Social Acceptance of Nomadic Virtual Reality

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Figure 1: PlayStation booth at a exhebition, 2019.

ABSTRACT

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CCS CONCEPTS

• **Computer systems organization** → **Embedded systems**; *Redundancy*; Robotics; • **Networks** → Network reliability.

KEYWORDS

social acceptance, virtual reality, field study, test

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1 INTRODUCTION

Since new presentation methods like VR experience a growing trend as alternatives to conventional screens in different terminals like tablets or mobile phones, the devices used therefor enhance always on in size, functionality and appearance to fit into the „on-the-go" approach of modern life. Although the development process therefor is still far away from being finished VR devices might be prospective used in the same way we already use mobile phones today, every time and everywhere. To achieve a broad utilization it is not only important to focus on the unique user and establish hardware with a high usability for the users themselves, but also something that fits to all the tangentially involved people and theirs needs for well-being, comfortableness and privacy. The most important Issue to start with, which also is the topic of this paper, is the question about the current state of social acceptance of VR devices in public spaces. Before spreading out this type of gear and gaining the possibility of high sales output it is essential to find out if those devices are already accepted by society and which impacts they have on them.

In the paper "Virtual reality on the go?: a study on the social acceptance of VR glasses"[x] several researchers already tried to investigate this potential issue by showing pictures and videos of people wearing VR devices in public spaces to a group of test persons under laboratory conditions to find out more about their opinions, feelings and reactions confronted with this subject. As we all know it is hard to put oneself in a position you only see on pictures. With the inspection of images people will always keep a certain emotional distance to the context shown. The spontaneous confrontation with a previously completely unexpected situation in daily life might have another effect on their emotional acceptance. VR devices might be fully accepted by society but it can also be that they evoke discomfort because people are not used to not see each others eyes while passing by or sitting next to them on the bench. Of course sunglasses act similar but since todays VR goggles still cover almost half of the wearers face it cannot be generalized and needs to be examined more accurate. In this paper the mentioned issue will be reexamined using a field study to achieve a high validity not only in laboratory but also in the open field.

2 RELATED WORK

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Journals use one of three template styles. All but three ACM journals use the TEST template style:

- TEST:TEST.

3 STUDY: ACCEPTANCE OF NOMADIC VIRTUAL REALITY

As already mentioned VR devices represent a potential upcoming alternative to conventional screens in the mobile context. The specific target of this study is to examine more about the current state of social acceptance in the open field by confronting unprepared pedestrians with this topic in different real life scenarios. This is done with the help of a field study because of our hypothesis that the procedure under laboratory conditions will have another result due to emotional distances.

3.1 Study Design

The design of the study is a two-factorial within-subject design and was conducted with the help of the three independent variables GENDER, WEARING OF VR-GOGGLES and PERFORMING GESTURES. The usage of VR devices does not only include the actual wearing of the goggles. Gesture control with the help of connected VR controllers is essential for the use of VR devices of any kind. Since performing those gestures might have a big impact on the acceptance this also is an essential issue to examine if you want to find out more about the general acceptance and how people react when beeing contfronted with this situation. It is also important to investigate whether the gender of the wearer has an influence on the results or not.

3.2 Stimuli

3.3 Survey Procedure

3.4 Participants

4 TYPEFACES

The "acmart" document class requires the use of the "Libertine" typeface family. Your TEX installation should include this set of

packages. Please do not substitute other typefaces. The "lmodern" and "ltimes" packages should not be used, as they will override the built-in typeface families.

5 TITLE INFORMATION

The title of your work should use capital letters appropriately - https://capitalizemytitle.com/ has useful rules for capitalization. Use the `title` command to define the title of your work. If your work has a subtitle, define it with the `subtitle` command. Do not insert line breaks in your title.

If your title is lengthy, you must define a short version to be used in the page headers, to prevent overlapping text. The `title` command has a "short title" parameter:

```
\title[short title]{full title}
```

6 AUTHORS AND AFFILIATIONS

Each author must be defined separately for accurate metadata identification. Multiple authors may share one affiliation. Authors' names should not be abbreviated; use full first names wherever possible. Include authors' e-mail addresses whenever possible.

Grouping authors' names or e-mail addresses, or providing an "e-mail alias," as shown below, is not acceptable:

```
\author{Brooke Aster, David Mehldau}
\email{dave,judy,steve@university.edu}
\email{firstname.lastname@phillips.org}
```

The `authornote` and `authornotemark` commands allow a note to apply to multiple authors — for example, if the first two authors of an article contributed equally to the work.

If your author list is lengthy, you must define a shortened version of the list of authors to be used in the page headers, to prevent overlapping text. The following command should be placed just after the last `\author{}` definition:

```
\renewcommand{\shortauthors}{McCartney, et al.}
```

Omitting this command will force the use of a concatenated list of all of the authors' names, which may result in overlapping text in the page headers.

The article template's documentation, available at https://www.acm.org/publications/proceedings-template, has a complete explanation of these commands and tips for their effective use.

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- the "ACM Reference Format" text on the first page.
- the "rights management" text on the first page.
- the conference information in the page header(s).

Table 1: Frequency of Special Characters

Non-English or Math	Frequency	Comments
Ø	1 in 1,000	For Swedish names
π	1 in 5	Common in math
\$	4 in 5	Used in business
Ψ_1^2	1 in 40,000	Unexplained usage

Rights information is unique to the work; if you are preparing several works for an event, make sure to use the correct set of commands with each of the works.

8 CCS CONCEPTS AND USER-DEFINED KEYWORDS

Two elements of the "acmart" document class provide powerful taxonomic tools for you to help readers find your work in an online search.

The ACM Computing Classification System — https://www.acm.org/publications/class-2012 — is a set of classifiers and concepts that describe the computing discipline. Authors can select entries from this classification system, via https://dl.acm.org/ccs/ccs.cfm, and generate the commands to be included in the LaTeX source.

User-defined keywords are a comma-separated list of words and phrases of the authors' choosing, providing a more flexible way of describing the research being presented.

CCS concepts and user-defined keywords are required for all short- and full-length articles, and optional for two-page abstracts.

9 SECTIONING COMMANDS

Your work should use standard LaTeX sectioning commands: `section`, `subsection`, `subsubsection`, and `paragraph`. They should be numbered; do not remove the numbering from the commands.

Simulating a sectioning command by setting the first word or words of a paragraph in boldface or italicized text is **not allowed.**

10 TABLES

The "acmart" document class includes the "booktabs" package — https://ctan.org/pkg/booktabs — for preparing high-quality tables.

Table captions are placed *above* the table.

Because tables cannot be split across pages, the best placement for them is typically the top of the page nearest their initial cite. To ensure this proper "floating" placement of tables, use the environment **table** to enclose the table's contents and the table caption. The contents of the table itself must go in the **tabular** environment, to be aligned properly in rows and columns, with the desired horizontal and vertical rules. Again, detailed instructions on **tabular** material are found in the *LaTeX User's Guide.*

Immediately following this sentence is the point at which Table 1 is included in the input file; compare the placement of the table here with the table in the printed output of this document.

To set a wider table, which takes up the whole width of the page's live area, use the environment **table*** to enclose the table's contents and the table caption. As with a single-column table, this wide table will "float" to a location deemed more desirable. Immediately following this sentence is the point at which Table 2 is included in

the input file; again, it is instructive to compare the placement of the table here with the table in the printed output of this document.

11 MATH EQUATIONS

You may want to display math equations in three distinct styles: inline, numbered or non-numbered display. Each of the three are discussed in the next sections.

11.1 Inline (In-text) Equations

A formula that appears in the running text is called an inline or in-text formula. It is produced by the **math** environment, which can be invoked with the usual `\begin . . . \end` construction or with the short form `$ . . . $`. You can use any of the symbols and structures, from α to ω, available in LaTeX [20]; this section will simply show a few examples of in-text equations in context. Notice how this equation: $\lim_{n\to\infty} x = 0$, set here in in-line math style, looks slightly different when set in display style. (See next section).

11.2 Display Equations

A numbered display equation—one set off by vertical space from the text and centered horizontally—is produced by the **equation** environment. An unnumbered display equation is produced by the **displaymath** environment.

Again, in either environment, you can use any of the symbols and structures available in LaTeX; this section will just give a couple of examples of display equations in context. First, consider the equation, shown as an inline equation above:

$$\lim_{n\to\infty} \tag{1}$$

Notice how it is formatted somewhat differently in the **displaymath** environment. Now, we'll enter an unnumbered equation:

$$\sum_{i=0}^{\infty} x + 1$$

and follow it with another numbered equation:

$$\sum_{i=0}^{\infty} x_i = \int_0^{\pi+2} f \tag{2}$$

just to demonstrate LaTeX's able handling of numbering.

12 FIGURES

The "`figure`" environment should be used for figures. One or more images can be placed within a figure. If your figure contains third-party material, you must clearly identify it as such, as shown in the example below.

Figure 2: 1907 Franklin Model D roadster. Photograph by Harris & Ewing, Inc. [Public domain], via Wikimedia Commons. (https://goo.gl/VLCRBB).

Your figures should contain a caption which describes the figure to the reader. Figure captions go below the figure. Your figures should **also** include a description suitable for screen readers, to assist the visually-challenged to better understand your work.

Figure captions are placed *below* the figure.

12.1 The "Teaser Figure"

A "teaser figure" is an image, or set of images in one figure, that are placed after all author and affiliation information, and before the body of the article, spanning the page. If you wish to have such a figure in your article, place the command immediately before the `\maketitle` command:

```
\begin{teaserfigure}
  \includegraphics[width=\textwidth]{teaser}
  \caption{figure caption}
  \Description{figure description}
\end{teaserfigure}
```

13 CITATIONS AND BIBLIOGRAPHIES

The use of BibTeX for the preparation and formatting of one's references is strongly recommended. Authors' names should be complete — use full first names ("Donald E. Knuth") not initials ("D. E. Knuth") — and the salient identifying features of a reference should be included: title, year, volume, number, pages, article DOI, etc.

The bibliography is included in your source document with these two commands, placed just before the `\end{document}` command:

```
\bibliographystyle{ACM-Reference-Format}
\bibliography{bibfile}
```

where "`bibfile`" is the name, without the "`.bib`" suffix, of the BibTeX file.

Citations and references are numbered by default. A small number of ACM publications have citations and references formatted in the "author year" style; for these exceptions, please include this command in the **preamble** (before "`\begin{document}`") of your LaTeX source:

```
\citestyle{acmauthoryear}
```

Some examples. A paginated journal article [2], an enumerated journal article [7], a reference to an entire issue [6], a monograph (whole book) [19], a monograph/whole book in a series (see 2a in spec. document) [13], a divisible-book such as an anthology or compilation [9] followed by the same example, however we only output the series if the volume number is given [10] (so Editor00a's series should NOT be present since it has no vol. no.), a chapter in a divisible book [30], a chapter in a divisible book in a series [8], a multi-volume work as book [18], an article in a proceedings (of a conference, symposium, workshop for example) (paginated proceedings article) [3], a proceedings article with all possible elements [29], an example of an enumerated proceedings article [11], an informally published work [12], a doctoral dissertation [5], a master's thesis: [4], an online document / world wide web resource [1, 24**?**], a video game (Case 1) [23] and (Case 2) [22] and [21] and (Case 3) a patent [28], work accepted for publication [25], 'YYYYb'-test for prolific author [26] and [27]. Other cites might contain 'duplicate' DOI and URLs (some SIAM articles) [17]. Boris / Barbara Beeton: multi-volume works as books [15] and [14]. A couple of citations with DOIs: [16, 17]. Online citations: [31**?** , 32].

14 ACKNOWLEDGMENTS

Identification of funding sources and other support, and thanks to individuals and groups that assisted in the research and the preparation of the work should be included in an acknowledgment

Table 2: Some Typical Commands

Command	A Number	Comments
`\author`	100	Author
`\table`	300	For tables
`\table*`	400	For wider tables

section, which is placed just before the reference section in your document.

This section has a special environment:

```
\begin{acks}
...
\end{acks}
```

so that the information contained therein can be more easily collected during the article metadata extraction phase, and to ensure consistency in the spelling of the section heading.

Authors should not prepare this section as a numbered or unnumbered `\section`; please use the "`acks`" environment.

15 APPENDICES

If your work needs an appendix, add it before the "`\end{document}`" command at the conclusion of your source document.

Start the appendix with the "`appendix`" command:

```
\appendix
```

and note that in the appendix, sections are lettered, not numbered. This document has two appendices, demonstrating the section and subsection identification method.

16 SIGCHI EXTENDED ABSTRACTS

The "`sigchi-a`" template style (available only in LaTeX and not in Word) produces a landscape-orientation formatted article, with a wide left margin. Three environments are available for use with the "`sigchi-a`" template style, and produce formatted output in the margin:

- `sidebar`: Place formatted text in the margin.
- `marginfigure`: Place a figure in the margin.
- `margintable`: Place a table in the margin.

ACKNOWLEDGMENTS

To Robert, for the bagels and explaining CMYK and color spaces.

REFERENCES

[1] Rafal Ablamowicz and Bertfried Fauser. 2007. *CLIFFORD: a Maple 11 Package for Clifford Algebra Computations, version 11.* Retrieved February 28, 2008 from http://math.tntech.edu/rafal/cliff11/index.html

[2] Patricia S. Abril and Robert Plant. 2007. The patent holder's dilemma: Buy, sell, or troll? *Commun. ACM* 50, 1 (Jan. 2007), 36–44. https://doi.org/10.1145/1188913.1188915

[3] Sten Andler. 1979. Predicate Path expressions. In *Proceedings of the 6th. ACM SIGACT-SIGPLAN symposium on Principles of Programming Languages (POPL '79).* ACM Press, New York, NY, 226–236. https://doi.org/10.1145/567752.567774

[4] David A. Anisi. 2003. *Optimal Motion Control of a Ground Vehicle.* Master's thesis. Royal Institute of Technology (KTH), Stockholm, Sweden.

[5] Kenneth L. Clarkson. 1985. *Algorithms for Closest-Point Problems (Computational Geometry).* Ph.D. Dissertation. Stanford University, Palo Alto, CA. UMI Order Number: AAT 8506171.

[6] Jacques Cohen (Ed.). 1996. Special issue: Digital Libraries. *Commun. ACM* 39, 11 (Nov. 1996).

[7] Sarah Cohen, Werner Nutt, and Yehoshua Sagic. 2007. Deciding equivalances among conjunctive aggregate queries. *J. ACM* 54, 2, Article 5 (April 2007), 50 pages. https://doi.org/10.1145/1219092.1219093

[8] Bruce P. Douglass, David Harel, and Mark B. Trakhtenbrot. 1998. Statecarts in use: structured analysis and object-orientation. In *Lectures on Embedded Systems*, Grzegorz Rozenberg and Frits W. Vaandrager (Eds.). Lecture Notes in Computer Science, Vol. 1494. Springer-Verlag, London, 368–394. https://doi.org/10.1007/3-540-65193-4_29

[9] Ian Editor (Ed.). 2007. *The title of book one* (1st. ed.). The name of the series one, Vol. 9. University of Chicago Press, Chicago. https://doi.org/10.1007/3-540-09237-4

[10] Ian Editor (Ed.). 2008. *The title of book two* (2nd. ed.). University of Chicago Press, Chicago, Chapter 100. https://doi.org/10.1007/3-540-09237-4

[11] Matthew Van Gundy, Davide Balzarotti, and Giovanni Vigna. 2007. Catch me, if you can: Evading network signatures with web-based polymorphic worms. In *Proceedings of the first USENIX workshop on Offensive Technologies (WOOT '07).* USENIX Association, Berkley, CA, Article 7, 9 pages.

[12] David Harel. 1978. *LOGICS of Programs: AXIOMATICS and DESCRIPTIVE POWER.* MIT Research Lab Technical Report TR-200. Massachusetts Institute of Technology, Cambridge, MA.

[13] David Harel. 1979. *First-Order Dynamic Logic.* Lecture Notes in Computer Science, Vol. 68. Springer-Verlag, New York, NY. https://doi.org/10.1007/3-540-09237-4

[14] Lars Hörmander. 1985. *The analysis of linear partial differential operators. III.* Grundlehren der Mathematischen Wissenschaften [Fundamental Principles of Mathematical Sciences], Vol. 275. Springer-Verlag, Berlin, Germany. viii+525 pages. Pseudodifferential operators.

[15] Lars Hörmander. 1985. *The analysis of linear partial differential operators. IV.* Grundlehren der Mathematischen Wissenschaften [Fundamental Principles of Mathematical Sciences], Vol. 275. Springer-Verlag, Berlin, Germany. vii+352 pages. Fourier integral operators.

[16] IEEE 2004. IEEE TCSC Executive Committee. In *Proceedings of the IEEE International Conference on Web Services (ICWS '04).* IEEE Computer Society, Washington, DC, USA, 21–22. https://doi.org/10.1109/ICWS.2004.64

[17] Markus Kirschmer and John Voight. 2010. Algorithmic Enumeration of Ideal Classes for Quaternion Orders. *SIAM J. Comput.* 39, 5 (Jan. 2010), 1714–1747. https://doi.org/10.1137/080734467

[18] Donald E. Knuth. 1997. *The Art of Computer Programming, Vol. 1: Fundamental Algorithms (3rd. ed.).* Addison Wesley Longman Publishing Co., Inc.

[19] David Kosiur. 2001. *Understanding Policy-Based Networking* (2nd. ed.). Wiley, New York, NY.

[20] Leslie Lamport. 1986. *LaTeX: A Document Preparation System.* Addison-Wesley, Reading, MA.

[21] Newton Lee. 2005. Interview with Bill Kinder: January 13, 2005. Video. *Comput. Entertain.* 3, 1, Article 4 (Jan.-March 2005). https://doi.org/10.1145/1057270.1057278

[22] Dave Novak. 2003. Solder man. Video. In *ACM SIGGRAPH 2003 Video Review on Animation theater Program: Part I - Vol. 145 (July 27–27, 2003).* ACM Press, New York, NY, 4. https://doi.org/99.9999/woot07-S422

[23] Barack Obama. 2008. A more perfect union. Video. Retrieved March 21, 2008 from http://video.google.com/videoplay?docid=6528042696351994555

[24] Poker-Edge.Com. 2006. Stats and Analysis. Retrieved June 7, 2006 from http://www.poker-edge.com/stats.php

[25] Bernard Rous. 2008. The Enabling of Digital Libraries. *Digital Libraries* 12, 3, Article 5 (July 2008). To appear.

[26] Mehdi Saeedi, Morteza Saheb Zamani, and Mehdi Sedighi. 2010. A library-based synthesis methodology for reversible logic. *Microelectron. J.* 41, 4 (April 2010), 185–194.

[27] Mehdi Saeedi, Morteza Saheb Zamani, Mehdi Sedighi, and Zahra Sasanian. 2010. Synthesis of Reversible Circuit Using Cycle-Based Approach. *J. Emerg. Technol. Comput. Syst.* 6, 4 (Dec. 2010).

[28] Joseph Scientist. 2009. The fountain of youth. Patent No. 12345, Filed July 1st., 2008, Issued Aug. 9th., 2009.

[29] Stan W. Smith. 2010. An experiment in bibliographic mark-up: Parsing metadata for XML export. In *Proceedings of the 3rd. annual workshop on Librarians and Computers (LAC '10)*, Reginald N. Smythe and Alexander Noble (Eds.), Vol. 3. Paparazzi Press, Milan Italy, 422–431. https://doi.org/99.9999/woot07-S422

[30] Asad Z. Spector. 1990. Achieving application requirements. In *Distributed Systems* (2nd. ed.), Sape Mullender (Ed.). ACM Press, New York, NY, 19–33. https://doi.org/10.1145/90417.90738
[31] TUG 2017. *Institutional members of the TEX Users Group.* Retrieved May 27, 2017 from http://wwtug.org/instmem.html
[32] Boris Veytsman. [n.d.]. *acmart—Class for typesetting publications of ACM.* Retrieved May 27, 2017 from http://www.ctan.org/pkg/acmart

A RESEARCH METHODS

A.1 Part One

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A.2 Part Two

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B ONLINE RESOURCES

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