial correlation between being employed and Educational Use becomes negative, and the correlation to Proactive Use diminishes.

628Cf. Löw 2001: p. 159.

629Cf. Ibid.: p. 202.

630Cf. Levinson 1999: p. 91, Kapor 1995 via Schmutzer 1997: p. 232, Nafus 2012: p. 675, referring Coleman and Golub 2008.

631 Cf. van Deursen / van Dijk 2010: p. 905.

632Respective partial correlations:

Unemployed: Proactive Use: 0.012. Presence: 0.04. Social Appliance: 0.035. Technical Skills: -0.03. Educational Use: -0.01 .

Working: Proactive Use: 0.228. Presence: -0.068. Social Appliance: 0.008. Technical Skills: 0.061. Educational Use: 0.007 .

Student: Proactive Use: -0.07. Presence: -0.0106. Social Appliance: 0.093. Technical Skills: 0.072. Educational Use: 0.115 .

Other: Proactive Use: -0.254. Presence: -0.003. Social Appliance: -0.09. Technical Skills: -0.114. Educational Use: -0.165.

633Respective correlations:

Unemployed: Proactive Use: 0.04. Presence: 0.069. Social Appliance: 0.063. Technical Skills: 0.001. Educational Use: 0.018 .

Student: Proactive Use: 0.133. Presence: 0.314. Social Appliance: 0.295. Technical Skills: 0.239. Educational Use: 0.272 .

Working: Proactive: 0.331. Presence: 0.115. Social Appliance: 0.169. Technical Skills: 0.182. Educational Use: 0.189 .

Other: Proactive Use: -0.454. Presence: -0.339. Social Appliance: -0.384. Technical Skills: -0.341. Educational Use: -0.376.

On the other hand, the correlation between being a student and Proactive Use is positive when also controlling for formal education. The correlation between being unemployed and Proactive Use still remains greater than that for being a student, though. However, being a student still has the most positive partial correlation for the scores for Educational Use, Technical Skills and Presence. And, when controlling for age and formal education, being employed actually has the most negative correlation with Presence.⁶³⁴ Of course, how the presence asserted can be actually used and utilized will also depend on other factors.⁶³⁵

However, given the general compositional bias of the clusters, as different *habiti* can be assumed, so can be differing abilities and interests (as well as interest styles) to use present opportunities. The cluster structure presents rather coherent types, also with regards to demography. This makes the implication of varying degrees of proximity to 'legitimate' taste as well as available capital a valid assumption (for example, compare clusters #1 and #6). However, this all means that the strategies pursued appear sensible in the context of *habitus* as well as available capital: To invest in certain and more sophisticated use of the internet would not prove feasible for the clusters remote from certain types of capital.⁶³⁶

Considering the correlations between varying employment states and the indices, it is very likely that many students still have not yet finished their educational course, whereas workers and unemployed people may have already achieved higher degrees. While the status of being a student is not as influential for media use (or academic *habitus*), having accumulated formal education (in other words, having studied) is. Also, Educational Use presents a field specific use of Proactive Use, and in this category, students yielded the highest score. Yet, what this exhibited was that to use the internet in a strategic and instrumental manner seems not to be limited to those with actual academic everyday practice. But while the internet thus allows (and to a certain extent demands) the use of academic principles outside of strictly academic

⁶³⁴Respective partial correlations:

Student: Proactive Use: 0.025. Educational use: 0.209. Technical Skills: 0.126. Presence: 0.123.

Unemployed: Proactive Use: 0.042. Educational Use: 0.012. Technical Skills: -0.017. Presence: 0.044.

Working: Proactive Use: 0.115. Educational Use: -0.041. Technical Skills: -0.007. Presence: -0.092.

Other: Proactive Use: -0.183. Educational Use: -0.097. Technical Skills: -0.070. Presence: 0.011.

⁶³⁵Also see chapter 9.

⁶³⁶For the general principle at work here, cf. Bourdieu 1982: pp. 596f, 605, 636, 638.

circles, the correlation between formal education and Proactive Use is still rather strong.⁶³⁷ In other words, old means to legitimate success are still valid online.⁶³⁸ In fact, as the usage styles differ and fragmentation is advanced,⁶³⁹ the intuition for the 'right' investments and strategies that comes with a privileged habitus⁶⁴⁰ is as pronounced as ever. Consequently, differences become accentuated:⁶⁴¹ While Habermas' idealized discussions in the digital salons are technically possible, they are not a likely empiric reality.

Thus, while a very possible congregation of clusters #3 and #5 online might hint at the dissolving of barriers at first, it might very well be that these discussions will be among already connected milieus. This would require further qualitative scrutiny and is the most pessimistic interpretation. However, even if the internet served to bring together previously unfamiliar academic-minded people, this would still not live up to the promise of the universal discussion salons of the internet: Whether such meetings will be able to balance out the fragmentation presented by the usage styles of the other clusters – depicting the demography of the implied “one internet” scattered and clotted across the web – remains questionable.

8.7. Overview of the resulting clusters

Chart 17: Overview of all the clusters

Overview of all the clusters						
Item	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6
Applied indices						
Proactive Use	++	0	+	+++	+++	----
Presence	--	---	+++	+++	++++	---
Technical Skills	+	--	-	+++++	++	---
Educational Use	+++	--	--	+++	+++	---

⁶³⁷O.367.

⁶³⁸Again confirming hypothesis 7.

⁶³⁹Cf. McLuhan / Powers 1995: p. 167.

⁶⁴⁰Cf. Bourdieu 1982: p. 387.

⁶⁴¹Cf. Bélanger / Carter 2009: p. 134.

Overview of all the clusters						
Item	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6
Socio-demographic Items (non-standardised)						
Age	0	+	--	-	--	+++
Female	-	0	+	--	+	+++
Formal education	++	0	-	++	+	---
Urbanity	0	-	0	+++	++	-
Student	-	--	+	++	+++	--
Working	++	+	++	++	++	-----
Other	--	+	--	---	----	+++++
Unemployed	-	-	++	+	+	-
Analysed indices						
Social Appliance	-	--	++	+++	++	---
Relation skills / self-assessment	+ ++	-- 0	- ++	+++++ ++	++ ++	--- ----
Nominal non-standardised variables						
Internet type at home	+	+	++	+++	++	--
Frequency of internet use	++	++	++	++	++	----
Frequency of recent use	+	-	+	++	++	---
Recent Internet use at home	++	+	+	++	++	-----
Recent Mobile use	+	--	++	+++	++	----

8.8. Review of the hypotheses

HYPOTHESIS 1A (strong):

The habitus governs seemingly individual decisions. The style of internet usage depends on socio-demographic factors. Clusters will differ by gender, age, cultural capital and the social position.

Verdict: Confirmed. All clusters differed by their socio-demographic means for age, gender and formal education.

HYPOTHESIS 1B (strong):

Despite shared places, the internet still very much sees different strategies applied and goals pursued depending on the individual's habitus. Supra-individual tendencies, governed by gender, age, education and employment status shape the usage of the internet. While there is literally 'space for everyone' on the internet, the pursued strategies are modern emergences of old differences and mirror previous hierarchical differences. As such, they are embedded in traditional strives for dominance.

Verdict: Confirmed. The socio-demographic framing as well as the varying score-mixtures implied a litany of aims pursued and usage styles applied. Formal education correlated with a more teleological pursuance of more traditionally legitimate goals on the internet, such as education itself.

HYPOTHESIS 2 (strong):

The more urban an area, the better the assumed connection to the internet and the world wide web will be.

Verdict: Confirmed, although only a slight influence within Austria.

HYPOTHESIS 3A (weak):

Strategic and Proactive Use of media strongly correlates with academic habitus.

Verdict: Confirmed. The higher the formal education, the higher the score for Proactive Use. Also, the higher the score for Educational Appliance – itself a sign of academic habitus – the higher the score for Proactive Use.

HYPOTHESIS 3B (weak):

Formal education has a positive effect on technical skills.

Verdict: Confirmed. A positive correlation as well as trends across the clusters were noted.

HYPOTHESIS 4A (strong):

Technical skills do not determine the actual usage.

Verdict: Refuted to a certain extent. While clusters differ in their usage styles, Proactive and Educational Use were only present with at least slightly above average Technical Skills.

HYPOTHESIS 4B (strong):

Technical Skills are higher among younger people.

Verdict: Confirmed. Age correlates negatively with almost every index score.

HYPOTHESIS 4C (strong):

When both possess the same skills, men are prone to estimate their skills to be of a higher level than women do.

Verdict: Confirmed, although with only minimal influence on the general population. However, the more knowledgeable people are, the more pronounced the effect of gender becomes.

HYPOTHESIS 5A (weak):

The negative role of female gender regarding internet use is mediated by age, education and employment status. However, usage differences between genders increase as education decreases, and decrease at advanced age.

Verdict: Confirmed, although for age mainly for the highest category.

HYPOTHESIS 5B (weak):

High age and low education have a negative effect on sophisticated internet use.

Verdict: Confirmed.

HYPOTHESIS 5C (weak):

Higher formal education implies an academic habitus and makes it more likely for users to apply the internet for educational purposes.

Verdict: Confirmed.

HYPOTHESIS 6A (strong):

Women are more likely to use the internet for social means.

Verdict: Confirmed and expanded for recent internet users; not appropriate for the population in general. Among recent users, women also are likely to assert a higher Presence score than men.

HYPOTHESIS 6B (strong):

Men are more likely to use the internet for instrumental reasons, hence, they are more prone to proactive use.

Verdict: Confirmed.

HYPOTHESIS 7 (weak):

Those already in power will remain in a very much favoured and powerful position in the digital sphere.

Verdict: Confirmed. Formal education has an almost universally positive effect on all the other indices.

HYPOTHESIS 8 (strong):

Usage varies wildly – homogeneous usage types cannot be assumed. Clusters can be identical regarding one or more attributes (for example, gender or education) but differ regarding others.

Verdict: Confirmed for the most part. While a specific value for one variable did not dictate another, there were obvious tendencies (for one, above average Technical Skills entailed above average Educational Appliance).

HYPOTHESIS 9 (strong):

Whether people have access to the internet on their private premises or not influences the assumed usage. For one, to engage in lengthy discussions while accessing the internet in public or at work is unlikely. Second, the relation leisure time is in to professional activity shapes the assumed approach to online usage.⁶⁴² Finally, for citizens to engage in discussions as equals is rooted in them doing so as private citizens, decidedly remote from external supervision.

Verdict: Confirmed. Both the type of internet present at home as well as the frequency of use implied very different levels of sophisticated use.

It should be noted that the strength-level of hypotheses does not seem to have influenced their verifiability or empirical validation.

⁶⁴²Cf. Sassi 2005: p. 689.

9. Conclusions and outlook

The cluster analysis resulted in six clusters depicting different usage styles of the internet, but also heavily differed as far as their mean demographic attributes were concerned. The clusters with the highest Presence score were also the youngest clusters, and the clusters with the highest scores for Proactive Use, Technical Skills and Educational Use all had a far above average level of formal education. Altogether, despite most clusters being somewhat remote to another in one or more singular aspects, the composition of the clusters presented a rather fragmented picture. The means to use the internet determine one's ability to compete in the digital world, which is why a socio-demographic bias regarding the activities and skills conducted online will yield grave consequences. If a critical "*civil public stands and falls with the principle of universal access*",⁶⁴³ then the same must also hold true for a critical civil internet. However, due to the differences in usage, information sources and communication platforms common across milieus are to be expected to decline. There is, both literally as well as figuratively, little common ground. Consequently fragmentation is bolstered, as not only do one's chances depend heavily on media usage, but the idea of a network where everybody speaks to everybody is effectively rendered a myth.

The fact that the largest cluster of the analysis did not participate in the modern digital world at all is the obvious peak of such fragmentation. Furthermore, the second largest cluster participated only to a very limited extent. This equates to 2.6 million Austrians without regard or access to, but either way without participation in the digital world. If future expansions of civil matters to the digital are to come, it must be kept in mind that they will most certainly yield a systematically biased exclusion in participation.⁶⁴⁴

The clusters depicting usage styles that rewarded the most profitable results as far as legitimate assets are concerned⁶⁴⁵ were clusters #1 (the Established Users), #4 (the Old Internet) and #5 (the Digital Academics). Clusters #4 and #5 had only above average scores for the four applied indices (Proactive Use, Presence, Technical Skills,

⁶⁴³Habermas 1990: p. 156.

⁶⁴⁴Also cf. Litt 2013: p. 613, referencing Warschauer 2003: p. 9.

⁶⁴⁵Using the internet as means to diversion might be a very valid strategy as well, however, it does not accumulate usable or recognized capital.

Educational Use), and cluster #1 had a below average score only for Presence. It is to be assumed that a higher Presence score, considering the average age of the clusters, is tied to Digital Nativeness and a question of usage among peers.⁶⁴⁶ It should be noted that these three clusters, the ones benefiting the most in the digital, contain the two smallest clusters, whereas the third one can be assumed to have already been in a very favourable position before the internet had come into its current position. The empowering effects of the internet are thus limited to a small fraction of the population, and a systematically biased one, too.

Cluster 3 (the New Internet) asserted a lot of presence, but otherwise, the four main indices' scores were merely slightly above average (Proactive Use) to below average (Technical Skills, Educational Use). Thus, how this presence was actually seized (beyond mere social links) is questionable. In fact, the potency of Presence is expected to be tied to the other indices as well as socio-demographic factors: The content of discussions as well as the persuasion exerted will determine the results and rewards.⁶⁴⁷ However, such a more differentiated analysis was not feasible with the database used for this thesis.⁶⁴⁸ What remains is that even on the level assessed, fundamental differences could be found: Whether one engages in online discussions at all and shows Presence at all is very unevenly distributed.

This means that, all in all, already existing differences and (dis)advantages will be magnified in their effects online: As Cluster #3 ranked last of those utilizing the internet in more proficient ways, it can be stated that the rewards of the new possibilities on the internet will be reaped by those already at advantage. Socio-demographically speaking, the disadvantaged clusters #2 and #6 were the two oldest clusters and the least urban ones. Cluster #6 was also the most female-dominated. Although Cluster #5, which was one of those profiting from the digital options, had an above average amount of female members, the other two benefiting clusters were male-dominated. In general, being female can be considered a disadvantage when it comes to seizing opportunities online.⁶⁴⁹

646This could lead to self-reinforcing effects: As using the internet is less common amongst more advanced age groups, assessing presence on the net holds less relevance for that reference group.

647Cluster 3 had the second-lowest level of formal education.

648One only has to think of Löw's quote that even in feminist forums, men dominate the discussions (cf. Löw 2001: p. 100) – dominance cannot be measured by mere participation in discussions, but also affects the outcome.

649It correlated negatively with Proactive Use and Technical Skills, and only correlated positively for

One major socio-demographic variable, namely that of migration background / ethnicity, was not present in the database used. It can only be assumed that this factor will also heavily influence both the framing and the structure of the usage style. However, this subject matter is for future research to touch upon.

To summarize the study: Already marginalized segments of the population – rural, of high age and with below average education – hardly participate in the digital, if at all. They are the clear losers of a development emphasizing and implementing digital aspects with regards to more and more matters. Their role in a society that is inseparably connected with the digital is marked by uncertainty and passivity.

Those already in favourable positions – of high formal education, male, of average age or below, rather urban – continue to profit as the digitalization advances. In the case of cluster #4, it can be assumed that they owe part of their success to proficiency with technical matters, whereas cluster #1 merely seems to use the new technology as a tool. Either way, both clusters' members are at a mean age that implies they already finished their educational career, as illustrated by their high score for formal education and low score for students. The details of their professional career are not assessed by the database, however, for their age groups, unemployment is below average, and “other” statuses (hinting at retirement or housekeeping) are far below average.⁶⁵⁰ Both clusters use the internet in very pro-active ways and for educational purposes. While they differ with regards to Technical Skills and Presence, both contain established members of society that depict considerable prowess in their use of the internet. They remain in favourable positions in the modern world, although cluster #4 arguably owes its previous success to technologization already undergone. To call them winners of the recent digitalization would be misleading, though, as they were far from losing before it as well. Especially given cluster #4's use of the internet, Sparks' quotation comes to mind: That while the internet *“is a medium through which people can learn and debate, it will be for rich white people rather than for the mass of the world's population.”*⁶⁵¹ While ethnicity and income were not assessed

Presence (itself a factor tied to others in its consequences) when only considering recent online-users.

650 In general, the “other” status of employment correlated negatively with all the four main index scores.

651 Sparks 2000, quoted via Sassi 2005: p. 689.

in the database, both clusters give the indication to be close to the societal “*power field*”⁶⁵² and are predominantly.

Cluster #3 is one of the two very young clusters, however, it has the higher unemployment rate of the two and much lower formal education. Thus, it again contains already marginalized members of society, as it also has an above average percentage of women and a bigger amount of members occupied “other” than the second cluster of its age group. Its members do not usually use the internet for Educational Purposes, and their Technical Skills are also below average. They show far above average Presence, though, and slightly Proactive Use of the internet. Still, considering the immediate competition in their age-sector, it can be assumed that the internet will not help them to rise in the social hierarchy. Thus, the members of this cluster will most likely not benefit from the arrival of the internet as far as their societal position goes. They will remain against certain odds, and the internet with its possibilities theoretically accessible for all will only give their hardship a more justified sheen: The systematic problem of them not having acquired the more rewarding cultural techniques leads to individualized blame for neglected options and strategies. One possible outcome would be for these particular characteristics of use are regarded as objectively faulty, even by those applying them.⁶⁵³ The habitus possessed could then either be defiantly defended (with non-rewarding results), or defeat be admitted – both outcomes are not inclusive at all.

The only winners of the digitalization – those still young but using the internet in beneficial ways – are in cluster #5. The “Digital Academics” have far above average scores for all indices. However, they are far from being a marginalized group: Despite being the second-smallest cluster, they possess above average education (despite their age), are more urban than average and have a lower unemployment-rate than the other cluster their age. Of all the clusters at advantage both from a socio-demographic point of view as well as far as index scores are concerned (#1, #4, #5), this is the only one where the amount of female-members is above average. Consequently, female members of this cluster are arguably the true winners of the recent developments regarding the role of the internet and its usability. However, it is again contestable how much of an improvement this already advantageous received. If anything,

652Bourdieu 1989: p. 30, quoted via Treibel 2000: p. 214. Originally “*Macht-Feld*”.

653Cf. Bourdieu 1982: pp. 600f.

the internet made sure that the advantages of its capital and habitus would be applicable to yet another area. Considering the inequalities in access to formal education, even cluster #5's members do not tell a tale of rags-to-riches, but for most, a continued success story.

All of this is important, as even though the usability of the internet becomes easier and more accessible as time progresses, the actual usage differences are still socio-demographically biased. Thus, merely granting access will not be enough, as exemplified by cluster #2. If anything, pure access, especially when considered to produce justified rewards, will only magnify differences, and decrease the ability to compete of those already disadvantaged.

Likewise, for clusters segmented by individual usage interests and styles to cross over and interchange information and expertise with other clusters seems unlikely. Such lack of central “town halls” that everybody from the “*global village*”⁶⁵⁴ frequents results in advanced fragmentation, affecting those not connected (clusters #2 and #6) the worst. Generally, the highly specialized communities of the internet present “*a society in transition, where new forms of solidarity have still to be found.*”⁶⁵⁵ It is up to research to pinpoint and specify the most immediate friction points. Due to the limitations faced in this thesis, there are still many questions left untouched. The role of dominance in online-discussions will certainly frame the mere theoretical Presence assessed in this thesis in a much more differentiated way. Also, as mentioned before, the role of ethnicity and actual income statuses would present a much more distinct picture: As Bourdieu notes, whereas it is choice for well-off women to work, it is a pure necessity for the lower classes.⁶⁵⁶ A more profound classification of clusters would thus require additional information concerning socio-economic status. In general, a more nuanced assessment of the type of activities conducted online, as well as more information on the habituality of it and the time spent doing so, would prove useful.

However, what this thesis still showed was that, even on a basic level of assessment, there exist considerable differences in usage, which are systemically biased by socio-demographic factors. Austria is not exempt from the problems of the second level

654McLuhan / Powers 1995.

655Heuser 1996: p. 88, via Bühl 1997: p. 55.

656Cf. Bourdieu 1982: p. 291.

digital divide: The findings of van Dijk / van Deursen⁶⁵⁷ could be confirmed for this nation as well. Various skills, many connected to traditional and systematically biased forms of education, are required to perform different actions online successfully.⁶⁵⁸ The influence of habitus continues to reproduce hierarchical differences online as well.⁶⁵⁹ As the “*the world of multimedia (will) be inhabited by two distinct populations (...): the interacted, and the interacting*”,⁶⁶⁰ one's habitus will still determine whether one will dominate or be dominated.⁶⁶¹ The habitus also governs the synthesis of places,⁶⁶² and as such, how digital places and facilities in the “*medium of media*”⁶⁶³ are interpreted and utilized.

Gender, being part of habitus, also continues to take effect even in the seemingly discarnate⁶⁶⁴ online worlds: Men, as predicted based on theory by Löw⁶⁶⁵ and previously verified empirically by Hargittai and Shafer,⁶⁶⁶ are both more self-assured in their self-perception as well as more dominant in discussions. While the former could be verified in this thesis, the later claim would require a more differentiated analysis. However, it could be confirmed that women are more likely to use the internet for social means,⁶⁶⁷ and that men “*use the internet (...) more for instrumental (...) reasons*”.⁶⁶⁸ Also, given the composition of clusters #2 and #6, the assumption that urbanity concerns the exclusion from the digital,⁶⁶⁹ could be verified for Austria as well. In general and as mentioned before, the current use of internet reproduces the societal position of the respective demography and favours an academic habitus. For example, compare the composition of cluster #1 when compared with cluster #2, or cluster #5 compared to cluster #3. This is, again, in line with previous findings,⁶⁷⁰ but

657Cf. Van Deursen / van Dijk 2010, Van Deursen / van Dijk 2014.

658Cf. Van Deursen / van Dijk 2010: p. 511.

659Cf. Bourdieu 2000: p. 218 for the general principle. Also, the composition of cluster #4, when compared to the internet's demography of 1996, exhibits the stability of habitus transformations into online usage logic as well as its hierarchy-ensuring ability.

660Castells 2001: p. 424, via: Zillien 2006: p. 96.

661Cf. Bourdieu 2000: pp. 166f.

662Cf. Löw 2001: p. 202.

663Levinson 1999: p. 42.

664Cf. McLuhan / Powers 1995: p. 162.

665Cf. Löw 2001: p. 100.

666Hargittai and Shafer 2006, via Litt 2013: p. 620.

667In line with van Deursen / van Dijk 2014: p. 511, referencing: Jackson et al. 2001, Subrahmanyam et al. 2001, Valkenburg / Peter 2007, Zillien / Hargittai 2009 as well as Schumacher / Morahan-Martin 2001.

668Tondeur et al. 2010: p. 163, referencing Kennedy et al. 2003.

669Cf. Sassi 2005: p. 690.

670Cf. van Deursen / van Dijk 2010: p. 511, referencing Hargittai and Hinnant 2008.

also makes it less likely for Habermas' idealized salon discussion culture⁶⁷¹ to blossom online: Given the continuing differentiation of usage logic and reasons, as well as the nature of online communities,⁶⁷² the findings hint that McLuhan and Powers' prediction that interaction will in fact have brought upon “*the next step in the fragmentation of the audience*”, came true.⁶⁷³ The difference in usage styles exhibited by the clusters in this thesis displayed little common ground for approximation, but rather fertile grounds for respective filter-bubbles.⁶⁷⁴

However, as it points out the interconnectedness between the appliance of cultural techniques and one's position in the respective society and culture at large, the solution for this predicament cannot be found in the purely digital. Access to formal education correlates highly with the success in the digital. If the ideal and promise of the one internet, for all to access and communicate with, is to be aspired to, common ground must be created: Not only in the facilities present online, but also in the assumed understanding and application – but hence also applicability – of them. Because an intuition for which opportunities are worth pursuing the most is one of the most powerful applications of the habitus of those already privileged,⁶⁷⁵ and as such, cannot be ignored in or replaced by the digital. Which is why to merely provide the means is not enough to ensure purposeful application of them: “*To have a million is not enough to live the life of a millionaire*”.⁶⁷⁶

671 Cf. Habermas 1990.

672 Cf. Lorenz 1997: p. 116.

673 McLuhan / Powers 1995: p. 167.

674 Cf. Lotan 2014.

675 Cf. Bourdieu 1982: p. 387.

676 Ibid.: p. 588. Originally: “*Es genügt nicht, über eine Million zu verfügen, um das Leben eines Millionärs führen zu können*”.

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Gallia est omnis divisa in partes tres, quarum unam incolunt Belgae, aliam Aquitani, tertiam qui ipsorum lingua Celtae, nostra Galli appellantur.

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Appendix: Description sheet of the variables

IKT-Einsatz in Haushalten 2013: Befragungszeitpunkt April bis Juni 2013
Merkmalsverzeichnis

Variable	Beschreibung	Frage	Code	Beschreibung	Bezugszeitraum	Filter
Haushaltsfile: nur Haushalte mit mindestens einem Haushaltsmitglied im Alter von 16 bis 74 Jahren						
comp	Computer	Gibt es in Ihrem Haushalt einen Computer?	1 ja 0 nein		Befragungszeitpunkt	alle Haushalte
iacc	Internetzugang	Gibt es in Ihrem Haushalt Zugang zum Internet? Dabei ist es egal, über welches Gerät das Internet genutzt wird.	1 ja 0 nein		Befragungszeitpunkt	alle Haushalte
bb	Internetverbindung: Breitbandverbindung (DSL, feste Breitbandverbindung über eine eigene Leitung, Breitband über ein lokales Funknetz, mobiles Breitband)	Welche Verbindung nutzen Sie zu Hause für den Internetzugang?	1 ja 0 nein 9 nicht zutreffend		Befragungszeitpunkt	Haushalte mit iacc=1
dsl	Internetverbindung: DSL-Verbindung, wie z.B. ADSL	Welche Verbindung nutzen Sie zu Hause für den Internetzugang?	1 ja 0 nein 9 nicht zutreffend		Befragungszeitpunkt	Haushalte mit iacc=1
bbwfx	Internetverbindung: Feste Breitbandverbindung über eine eigene Leitung, z.B. über Kabel, Glasfaser, Powerline/Stromnetz	Welche Verbindung nutzen Sie zu Hause für den Internetzugang?	1 ja 0 nein 9 nicht zutreffend		Befragungszeitpunkt	Haushalte mit iacc=1
bbfwl	Internetverbindung: Breitband über ein lokales Funknetz, wie z.B. über Satellit, öffentliches WiFi oder öffentliches WLAN	Welche Verbindung nutzen Sie zu Hause für den Internetzugang?	1 ja 0 nein 9 nicht zutreffend		Befragungszeitpunkt	Haushalte mit iacc=1
bbmobh	Internetverbindung: Mobiles Breitband über ein Handy oder Smartphone	Verwenden Sie mobiles Breitband über ein Handy, das zumindest 3G-fähig ist, z.B. UMTS?	1 ja 0 nein 9 nicht zutreffend		Befragungszeitpunkt	Haushalte mit iacc=1
bbmobm	Internetverbindung: Mobiles Breitband über eine Datenkarte	Verwenden Sie mobiles Breitband mit Datenkarte oder Modem am Computer mit zumindest 3G-Technologie, wie z.B. USB-Modem, Laptop mit zumindest 3G-Datenkarte (z.B. mit integrierter SIM-Karte)?	1 ja 0 nein 9 nicht zutreffend		Befragungszeitpunkt	Haushalte mit iacc=1
dialup1	Internetverbindung: Analog-Modem oder ISDN (Schmalbandverbindung)	Welche Verbindung nutzen Sie zu Hause für den Internetzugang?	1 ja 0 nein 9 nicht zutreffend		Befragungszeitpunkt	Haushalte mit iacc=1
mphnar1	Internetverbindung: Mobile Schmalbandverbindung, die über Handy oder mit Modem am Computer genutzt wird, wie z.B. GPRS	Welche Verbindung nutzen Sie zu Hause für den Internetzugang?	1 ja 0 nein 9 nicht zutreffend		Befragungszeitpunkt	Haushalte mit iacc=1
xelse	Kein Internetzugang: Das Internet wird woanders genutzt	Was sind die Gründe dafür, dass Sie zu Hause keinen Internetzugang haben?	1 ja 0 nein 9 nicht zutreffend		Befragungszeitpunkt	Haushalte mit iacc=2
xneed	Kein Internetzugang: Das Internet wird nicht gebraucht, weil nicht zweckmäßig oder nicht interessant	Was sind die Gründe dafür, dass Sie zu Hause keinen Internetzugang haben?	1 ja 0 nein 9 nicht zutreffend		Befragungszeitpunkt	Haushalte mit iacc=2
xequ	Kein Internetzugang: Anschaffungskosten sind zu hoch	Was sind die Gründe dafür, dass Sie zu Hause keinen Internetzugang haben?	1 ja 0 nein 9 nicht zutreffend		Befragungszeitpunkt	Haushalte mit iacc=2

xacc	Kein Internetzugang: Laufende Kosten sind zu hoch (z.B. Telefonkosten, Verbindungsgebühren)	Was sind die Gründe dafür, dass Sie zu Hause keinen Internetzugang haben?	1 ja 0 nein 9 nicht zutreffend	Befragungszeitpunkt	Haushalte mit iacc=2
xskl	Kein Internetzugang: fehlende Kenntnisse	Was sind die Gründe dafür, dass Sie zu Hause keinen Internetzugang haben?	1 ja 0 nein 9 nicht zutreffend	Befragungszeitpunkt	Haushalte mit iacc=2
xsec	Kein Internetzugang: Datenschutz- oder Sicherheitsbedenken	Was sind die Gründe dafür, dass Sie zu Hause keinen Internetzugang haben?	1 ja 0 nein 9 nicht zutreffend	Befragungszeitpunkt	Haushalte mit iacc=2
xbbn	Kein Internetzugang: Breitbandinternet ist am Wohnort nicht verfügbar	Was sind die Gründe dafür, dass Sie zu Hause keinen Internetzugang haben?	1 ja 0 nein 9 nicht zutreffend	Befragungszeitpunkt	Haushalte mit iacc=2
xoth	Kein Internetzugang: andere Gründe	Was sind die Gründe dafür, dass Sie zu Hause keinen Internetzugang haben?	1 ja 0 nein 9 nicht zutreffend	Befragungszeitpunkt	Haushalte mit iacc=2
geo_nuts1	Region NUTS1	Ostösterreich: Burgenland, Wien, Niederösterreich Südösterreich: Kärnten, Steiermark Westösterreich: Oberösterreich, Salzburg, Tirol, Vorarlberg	AT1 Ostösterreich AT2 Südösterreich AT3 Westösterreich		alle Haushalte
geo_dens	Urbanisierungsgrad	Informationen unter http://ec.europa.eu/eurostat/ramon/miscellaneous/index.cfm?TargetUrl=DSP_DEGURBA	1 dicht besiedeltes Gebiet 2 mitteldicht besiedeltes Gebiet 3 dünn besiedeltes Gebiet		alle Haushalte
hh_pop	Anzahl der Haushaltsmitglieder	Anzahl der Haushaltsmitglieder unabhängig vom Alter	1 1 Person 2 2 Personen 3 3 Personen 4 4 Personen 5 5 und mehr Personen		alle Haushalte
hh_child	Anzahl der Kinder	Anzahl der Kinder im Haushalt = Personen unter 16 Jahren	0 ohne Kind(er) 1 1 Kind 2 2 Kinder 3 3 Kinder 4 4 und mehr Kinder		alle Haushalte
hh_id	Haushaltskennzahl	Laufende Nummer des Haushalts, bestehend aus AT und einer 7stelligen Zahl			
hh_wght	Haushaltsgewicht	Ergibt summiert die Anzahl der Haushalte mit mindestens einem Mitglied im Alter von 16 bis 74 Jahren			
Personenfile: Personen im Alter von 16 bis 74 Jahren					
cu	Computernutzung	Wann haben Sie zuletzt einen Computer zu Hause, am Arbeitsplatz oder an anderen Orten verwendet?	1 In den letzten drei Monaten 2 Im letzten Jahr, aber nicht in den letzten drei Monaten 3 Vor mehr als einem Jahr 4 Noch nie		alle Personen
cfu	Häufigkeit der Computernutzung	Wie oft haben Sie in den letzten drei Monaten durchschnittlich einen Computer genutzt?	1 Jeden Tag oder fast jeden Tag 2 Mindestens einmal pro Woche, aber nicht täglich 3 Weniger als einmal pro Woche 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit cu=1
iu	Internetnutzung	Wann haben Sie zuletzt das Internet zu Hause, am Arbeitsplatz oder an anderen Orten genutzt?	1 In den letzten drei Monaten 2 Im letzten Jahr, aber nicht in den letzten drei Monaten 3 Vor mehr als einem Jahr 4 Noch nie		alle Personen
ifu	Häufigkeit der Internetnutzung	Wie oft haben Sie in den letzten drei Monaten durchschnittlich das Internet genutzt?	1 Jeden Tag oder fast jeden Tag 2 Mindestens einmal pro Woche, aber nicht täglich 3 Weniger als einmal pro Woche 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1

ihm	Orte der Internetnutzung: zu Hause	Wo haben Sie in den letzten drei Monaten das Internet genutzt? Dabei ist es egal, über welches Gerät das Internet genutzt wurde (z.B. Computer, Handy etc.).	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iwrk	Orte der Internetnutzung: am Arbeitsplatz (nicht zu Hause)	Wo haben Sie in den letzten drei Monaten das Internet genutzt? Dabei ist es egal, über welches Gerät das Internet genutzt wurde (z.B. Computer, Handy etc.).	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
ied	Orte der Internetnutzung: am Ausbildungsort	Wo haben Sie in den letzten drei Monaten das Internet genutzt? Dabei ist es egal, über welches Gerät das Internet genutzt wurde (z.B. Computer, Handy etc.).	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
ioh	Orte der Internetnutzung: bei anderen Leuten zu Hause	Wo haben Sie in den letzten drei Monaten das Internet genutzt? Dabei ist es egal, über welches Gerät das Internet genutzt wurde (z.B. Computer, Handy etc.).	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
ioth	Orte der Internetnutzung: An anderen Orten (z.B. Internetcafé, Hotel, Flughafen, Hotspots, öffentliche Einrichtungen wie z.B. Bibliothek, Gemeindezentrum)	Wo haben Sie in den letzten drei Monaten das Internet genutzt? Dabei ist es egal, über welches Gerät das Internet genutzt wurde (z.B. Computer, Handy etc.).	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iump	Mobile Internetnutzung außerhalb des Haushalts oder der Arbeit: Handy oder Smartphone	Verwenden Sie folgende mobile Geräte, um das Internet außerhalb des Haushalts oder außerhalb der Arbeit zu nutzen?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iump_mph	Mobile Internetnutzung außerhalb des Haushalts oder der Arbeit: Handy oder Smartphone über Mobilfunknetz	Nutzen Sie das Handy oder Smartphone dabei über ein Mobilfunknetz?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iump=1
iump_wl	Mobile Internetnutzung außerhalb des Haushalts oder der Arbeit: Handy oder Smartphone über öffentliches WLAN	Nutzen Sie das Handy oder Smartphone dabei über ein lokales Funknetz, wie z.B. über öffentliches WiFi oder öffentliches WLAN?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iump=1
iumc	Mobile Internetnutzung außerhalb des Haushalts oder der Arbeit: Tragbarer Computer, wie Laptop, Notebook, Netbook	Verwenden Sie folgende mobile Geräte, um das Internet außerhalb des Haushalts oder außerhalb der Arbeit zu nutzen?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iumc_mph	Mobile Internetnutzung außerhalb des Haushalts oder der Arbeit: Tragbarer Computer, wie Laptop, Notebook, Netbook oder Tablet Computer über Mobilfunknetz	Nutzen Sie das den tragbaren Computer dabei über ein Mobilfunknetz?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iumc=1
iumc_wl	Mobile Internetnutzung außerhalb des Haushalts oder der Arbeit: Tragbarer Computer, wie Laptop, Notebook, Netbook oder Tablet Computer über öffentliches WLAN	Nutzen Sie den tragbaren Computer dabei über ein lokales Funknetz, wie z.B. über öffentliches WiFi oder öffentliches WLAN?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iumc=1
iumd_oth	Mobile Internetnutzung außerhalb des Haushalts oder der Arbeit: Andere mobile Geräte	Verwenden Sie folgende mobile Geräte, um das Internet außerhalb des Haushalts oder außerhalb der Arbeit zu nutzen? Andere mobile Geräte sind z.B. PDA, MP3-Player, E-Book-Reader, mobile Spielekonsolen	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iumbx	Keine mobile Internetnutzung außerhalb des Haushalts oder der Arbeit	Ich steige außerhalb des Haushalts oder außerhalb der Arbeit nicht über mobile Geräte ins Internet ein	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iuem	Internetaktivitäten: Versenden oder empfangen von E-Mails	Versenden oder empfangen Sie E-Mails?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iusnet	Internetaktivitäten: Nutzung sozialer Netzwerke	Nutzen Sie soziale Netzwerke wie z.B. Facebook, Twitter, MySpace? (Dazu gehört z.B. das Erstellen eines Personenprofils, das Posten von Nachrichten oder sonstigen Beiträgen)	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1

iunw1	Internetaktivitäten: Lesen oder Herunterladen von Online-Nachrichten etc.	Lesen oder laden Sie Online-Nachrichten oder -Zeitungen oder Online-Zeitschriften oder -Magazine herunter (z.B. auf orf.at, krone.at, derstandard.at etc.)?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
ihif	Internetaktivitäten: Suchen von gesundheitsbezogenen Informationen	Suchen Sie gesundheitsbezogene Informationen (z.B. über Krankheiten, Verletzungen, Ernährung oder Vorsorge)?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iueduif	Internetaktivitäten: Informationssuche zu Ausbildungs-, Schulungs- oder Kursangeboten	Suchen Sie Informationen über Ausbildungs-, Schulungs- oder Kursangebote?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iuif	Internetaktivitäten: Finden von Informationen über Waren oder Dienstleistungen	Nutzen Sie das Internet zum Finden von Informationen über Waren oder Dienstleistungen?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iusoft	Internetaktivitäten: Herunterladen von Software	Laden Sie Software herunter (ausgeschlossen Spielesoftware)?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iupol1	Internetaktivitäten: Posten von Meinungen über Bürgerangelegenheiten oder politische Themen	Posten Sie Meinungen über Bürgerangelegenheiten oder politische Themen über Websites (z.B. über Blogs, soziale Netzwerke)?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iuvote	Internetaktivitäten: Online-Konsultationen oder Online-Abstimmungen zu Bürgerangelegenheiten oder politischen Themen	Nehmen Sie an Online-Konsultationen oder Online-Abstimmungen über Bürgerangelegenheiten oder politische Themen teil (z.B. Städteplanung, Unterschreiben einer Petition)?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iuolc	Internetaktivitäten: Teilnahme an einem Online-Kurs	Nehmen Sie an einem Online-Kurs teil (egal zu welchem Thema)?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iuwiki	Internetaktivitäten: Verwenden von Wikis	Verwenden Sie Wikis, um sich Wissen – egal welches Thema betreffend – anzueignen (z.B. Wikipedia, Online-Enzyklopädien)?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iujob	Internetaktivitäten: Jobsuche, Senden von Bewerbungsunterlagen	Nutzen Sie das Internet zur Jobsuche oder zum Senden von Bewerbungsunterlagen?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iupnet	Internetaktivitäten: Nutzung beruflicher Netzwerke	Nutzen Sie berufliche Netzwerke wie z.B. LinkedIn oder Xing? (Dazu gehört z.B. das Erstellen eines Personenprofils, das Posten von Nachrichten oder sonstigen Beiträgen)	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iuholc	Internetaktivitäten: Angebote/Leistungen für Reisen oder Reiseunterkünfte	Nutzen Sie Angebote oder Leistungen für Reisen oder Reiseunterkünfte?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iusell	Internetaktivitäten: Verkaufen über Internet	Verkaufen Sie Waren oder Dienstleistungen über Internet (z.B. bei Auktionen über ebay, flohmarkt.at oder willhaben.at)?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iuiph1	Internetaktivitäten: Telefonieren über Internet/Videoanrufe	Telefonieren Sie über Internet oder tätigen Sie Videoanrufe mit einer Webcam über Internet?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1

iubk	Internetaktivitäten: Internet-Banking	Nutzen Sie Internet-Banking?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iu=1
iunw1sub	Abonnement von Online-Nachrichtendiensten	Haben Sie auch Online-Nachrichtendienste abonniert, die Sie regelmäßig erhalten, wie z.B. RSS-Feeds?	1 ja 0 nein 9 nicht zutreffend	in den letzten drei Monaten vor dem Befragungszeitpunkt	Personen mit iunw1=1
igov12if	E-Government: Informationssuche	Haben Sie in den letzten zwölf Monaten im Internet nach Informationen auf Websites von Ämtern, Behörden oder öffentlichen Einrichtungen für private Zwecke gesucht?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit iu=1 oder iu=2
igov12fm	E-Government: Herunterladen von Formularen	Haben Sie in den letzten zwölf Monaten im Internet Formulare von Websites von Ämtern, Behörden oder öffentlichen Einrichtungen für private Zwecke heruntergeladen (z.B. Steuerformulare, Formular zur Änderung des Wohnsitzes)?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit iu=1 oder iu=2
igov12rt	E-Government: Rücksenden von ausgefüllten Formularen	Haben Sie in den letzten zwölf Monaten ausgefüllte Formulare an Ämter, Behörden oder öffentlichen Einrichtungen über Internet wieder zurückgesendet? Denken Sie hier bitte nur an private Angelegenheiten. Per Post und per E-Mail verschickte Formulare zählen nicht dazu.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit iu=1 oder iu=2
igovtax	E-Government: Einkommenssteuererklärung, Arbeitnehmerveranlagung	Haben Sie in den letzten zwölf Monaten Websites von Ämtern, Behörden oder öffentlichen Einrichtungen für Folgendes genutzt?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igovss	E-Government: Antrag auf Bezug von Pension oder Sozialleistungen, z.B. Arbeitslosenunterstützung, Kindergeld	Haben Sie in den letzten zwölf Monaten Websites von Ämtern, Behörden oder öffentlichen Einrichtungen für Folgendes genutzt?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igovdoc	E-Government: Beantragen oder Anfordern von persönlichen Dokumenten, Urkunden oder Ausweisen (z.B. Reisepass, Personalausweis)	Haben Sie in den letzten zwölf Monaten Websites von Ämtern, Behörden oder öffentlichen Einrichtungen für Folgendes genutzt?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igovlib	E-Government: Öffentliche Bibliotheken, z.B. Nutzen von Online-Katalogen/Bibliothekskatalogen, Suchfunktionen	Haben Sie in den letzten zwölf Monaten Websites von Ämtern, Behörden oder öffentlichen Einrichtungen für Folgendes genutzt?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igoved	E-Government: Einschreibung in höhere Bildungseinrichtungen, Universitäten oder Fachhochschulen	Haben Sie in den letzten zwölf Monaten Websites von Ämtern, Behörden oder öffentlichen Einrichtungen für Folgendes genutzt?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igovmv	E-Government: Meldung einer Adressänderung	Haben Sie in den letzten zwölf Monaten Websites von Ämtern, Behörden oder öffentlichen Einrichtungen für Folgendes genutzt?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igovpb_tf	Probleme bei E-Government-Nutzung: Technische Störung der Website	Waren Sie bei der Nutzung von Websites von Ämtern, Behörden oder öffentlichen Einrichtungen für private Zwecke in den letzten zwölf Monaten mit einem der folgenden Probleme konfrontiert?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igovpb_pif	Probleme bei E-Government-Nutzung: Mangelnde, unklare oder veraltete Informationen	Waren Sie bei der Nutzung von Websites von Ämtern, Behörden oder öffentlichen Einrichtungen für private Zwecke in den letzten zwölf Monaten mit einem der folgenden Probleme konfrontiert?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igovpb_snf	Probleme bei E-Government-Nutzung: Hilfe oder Support wären notwendig gewesen, es waren aber keine Informationen oder Kontaktdaten auf der Website verfügbar	Waren Sie bei der Nutzung von Websites von Ämtern, Behörden oder öffentlichen Einrichtungen für private Zwecke in den letzten zwölf Monaten mit einem der folgenden Probleme konfrontiert?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1

igovpb_oth	Probleme bei E-Government-Nutzung: Andere	Waren Sie bei der Nutzung von Websites von Ämtern, Behörden oder öffentlichen Einrichtungen für private Zwecke in den letzten zwölf Monaten mit einem der folgenden Probleme konfrontiert?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igov_eof	Zufriedenheit bei E-Government: Das einfache Finden von Informationen	Bei den folgenden vier Punkten geht es um Ihre Zufriedenheit bei der Nutzung von behördlichen Websites oder Websites von öffentlichen Einrichtungen. Bitte geben Sie jeweils an, ob Sie überwiegend zufrieden oder überwiegend unzufrieden waren. Falls einer der Punkte nicht auf Sie zutrifft, dann geben Sie dies bitte auch an.	1 Überwiegend zufrieden 0 Überwiegend unzufrieden 8 Trifft für Sie nicht zu 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igov_use	Zufriedenheit bei E-Government: Nützlichkeit der verfügbaren Informationen	Bei den folgenden vier Punkten geht es um Ihre Zufriedenheit bei der Nutzung von behördlichen Websites oder Websites von öffentlichen Einrichtungen. Bitte geben Sie jeweils an, ob Sie überwiegend zufrieden oder überwiegend unzufrieden waren. Falls einer der Punkte nicht auf Sie zutrifft, dann geben Sie dies bitte auch an.	1 Überwiegend zufrieden 0 Überwiegend unzufrieden 8 Trifft für Sie nicht zu 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igov_ifp	Zufriedenheit bei E-Government: Bereitgestellte Informationen während eines behördlichen Vorgangs oder danach	Bei den folgenden vier Punkten geht es um Ihre Zufriedenheit bei der Nutzung von behördlichen Websites oder Websites von öffentlichen Einrichtungen. Bitte geben Sie jeweils an, ob Sie überwiegend zufrieden oder überwiegend unzufrieden waren. Falls einer der Punkte nicht auf Sie zutrifft, dann geben Sie dies bitte auch an.	1 Überwiegend zufrieden 0 Überwiegend unzufrieden 8 Trifft für Sie nicht zu 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igov_eou	Zufriedenheit bei E-Government: Benutzerfreundlichkeit der genutzten Dienste auf der Website	Bei den folgenden vier Punkten geht es um Ihre Zufriedenheit bei der Nutzung von behördlichen Websites oder Websites von öffentlichen Einrichtungen. Bitte geben Sie jeweils an, ob Sie überwiegend zufrieden oder überwiegend unzufrieden waren. Falls einer der Punkte nicht auf Sie zutrifft, dann geben Sie dies bitte auch an.	1 Überwiegend zufrieden 0 Überwiegend unzufrieden 8 Trifft für Sie nicht zu 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12if=1 oder igov12fm=1 oder igov12rt=1
igov_ctf	Kontakt mit Ämtern, Behörden oder öffentlichen Einrichtungen: per Telefon (ausgenommen SMS)	Haben Sie in den letzten zwölf Monaten andere Wege als das Internet genutzt, um mit Ämtern, Behörden oder öffentlichen Einrichtungen in Kontakt zu treten? Denken Sie bitte nur an private Angelegenheiten.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit iu=1 oder iu=2
igov_cem	Kontakt mit Ämtern, Behörden oder öffentlichen Einrichtungen: per E-Mail	Haben Sie in den letzten zwölf Monaten andere Wege als das Internet genutzt, um mit Ämtern, Behörden oder öffentlichen Einrichtungen in Kontakt zu treten? Denken Sie bitte nur an private Angelegenheiten.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit iu=1 oder iu=2
igov_cvis	Kontakt mit Ämtern, Behörden oder öffentlichen Einrichtungen: persönlich vor Ort	Haben Sie in den letzten zwölf Monaten andere Wege als das Internet genutzt, um mit Ämtern, Behörden oder öffentlichen Einrichtungen in Kontakt zu treten? Denken Sie bitte nur an private Angelegenheiten.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit iu=1 oder iu=2
igov_coth	Kontakt mit Ämtern, Behörden oder öffentlichen Einrichtungen: auf anderem Weg, wie z.B. per Post, SMS, Fax	Haben Sie in den letzten zwölf Monaten andere Wege als das Internet genutzt, um mit Ämtern, Behörden oder öffentlichen Einrichtungen in Kontakt zu treten? Denken Sie bitte nur an private Angelegenheiten.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit iu=1 oder iu=2
igov_cx	Kontakt mit Ämtern, Behörden oder öffentlichen Einrichtungen: ich musste nicht kontaktieren	Haben Sie in den letzten zwölf Monaten andere Wege als das Internet genutzt, um mit Ämtern, Behörden oder öffentlichen Einrichtungen in Kontakt zu treten? Denken Sie bitte nur an private Angelegenheiten.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov_ctf=0 und igov_cem=0 und igov_cvis=0 und igov_coth=0 und igov12if=0 und igov12fm=0 und igov12rt=0
igov12rtx_nap	Kein Rücksenden von Formularen über Internet: Ich musste keine behördlichen Formulare einreichen	Es gibt verschiedene Gründe, warum ausgefüllte Formulare nicht über das Internet an Ämter oder Behörden zurückgesendet werden. Wenn Sie an die letzten zwölf Monate denken, welche treffen da auf Sie zu?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12rt=0
igov12rtx_sna	Kein Rücksenden von Formularen über Internet: Es waren keine Formulare im Internet verfügbar	Es gibt verschiedene Gründe, warum ausgefüllte Formulare nicht über das Internet an Ämter oder Behörden zurückgesendet werden. Wenn Sie an die letzten zwölf Monate denken, welche treffen da auf Sie zu?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12rtx_nap=0
igov12rtx_pcm	Kein Rücksenden von Formularen über Internet: Der persönliche Kontakt fehlt, ich bevorzuge persönliche Besuche	Es gibt verschiedene Gründe, warum ausgefüllte Formulare nicht über das Internet an Ämter oder Behörden zurückgesendet werden. Wenn Sie an die letzten zwölf Monate denken, welche treffen da auf Sie zu?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12rtx_nap=0

igov12rtx_irm	Kein Rücksenden von Formularen über Internet: Eine unmittelbare Antwort oder Rückmeldung fehlt	Es gibt verschiedene Gründe, warum ausgefüllte Formulare nicht über das Internet an Ämter oder Behörden zurückgesendet werden. Wenn Sie an die letzten zwölf Monate denken, welche treffen da auf Sie zu?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12rtx_nap=0
igov12rtx_tpap	Kein Rücksenden von Formularen über Internet: Ich vertraue der Einreichung oder Abgabe am Papier mehr	Es gibt verschiedene Gründe, warum ausgefüllte Formulare nicht über das Internet an Ämter oder Behörden zurückgesendet werden. Wenn Sie an die letzten zwölf Monate denken, welche treffen da auf Sie zu?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12rtx_nap=0
igov12rtx_skl	Kein Rücksenden von Formularen über Internet: Mangel an Kenntnissen oder Wissen (z.B. ich wusste nicht, wie man die Website nutzt bzw. die Nutzung der Website war zu kompliziert)	Es gibt verschiedene Gründe, warum ausgefüllte Formulare nicht über das Internet an Ämter oder Behörden zurückgesendet werden. Wenn Sie an die letzten zwölf Monate denken, welche treffen da auf Sie zu?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12rtx_nap=0
igov12rtx_sec	Kein Rücksenden von Formularen über Internet: Bedenken bezüglich dem Schutz und der Sicherheit der persönlichen Daten	Es gibt verschiedene Gründe, warum ausgefüllte Formulare nicht über das Internet an Ämter oder Behörden zurückgesendet werden. Wenn Sie an die letzten zwölf Monate denken, welche treffen da auf Sie zu?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12rtx_nap=0
igov12rtx_vrq	Kein Rücksenden von Formularen über Internet: Die entsprechenden Dienste erfordern ohnehin den persönlichen Besuch oder die Abgabe am Papier	Es gibt verschiedene Gründe, warum ausgefüllte Formulare nicht über das Internet an Ämter oder Behörden zurückgesendet werden. Wenn Sie an die letzten zwölf Monate denken, welche treffen da auf Sie zu?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12rtx_nap=0
igov12rtx_sign	Kein Rücksenden von Formularen über Internet: Fehlen von oder Probleme mit einer digitalen Signatur oder elektronischen Identifikation (z.B. eine Bürgerkarte oder eine Handy-Signatur, um sich zu identifizieren oder die Dienste zu nutzen)	Es gibt verschiedene Gründe, warum ausgefüllte Formulare nicht über das Internet an Ämter oder Behörden zurückgesendet werden. Wenn Sie an die letzten zwölf Monate denken, welche treffen da auf Sie zu?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12rtx_nap=0
igov12rtx_del	Kein Rücksenden von Formularen über Internet: Jemand anderer hat es für mich erledigt (z.B. Steuerberater, Verwandte, Freunde)	Es gibt verschiedene Gründe, warum ausgefüllte Formulare nicht über das Internet an Ämter oder Behörden zurückgesendet werden. Wenn Sie an die letzten zwölf Monate denken, welche treffen da auf Sie zu?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12rtx_nap=0
igov12rtx_oth	Kein Rücksenden von Formularen über Internet: Andere Gründe	Es gibt verschiedene Gründe, warum ausgefüllte Formulare nicht über das Internet an Ämter oder Behörden zurückgesendet werden. Wenn Sie an die letzten zwölf Monate denken, welche treffen da auf Sie zu?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit igov12rtx_nap=0
ibuy	Online-Einkäufe	Wann haben Sie zuletzt Waren oder Dienstleistungen für private Zwecke über Internet gekauft? Bestellungen und Einkäufe mit E-Mails, SMS und MMS zählen nicht dazu. Es ist egal, über welches Gerät Sie über Internet eingekauft haben (Personalcomputer, tragbarer Computer, Handheld Gerät, Handy oder Smartphone).	1 In den letzten drei Monaten 2 Im letzten Jahr, aber nicht in den letzten drei Monaten 3 Vor mehr als einem Jahr 4 Noch nie 9 nicht zutreffend	Befragungszeitpunkt	Personen mit iu=1 oder iu=2 oder iu=3
bfood	Gekaufte Produkte: Lebensmittel, Güter des täglichen Bedarfs wie Essen, Getränke, Hygiene- und Kosmetikartikel, Tabakwaren, Blumen etc.	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bfurn	Gekaufte Produkte: Haushaltsgüter (z.B. Möbel, Spielzeug)	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bmed	Gekaufte Produkte: Medikamente, Arzneimittel (z.B. Nahrungsergänzungsmittel, Vitaminpräparate)	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bfilm	Gekaufte Produkte: Filme, Musik	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2

bbooknl	Gekaufte Produkte: Bücher, Zeitschriften, Zeitungen einschließlich E-Books	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
belm	Gekaufte Produkte: E-Learning-Material	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bclot	Gekaufte Produkte: Kleidung, Sportartikel	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bgsoft	Gekaufte Produkte: Computer- oder Videospielsoftware oder Updates bzw. Upgrades für diese Spiele	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bosoft	Gekaufte Produkte: Andere Computersoftware oder Updates bzw. Upgrades für diese Programme	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bhard	Gekaufte Produkte: Computer-Hardware	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
beequ	Gekaufte Produkte: Elektronische Geräte (einschl. Kameras)	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bts	Gekaufte Produkte: Waren oder Dienstleistungen aus dem Telekommunikationsbereich (z.B. Abschließen von Fernseh-, Breitband- oder Handyverträgen, Aufladen des Guthabens von Wertkartenhandys)	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bfin	Gekaufte Produkte: Wertpapiere, Versicherungen oder andere Finanzdienstleistungen	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bholac	Gekaufte Produkte: Urlaubsunterkünfte (z.B. Zimmerbuchungen in Hotels)	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bota	Gekaufte Produkte: Andere Reisearrangements (z.B. Tickets für Verkehrsmittel wie Bus, Bahn, Flugzeug oder Mietwagenreservierungen)	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
btick	Gekaufte Produkte: Tickets für Veranstaltungen	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bothth	Gekaufte Produkte: Andere	Ich lese Ihnen eine Liste von Waren oder Dienstleistungen vor, die man über Internet einkaufen kann. Bitte sagen Sie mir jeweils, ob Sie solche über Internet in den letzten zwölf Monaten für private Zwecke erworben haben.	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2

bfilmo	Elektronische Lieferung: Filme, Musik	Wurden die Filme bzw. die Musik, die Sie über Internet gekauft haben, dann auch aus dem Internet heruntergeladen oder über Websites bezogen, anstatt sie auf herkömmlichem Weg geliefert zu bekommen (z.B. per Post)?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit bfilm=1
bbooko	Elektronische Lieferung: Bücher einschl. E-Books, Zeitschriften oder E-Learning-Material	Wurden die Bücher einschl. E-Books, Zeitschriften oder das E-Learning-Material, die Sie über Internet gekauft haben, dann auch aus dem Internet heruntergeladen oder über Websites bezogen, anstatt sie auf herkömmlichem Weg geliefert zu bekommen (z.B. per Post)?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit bbooknl=1 oder belm=1
bsofto	Elektronische Lieferung: Software	Wurde die Software, die Sie über Internet gekauft haben, dann auch aus dem Internet heruntergeladen oder über Websites bezogen, anstatt sie auf herkömmlichem Weg geliefert zu bekommen (z.B. per Post)?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit bgsoft=1 oder bosoft=1
bfdom	Herkunft der Online-Verkäufer: Unternehmen aus Österreich	Woher stammten die Unternehmen, bei denen Sie in den letzten zwölf Monaten für private Zwecke über Internet eingekauft haben?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bfeu	Herkunft der Online-Verkäufer: Unternehmen aus anderen EU-Ländern	Woher stammten die Unternehmen, bei denen Sie in den letzten zwölf Monaten für private Zwecke über Internet eingekauft haben?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bfwrld	Herkunft der Online-Verkäufer: Unternehmen aus Ländern außerhalb der EU	Woher stammten die Unternehmen, bei denen Sie in den letzten zwölf Monaten für private Zwecke über Internet eingekauft haben?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
bfunk	Herkunft der Online-Verkäufer: Das Land oder die Herkunft der Unternehmen ist mir nicht bekannt	Woher stammten die Unternehmen, bei denen Sie in den letzten zwölf Monaten für private Zwecke über Internet eingekauft haben?	1 ja 0 nein 9 nicht zutreffend	in den letzten zwölf Monaten	Personen mit ibuy=1 oder ibuy=2
isrch	Internetaktivitäten: Benutzen einer Suchmaschine, um Informationen zu finden	Welche der folgenden Aktivitäten haben Sie im Internet bereits durchgeführt?	1 ja 0 nein 9 nicht zutreffend	jemals	Personen mit iu=1 oder iu=2 oder iu=3
cem	Internetaktivitäten: Versenden von E-Mails mit angeschlossenen Dateien (Dokumente, Bilder etc.)	Welche der folgenden Aktivitäten haben Sie im Internet bereits durchgeführt?	1 ja 0 nein 9 nicht zutreffend	jemals	Personen mit iu=1 oder iu=2 oder iu=3
ichat	Internetaktivitäten: Posten von Nachrichten in Chatrooms, Newsgroups oder einem Online-Diskussionsforum (z.B. auf Websites von sozialen Netzwerken)	Welche der folgenden Aktivitäten haben Sie im Internet bereits durchgeführt?	1 ja 0 nein 9 nicht zutreffend	jemals	Personen mit iu=1 oder iu=2 oder iu=3
iphone	Internetaktivitäten: Teilen/Rufen über Internet	Welche der folgenden Aktivitäten haben Sie im Internet bereits durchgeführt?	1 ja 0 nein 9 nicht zutreffend	jemals	Personen mit iu=1 oder iu=2 oder iu=3
iexch	Internetaktivitäten: Nutzen von Tauschbörsen für den Austausch von Filmen, Musik etc. (File-sharing)	Welche der folgenden Aktivitäten haben Sie im Internet bereits durchgeführt?	1 ja 0 nein 9 nicht zutreffend	jemals	Personen mit iu=1 oder iu=2 oder iu=3
cweb	Internetaktivitäten: Erstellen einer Website	Welche der folgenden Aktivitäten haben Sie im Internet bereits durchgeführt?	1 ja 0 nein 9 nicht zutreffend	jemals	Personen mit iu=1 oder iu=2 oder iu=3
iupload	Internetaktivitäten: Upload von Texten, Spielen, Fotos, Filmen oder Musik auf Websites z.B. von sozialen Netzwerken	Welche der folgenden Aktivitäten haben Sie im Internet bereits durchgeführt?	1 ja 0 nein 9 nicht zutreffend	jemals	Personen mit iu=1 oder iu=2 oder iu=3

ibconf	Internetaktivitäten: Anpassen der Sicherheitseinstellungen des Internetbrowsers	Welche der folgenden Aktivitäten haben Sie im Internet bereits durchgeführt?	1 ja 0 nein 9 nicht zutreffend	jemals	Personen mit iu=1 oder iu=2 oder iu=3
i0	Internetaktivitäten: Keine der genannten Aktivitäten	Welche der folgenden Aktivitäten haben Sie im Internet bereits durchgeführt?	1 ja 0 nein 9 nicht zutreffend	jemals	Personen mit isrch=0 und cem=0 und ichtat=0 und iphone=0 und iexch=0 und cweb=0 und iupload=0 und ibconf=0
isk_sfcom	Einschätzung der Internetkenntnisse: ausreichend, um mit Verwandten, Freunden oder Kolleginnen und Kollegen über Internet zu kommunizieren?	Würden Sie Ihre derzeitigen Internetkenntnisse als ausreichend bezeichnen, ...	1 ja 0 nein 8 nicht auf die Person zutreffen 9 nicht zutreffend	Befragungszeitpunkt	Personen mit isrch=1 oder cem=1 oder ichtat=1 oder iphone=1 oder iexch=1 oder cweb=1 oder iupload=1 oder ibconf=1
isk_sfpri	Einschätzung der Internetkenntnisse: ausreichend, um Ihre persönlichen Daten zu schützen?	Würden Sie Ihre derzeitigen Internetkenntnisse als ausreichend bezeichnen, ...	1 ja 0 nein 8 nicht auf die Person zutreffen 9 nicht zutreffend	Befragungszeitpunkt	Personen mit isrch=1 oder cem=1 oder ichtat=1 oder iphone=1 oder iexch=1 oder cweb=1 oder iupload=1 oder ibconf=1
isk_sfvir	Einschätzung der Internetkenntnisse: ausreichend, um Ihren privaten Computer vor Viren oder anderen Computerinfektionen zu schützen?	Würden Sie Ihre derzeitigen Internetkenntnisse als ausreichend bezeichnen, ...	1 ja 0 nein 8 nicht auf die Person zutreffen 9 nicht zutreffend	Befragungszeitpunkt	Personen mit isrch=1 oder cem=1 oder ichtat=1 oder iphone=1 oder iexch=1 oder cweb=1 oder iupload=1 oder ibconf=1
isk_sfjob	Einschätzung der Computerkenntnisse: ausreichend, um einen neuen Job anzunehmen oder einen Jobwechsel anzustreben	Würden Sie Ihre derzeitigen Computerkenntnisse als ausreichend bezeichnen, wenn Sie einen neuen Job annehmen oder innerhalb eines Jahres einen Jobwechsel anstreben würden?	1 ja 0 nein 8 nicht auf die Person zutreffen 9 nicht zutreffend	Befragungszeitpunkt	Personen mit (cu=1 oder cu=2 oder cu=3) und (empst=1 oder empst=2)
agecls	Altersgruppen		1 16 bis 24 Jahre 2 25 bis 34 Jahre 3 35 bis 44 Jahre 4 45 bis 54 Jahre 5 55 bis 64 Jahre 6 65 bis 74 Jahre		alle Personen
sex	Geschlecht		1 männlich 2 weiblich		alle Personen
iscd	Ebene der höchsten abgeschlossenen Aus Einteilung in drei Gruppen, ISCED-Informationen unter http://www.statistik.de		0 ISCED 0-2 3 ISCED 3-4 5 ISCED 5-6		alle Personen
empst	Lebensunterhalt	Gliederung nach Eurostat-Vorgaben	1 Erwerbstätig 2 Arbeitslos 3 Schülerinnen, Schüler, Studierende 4 Andere		alle Personen
ind_id	Personenkennzahl	Laufende Nummer der Person, bestehend aus AT, der 7stelligen Zahl der Haushaltskennzahl und einer 2stelligen Zahl für die Person im Haushalt			
hh_ref_id	Haushaltskennzahl	Laufende Nummer des Haushalts, bestehend aus AT und einer 7stelligen Zahl			
ind_wght	Personengewicht	ergibt summiert die Anzahl der Personen im Alter von 16 bis 74 Jahren			

Abstract (Deutsch)

Der Forschungsstand und dezidierte Theorien zeigen auf, dass der Zugang zu den verschiedenen Stilen, das Internet zu verwenden, an soziodemographische Prädispositionen geknüpft ist: Bestehende Unterschiede werden im Digitalen mitnichten marginalisiert, sondern verstärkt. Besonders gewinnträchtige Nutzungsstrategien werden vor allem von ohnehin begünstigten Personen angewendet. Spezifische und differenzierte quantitative Analysen dieser komplexen Prozesse sind jedoch selten, auch, da sie ein beachtliches Tiefenlevel beim Datensatz voraussetzen. Diese Forschungslücke klafft auch in Österreich.

Auf der Basis der Theorien von u.A. Pierre Bourdieu, Martina Löw, Jürgen Habermas und Marshall McLuhan / Bruce R. Powers / Paul Levinson, sowie rezenten empirischen Befunden, wurde im Rahmen dieser Abschlussarbeit daher eine Clusteranalyse vorgenommen, welche letztlich sechs verschiedene Typen der Internetnutzung identifizierte: Die Etablierten Nutzer, die Ländlichen Besucher, das Neue Internet, das Alte Internet, die Digitalen Akademiker und die Non-Digitalen. Diese Typen wiesen dabei erhebliche soziodemographische Tendenzen auf.

Diejenigen drei Cluster, welche sich durch eine besonders aktive und zielorientierte Internetnutzung hervortaten, belegten ebenfalls die drei Spitzenplätze bei dem formalen Bildungsniveau. Demgegenüber wies der größte Cluster, welcher 1,4 Millionen ÖsterreicherInnen beinhaltete und eine nahezu vollständige Nichtwahrnehmung der Möglichkeiten des Internets zeigte, das geringste formale Bildungsniveau auf. Alter wiederum spielte bezüglich der Präsenz im Internet, etwa in sozialen Netzwerken, eine entscheidende Rolle: Die drei Cluster mit der größten Präsenz waren zugleich die drei jüngsten. Von den regelmäßigen InternetnutzerInnen wiesen Frauen eine höhere Präsenz auf, jedoch geringere Technische Fertigkeiten, Proaktive Nutzung, und sie nutzten das Internet weniger für Bildungszwecke. Des weiteren ergab die Analyse, dass insgesamt 2.6 Millionen Österreicher das Internet nur sehr sporadisch und kaum für anspruchsvollere Anliegen nutzen. Entsprechende Auslagerungen von Bürgerangelegenheiten in das Digitale (z.B. in Form von E-Governance) würde also einen systematisch verzerrten Partizipationsrückgang bedeuten. Gleich-

wohl sind entsprechende Zugangszwänge, etwa im Arbeitswettbewerb, bereits heute Realität.

Hohes Alter, weibliches Geschlecht, ländliches Umfeld, pensioniert bzw. ausschließlich im Haushalt beschäftigt zu sein und eine geringe Bildung machen es unwahrscheinlich, das Internet auf eine gewinnträchtige Art zu nutzen. Ohnehin marginalisierte Gruppen sind also auch online im Nachteil.

Abstract (English)

Previous research as well as theoretical assumptions showed that access to the various strategies applicable to use the internet depend heavily on pre-existing dispositions: Previous divides are not scaled down in the digital, but rather magnified. Rewarding usage-strategies are applied primarily by parties already at advantage. Specific and differentiated quantitative analysis of this intricate development is rare, though, as it requires a highly sophisticated level of data. Such a void is present for Austria, too.

Using the theoretical framework laid, among others, by Pierre Bourdieu, Martina Löw, Jürgen Habermas and Marshall McLuhan / Bruce R. Powers / Paul Levinson as well as recent empirical findings, a cluster analysis was conducted for this thesis. The analysis identified six different types of internet users: The Established Users, the Rural Visitors, the New Internet, the Old Internet, the Digital Academics and the Non-Digitals. These clusters exhibited a distinct socio-demographic bias.

The three clusters that excelled at active and purposeful internet usage also ranked the highest regarding formal education. In contrast, the biggest cluster, which included 1.4 million Austrians almost universally neglecting the possibilities of the internet, scored last as far as formal education was concerned. Age strongly influenced the Presence asserted online, for example, in social networks: The three clusters with the highest score for Presence were also the youngest. Among regular internet users, women displayed a higher Presence score, but lower scores for Technical Skills, Proactive Use and Educational Use. All in all, 2.6 million Austrians used the internet only very sporadically and not in sophisticated ways. Expansion and outsourcing of civil manners into the digital (e.g. E-governance) would thus entail a

systematically biased decline of participation. However, such constraints are already a reality for many, for example, when competing for jobs.

Advanced age, female gender, rural environment, being retired or being occupied with housekeeping only, and low education make it unlikely for one to use the internet in a socially rewarding way. Those already marginalized are hence at disadvantage online, too.

Curriculum Vitae

Persönliche Daten

Name	Rauschnick
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Ausbildung

10/2011 – 11/2014	Studium „Master Soziologie“ an der Universität Wien mit dem Masterarbeitsthema „The sociodemography of internet usage styles in Austria“ Betreuer: Univ.-Prof. Dr. Roland Verwiebe Abschluss: Master of Arts
09/2007 – 11/2010	Studium „Bachelor Sozialwissenschaften“ an der Universität Augsburg mit dem Bachelorarbeitsthema „Milieuspezifische Mediennutzung von Jugendlichen – empirische Studie an Augsburger Schulen“ Betreuer: Univ.-Prof. Dr. Helmut Giegler Abschluss: Bachelor of Arts Notendurchschnitt: 1,6
09/1997 – 06/2006	Holbein Gymnasium Augsburg mit den Leistungskursen Englisch und Geschichte Abschluss: Abitur Notendurchschnitt: 1,9

Berufserfahrung

08/2013 – 09/2013	Arbeit beim Bürgeramt der Stadt Augsburg zur Durchführung Landtags und Bundestagswahl im Bereich Briefwahl und Parteiverkehr
10/2009 – 07/2011	Arbeit als Tutor am Lehrstuhl für Psychologie an der Universität Augsburg
07/2007 – 08/2007	Praktikum bei der Zeitschrift „Neue Szene Augsburg“
09/2006 – 05/2007	Ersatzdienst bei der Hessing Stiftung Augsburg

Sprachkenntnisse

Deutsch	Muttersprache
Englisch	Fließend
Spanisch	Gute Kenntnisse
Latein	Latinum
Japanisch	Grundkenntnisse
Russisch	Grundkenntnisse

EDV-Kompetenzen

SPSS einschließlich Syntax-Programmierung	Sehr gute Kenntnisse
UCINET	Grundkenntnisse
STATA	Grundkenntnisse
Amos	Grundkenntnisse
Microsoft Word, Open Office Writer und Libre Office Writer	Sehr gute Kenntnisse
Microsoft Excel	Grundkenntnisse
Adobe Photoshop, Paint.net und Pinta	Sehr gute Kenntnisse
Inkscape	Grundkenntnisse
HTML-Programmierung	Grundkenntnisse